

# Index

COPYRIGHTED MATERIAL



# Index

## A

- A-0 system, 230**
- absolute positioning, 517**
- Abstract Class entity, 278**
- Access (Microsoft), 367, 370, 530**
- Access Modifier option, 689**
- accessibility, 525**
  - Section 508 and, 525
  - visual impairments, 525
  - WCAG and, 525
- Actions Pane, 547, 549, 555–556**
- Active Bugs query, 926**
- ActiveSync, 497, 501, 579, 581, 592, 833, 834, 836. See also Windows Mobile Device Center**
- Actual Quality v. Planned Velocity report, 942**
- AD. See Application Diagram**
- Add Column command, 127**
- Add Connection dialog box, 326, 366, 367, 581, 668, 669, 670**
- Add method, 189**
- Add New Item, 234**
- Add New Item dialog box, 18–19**
- Add New Project dialog box, 17–18**
- Add New Web Site dialog box, 18**
- Add Reference dialog box, 19–20**
- Add Service Reference item, 20, 428, 615, 619**
- Add SourceSafe Database Wizard, 110**
- Add Web Reference button, 21**
- .AddIn files (structure of), 860–861**
- Add-in Manager, 235, 853, 865**
- Add-in Wizard, 851–855**
- add-ins, 17, 849–866. See also VSPackages**
  - .AddIn files (structure of), 860–861
  - anatomy of, 855–860
  - debugging, 864
  - deployment, 864–865
  - developing, 861–863
  - disabled, 563–564
  - introduction, 850
  - Office, 17, 549–550
    - creation of, 557–561
    - disabling, 563–564
    - unregistering, 562–563
  - shared, 865–864
  - wizard, 851–855
- Add-Ins window (COM), 562–563**
- AddNew method, 336, 345, 346**
- AddResource method, 690**
- address breakpoints, 713–714**
- Administration Tool, Web Site, 542–546**
- ADO.NET, 365**
  - Entity Data Model, 414, 415
  - Entity Framework, 414
  - Entity Framework Tools, 414
  - LINQ and, 405
  - LINQ to SQL and, 403
  - Sync Services, 417–432, 494
- advanced checkbox, 31**
- AdventureWorks database**
  - binding and, 331–355
  - connection strings and, 667–675
  - DataSets and, 325–330
  - LINQ to SQL and, 403–416
- AesManaged symmetric algorithm, 449**
- Agile Software Development, MSF for, 923, 924, 928, 931, 941, 943, 945**
- AJAX (ASP.NET), 89, 537–542, 625**
  - Control Extenders, 540–542
  - Control Toolkit, 540
  - controls, 742
  - JavaScript, debugging, 743
  - ScriptManager control, 635
  - web applications and, 537–542
- alert keyword, 536**
- alias command, 48**
- aliases, for commands, 701**
- All Components, 50**
- All Work Items query, 926**
- AllItemsAreNotEqual, 313**
- AllItemsAreUnique, 313**

- Allocations (report view), 897**
- AllowUserToAddRows property, 127**
- AlternatingItemTemplate, 531**
- ambient properties, 29**
- AmbientValue attribute, 29**
- Americans with Disabilities Act Section 508 Guidelines, 525**
- Anchor property, 129–130**
- anchoring, 26, 572, 574, 600**
- animation, tool windows and, 34**
- Annotate window, 935**
- anonymous methods, 195, 199–201. See also lambda expressions**
- anonymous types, 191–193, 232, 383, 386, 388, 389**
- AnonymousTemplate, 529**
- Apache Web Server, 537, 633**
- app.config, 650**
- AppDomain policy, 439**
- Appearance category, 119**
- Application Diagram (AD), 882–884**
- Application Directory, 438**
- Application Framework (Visual Basic), settings, 93**
- application keys, 571**
- Application Services, ASP.NET, 481, 484, 485, 487, 494**
- application settings, configuration files, 657–664**
- Application State category, 746**
- Application tab, 91–93, 96, 481, 493, 773, 796**
- Application Verifier, 898–899**
- application-level add-ins (VSTO), 549–550**
  - creation of, 557–561
- application-level errors, 741**
- application-level tracing, 746**
- Application.Log property, 291**
- ApplicationServices, 484, 486, 487, 489, 490**
- Applied Games Group, 238**
- Apply Styles window, 519, 521, 522**
- ApplyResources method, 690**
- appSettings section, 657–658**
- Architect Edition (VSTS), 881–889**
  - AD, 882–884
  - DD, 881, 885–886
  - LDD, 881, 884–885
  - SD, 881, 887–889
  - Settings and Constraints editor, 886–887
- AreEqual, 313**
- AreSame, 313**
- array initialization, 189**
- Ascending keyword, 390**
- ASP.NET**
  - AJAX Server Control Extender, 512
  - AJAX Server Control template, 512
  - Application Services, 481, 484, 485, 487, 494
  - configuration, in IIS, 545–546
  - debugging. See debugging
  - MVC. See MVC
  - Professional ASP.NET 3.5: in C# and VB*, 546
  - Server Control template, 512
  - tracing. See tracing
  - web applications. See web applications
  - Web Service, 511
  - Web Site Administration Tool, 542–546
- Assemble Information, 91**
- assemblies (.NET), 19, 84, 97, 144, 231, 441, 469, 471, 472**
  - in GAC, 795, 799
  - Modules window and, 704–705
  - naming, 795–799
  - signing, 795, 799–801
  - strong-named, 795, 798–799, 801, 896
  - versioning, 797–798
    - MSBuild tasks v., 792–793
- AssemblyCleanup attribute, 315**
- AssemblyInitialize attribute, 315**
- Assert class, 312–313**
- Assert method, 755**
- Assert.Inconclusive statement, 309**
- association connector, 279**
- Association Editor, 406**
- asymmetric algorithms**
  - DSACryptoServiceProvider, 450
  - ECDiffieHellmanCng, 450
  - ECDsaCng, 450
  - RSACryptoServiceProvider, 450, 452, 455, 459, 460
- asymmetric keys, 450–453**
  - private keys, 450, 451, 452, 453, 454, 455, 459, 464, 467, 798, 801
  - public keys, 438, 450, 453, 454, 455, 459, 459, 467, 795, 798, 801
- AsymmetricAlgorithm abstract class, 450**
- Asynchronous Processing connection property, 672**
- Asynchronous Processing property, 672**
- AttachDBFilename connection property, 672**
- attributes, configuration file, 656–657. See also specific attributes**

auditing, 436. *See also* logging  
 authentication, 99, 436, 447, 450, 464, 468, 482, 485–487, 528–529  
 authorization, 99, 436, 428, 442–445, 481, 484–485  
**Auto Merge, 936**  
 automated intelligence. *See* IntelliSense  
 automatic outlines, 56–57  
 automatic properties, 199, 207  
 automation model, 839–848. *See also* add-ins;  
   DTE; macros  
   DTE and, 842–848  
   features in, 840  
   limitations of, 847–848  
   models in, 840  
   Visual Studio extensibility and, 841–842  
**automation, TFS, 944–945**  
**Autos window, 703**  
**AutoToolboxPopulate property, 23**  
**AvailablePhysicalMemory, 221**  
**AvailableVirtualMemory, 221**

## B

**background synchronization, 429–431**  
**BackgroundWorker component, 439, 430**  
**base class constraints, 175**  
**Before building option, 778**  
**binary resource files, 680**  
**binding, 331–359**  
   AdventureWorks database and, 331–355  
     inserting new items, 345–346  
     saving changes, 343–345  
     validation, 346–353  
   BindingNavigator, 334–335  
   BindingSource, 332–334, 733  
     chains, 338–342  
     data source selections, 336–338  
   DataBinding, 325, 331, 333, 334, 342, 349, 350  
   LINQ to SQL objects, 411–414  
   object data source, 355–359  
**BindingNavigator, 334–335**  
**BindingSource, 332–334, 733**  
   chains, 338–342  
**bitmap/icon loading, 688**  
**Blend (Expression Blend), 601–604**  
**block indenting, 57**  
**blue shading, 34, 35**  
**blue wavy lines, 242**

**Bluetooth, 502**  
**bookmarks, 251–253**  
**Bookmarks tool window, 64, 251–253**  
**borrowed paradigm, 232**  
**branching, 939**  
**break conditions, 714–715**  
**Break mode, 49, 698, 704, 711, 713, 723, 724**  
**‘Break when an exception is thrown’ option, 739**  
**Breakpoint Condition dialog box, 714**  
**Breakpoint Filter dialog box, 716**  
**Breakpoint Hit Count dialog box, 715**  
**breakpoints, 11, 49, 53, 85, 97, 698**  
   address, 713–714  
   debugging with, 711–721  
   deleting, 717  
   disabling, 717  
   Edit and Continue, 720–721  
   execution point and, 719–720  
   filters, 716  
   function, 712–713  
   location modification of, 717  
   New Breakpoint dialog box, 713  
   setting, 712–714  
     in JavaScript code, 741–742  
   simple, 712  
   tracepoints and, 717–719  
**Breakpoints window, 698–699, 716**  
**Browsable attribute, 27**  
**Bug Rates report, 942**  
**Bugs by Priority report, 942**  
**Build and Run node, 42–43**  
**build customization, 777–793**  
   C# Build pages, 785–787  
   Compile page (Visual Basic), 781–784  
     advanced settings, 782–783  
     Build Events, 783–784  
     Compilation Constants options, 783  
     optimizations, 782–783  
   general build options, 777–780  
   manual dependencies, 780–781  
   MSBuild, 787–793  
     schema, 791–793  
**Build Events, 782–784**  
**Build Management Event Query dialog box, 295, 296**  
**Build tab (C#), 95, 773**  
**build.proj, 145, 146**  
**Burndown Charts, 941**  
**ByVal keyword, 245**

## C

## C#

Build pages, 785–787  
 Build tab, 95, 773  
 code snippets and, 258–259  
 IntelliSense options, 249–250  
 language-specific features, 199–207  
 My namespace and, 214  
 VB.NET v., 210

## C++

Build and Run Options page and, 778–780  
 Code Analysis Tool, 895  
 code templates and, 171  
 as imperative language, 230  
 Managed, 471, 765  
 Visual, 840, 850, 852  
 Visual Studio and, 840

## C (programming language)

Code Analysis Tool, 895  
 as imperative language, 230

## c tag, 134

## CAB files, 831–833

## Cached Tables, 421

## Calculate Permissions button, 102

## Call Stack window, 703, 713, 714

## Call Tree (report view), 897

## Caller/Callee (report view), 897

## CAPI (Win32 Crypto API), 449

Cascading Style Sheet tools. *See* CSS tools

## case study (VSTS Architect Edition), 881–889

AD, 882–884  
 DD, 881, 885–886  
 LDD, 881, 884–885  
 SD, 881, 887–889  
 Settings and Constraints editor, 886–887

## Category attribute, 28

## Certificate Management, 496, 500

## Check for arithmetic overflow/underflow (setting), 786

## check ins, 112, 113, 116, 933, 934, 936

## check outs, 933

shared, 933, 936

## ChecksumCondition, 920

## Child Property, 406

## .CHM (Microsoft-compiled HTML help), 131, 144, 146

## Choose method, 172, 173

## Choose Search Folders dialog box, 68–69

## CIM Processes Event Query node, 295, 296

## class association, 279

## class constraints, 175

## class coupling, 893

## Class Declaration scope, 257

## Class Designer, 275–288

code generation tools, 282–284  
 components, 276  
 design surface, 276–277  
 PowerToys for, 285–288  
   functionality enhancements, 287–288  
   visualization enhancements, 285–287  
 refactoring with, 284–285  
 toolbar controls, 281  
 Toolbox and, 277, 278

## Class Details window, 279–280

## class diagrams

creating, 275–276  
 entities for, 278  
 exporting, 281  
 instantiating objects, 53  
 static methods, invoking, 52  
 View Class Diagram button, 15

## Class entity, 278

## Class Library projects, 159, 160, 166, 310, 834

## Class View, 6, 49–50, 52, 53, 276

## ClassCleanup attribute, 315

classes. *See also specific classes*

Assert, 312–313  
 management, 293–295  
 in My namespace, 208–209  
 partial, 56, 179, 225, 281, 412  
 public nested, 729  
 static, 202

## ClassInitialize attribute, 315

## 'Clean' option, 16

## ClickHandler method, 725

## ClickOnce, 817–824

for deployment, 101, 102, 103, 564, 565, 817–824  
 for update process, 822–823

## client application services, 99, 100, 481–494

ASP.NET Application Services and, 481, 484, 485, 487, 494  
 authentication, 99, 482, 485–487  
 configuration, 99–100  
 login form, 491–492  
 offline support, 492–494  
 role authorization, 99, 484–485  
 settings, 487–491  
 Web settings, 99

## ClientServices, 481

- client-side development (web applications), 535–542**
- Close method, 692, 691**
- CLR (Common Language Runtime), 158, 171, 209, 439, 564, 626, 649, 739, 773, 799, 911.** *See also* SQL-CLR Database Project
- clrversion, 158**
- CLS (Common Language Specification), 232**
- cmd alias, 49**
- CMMI Process Improvement, 923, 924, 928, 941**
- CNG (Cryptographic Next Generation) classes, 449**
- code**
  - C/C++ Code Analysis Tool, 895
  - debugging with, 753–756
  - excluded, 893
  - external, 726
  - formatting, 57–58
  - generation tools. *See also* Class Designer
    - drag-and-drop, 282–284
    - IntelliSense, 284
  - groups, 437, 438–439
    - evidence and, 438–439
    - machine policy, 439
  - lines of, 892
  - Managed Code Analysis Tool, 893–894
  - navigation, bookmarks and, 251–253
  - regions, 56
  - security. *See* security
  - stepping through, 719–720
- code access security, 437, 440–442**
- Code Coverage tool, 899–901, 903**
- code groups.** *See* machine policy code groups
- Code Metrics, 891–893**
  - class coupling, 893
  - cyclomatic complexity, 893
  - depth of inheritance, 893
  - excluded code, 893
  - lines of code, 892
  - Maintainability Index, 893
- code snippets, 246, 255–264**
  - creating, 261
  - Draw a Pie Chart, 258
  - information panes for, 262
  - Insert Snippet dialog box, 257
  - InsertSnippet command, 248
  - original, 256
  - reviewing, 262–264
  - in scopes, 257
  - Snippet Editor, 261
  - surround with, 259
  - using
    - in C#/J#, 258–259
    - in Visual Basic, 257–258
- Code Snippets Manager, 260**
- code tag, 134**
- Code View, 55–58, 256**
  - forward/backward, 56
  - outlining, 56–57
  - regions, 56
- code window, 697–698**
- code-beside file, 179, 683**
- CodePlex, 512**
  - AdventureWorks database, 325, 403, 667
  - branching guidance, 939
  - IronPython, 231
  - Microsoft.Sdc.Task, 792
  - MVC source code, 634
  - PowerToys for Class Designer, 285
  - Sandcastle, 144
- Codezone Community groups, 76, 77, 78**
- collection association, 279**
- CollectionAssert class, 313**
- ColorDialog, 161, 162**
- ColorPickerForm, 160, 161, 162, 163**
- colors.** *See* fonts/colors options
- Column and Row Styles dialog box, 128, 129**
- COM, 231**
  - Add-Ins window, 562–563
  - components, 72. *See also* add-ins
    - adding, 24, 25
  - ports, 502
  - programming model, 840, 842, 839
  - references, 19
- COM+ components, 564**
- Command window, 47–48, 65**
- commands (Visual Studio), 47, 701.** *See also* *specific commands*
  - DTE and, 846–847
  - role of, 846
- comment tokens, 147, 148**
- comments (XML), 131, 132–144, 149**
  - adding, 132–133
  - blocks, 132, 133, 140, 141
  - inline, 131–132
  - IntelliSense and, 144, 251
  - single-line, 132
  - tags, 133–143. *See also* tags
  - Task List, 147–149
  - using, 143–144

- Common Language Runtime. See CLR**
- Common Properties node, 86–87**
- Common Type System, 189**
- community projects, 512**
- Community Technology Preview (CTP), 144**
- Compare Versions, 113, 114, 116, 936**
- Compilation Constants options, 783**
- compilation, dynamic, 105**
- Compile page (Visual Basic), 781–784**
  - advanced settings, 782–783
  - Build Events, 783–784
  - Compilation Constants options, 783
  - optimizations, 782–783
- Compile pane (Visual Basic), 93–95**
- Compile tab, 95, 678, 773**
- compile warnings, Pragma and, 206–207**
- compiler options, VB.NET, 43**
- compiler section, 656**
- CompleteWord command, 248**
- completion (IntelliSense). See also IntelliSense**
  - statement, 249
  - stub, 245–246
  - word/phrase, 243–244
    - in context, 243–244
    - member lists, 244, 249, 253
- complex variables, 723, 724, 729, 732**
- ComponentResourceManager, 688, 689–690**
- components. See Toolbox; specific components**
- concurrent algorithms, 231**
- confidentiality, 436, 447, 449, 450, 464, 468**
- configuration files, 649–665**
  - app.config, 650
  - application settings, 657–664
  - appSettings section, 657–658
  - attributes, 656–657
  - compiler section, 656
  - configuration schema, 651–657
  - configurationSections block, 651–652
  - cryptologySettings section, 654
  - custom configuration sections, 660–664
  - dynamic properties, 659–660
  - IntelliSense and, 663–664
  - locking attributes, 657
  - machine.config, 649
  - MSBuild, 787
  - project settings, 658
  - referenced application settings, 664–665
  - runtime section, 652–653
  - SCDL tool, 663
  - security.config, 650
  - startup configuration section, 652
  - system.diagnostics section, 654–655
  - system.net section, 653–654
  - system.runtime.remoting section, 653
  - system.web section, 655
  - system.webserver section, 655
  - web.config, 649–650
- configuration management (threat modeling), 436**
- Configuration namespace, 590–591**
- Configuration Properties node, 87–88**
- configuration schema, 651–657**
- configurationSections block, 651–652**
- Configure Data Synchronization dialog box, 420, 423, 425**
- Configure Dataset with Wizard, 331**
- Configure ListView dialog box, 532**
- Configure Tables for Offline Use dialog box, 422**
- Connect Timeout (connection property), 672**
- connection properties**
  - Asynchronous Processing, 672
  - AttachDBFilename, 672
  - Connect Timeout, 672
  - Data Source, 672
  - Initial Catalog, 672
  - Integrated Security, 673
  - MultipleActiveResultSets, 673
  - Password, 673
  - User ID, 673
- Connection String Wizard, 667–672**
- connection strings, 316, 327, 419, 421, 436, 489, 494, 667–676, 883, 916**
  - encrypting, 674–676
  - in-code construction, 673–674
  - SQL Server format, 672–673
  - XML v., 667
- connectors, 279**
  - association, 279
  - inheritance, 279
- constraints, 174–175**
  - base class, 175
  - class/structure, 175
  - constructor, 175
  - interface, 175
- constructor constraints, 175**
- ContactBrowser, 359**
- ContactDataAccess, 359**
- ContactItem class, 560**
- ContactServices, 359**

- ContactTableAdapter**, 328, 329, 339
  - container controls**, 61, 127–129, 514
  - Contains (assertion)**, 313
  - ContentPlaceHolder components**, 534
  - context menu**, **Solution Explorer**, 15–16
  - Continuous Integration**, 901, 923
  - control extenders**, 540, 541, 542, 546
  - Control Extenders**, **AJAX**, 540–542
  - Control Outline mode**, 59–61
  - Control Tree category**, 746
  - control types (default)**, 378–379
  - Control view**, 59
  - controls**. *See also specific controls*
    - manipulation, **WCF** and, 598–600
    - mobile application, 571–579
    - Silverlight**, 628–629
    - web, 526–533
    - Web form controls, 515–519
    - Windows forms, 121–129
  - ControlValidator**, 351–352, 353
  - Copy Web Site tool**, 827
  - copying web applications**, 827
  - Corporate Portal**, 882, 883
  - Count method**, 193, 194, 195
  - counters**. *See performance counters*
  - cradling**, 501–502
  - Create Instance**, 53–54
  - Create New SQL Server Database dialog box**, 418
  - Create Strong Name Key dialog box**, 800
  - Create Unit Test menu**, 315
  - CRM project**, 418, 419, 420
  - CRMServices project**, 425, 426, 427, 428
  - cross browser**, **cross platform**, 626
  - cross-assembly referencing**, of resource files, 689
  - Cryptographic Next Generation (CNG) classes**, 449
  - Cryptographic Service Provider wrapper classes**, 449
  - cryptography**, 436, 447–468, 654
    - applying, 451–464
    - asymmetric keys, 450–453
    - authentication, 99, 436, 447, 450, 464, 468, 482, 485–487, 528–529
    - confidentiality, 436, 447, 449, 450, 464, 468
    - data integrity, 436, 447, 448, 449, 450, 464, 468, 799
    - general principles, 447
    - goals, 447, 451, 468
    - key containers, 464, 467, 675, 676
    - non-repudiation, 447, 450, 464, 468
    - SecureString**, 464–466
    - symmetric keys. *See symmetric keys*
    - techniques, 448–451
  - cryptographySettings section**, 654
  - CryptoStream**, 461, 462, 463
  - Crystal Reports Web Site template**, 512
  - CspParameters class**, 467
  - .csproj files**, 88, 90, 104, 506
  - CSS Properties window**, 519, 522, 523, 524
  - CSS (Cascading Style Sheet) tools**, 519–524
  - CStr operation**, 184
  - CTP (Community Technology Preview)**, 144
  - Ctrl+]**, 57
  - Ctrl+Tab window**, 33
  - culture resource files**, 686–688
    - creating, 686–687
    - loading, 687
  - cultures**, 686. *See also culture resource files*
    - invariant, 686, 687
    - neutral, 686
    - specific, 686
  - Current Selection**, 86
  - CurrentStatus property**, 305, 306, 308, 314, 316, 317, 320
  - CurrentStatusTest method**, 308, 309, 311, 312, 317, 318, 899
  - custom actions**, for installers, 812–814
  - Custom Component Set**, 50, 51
  - custom configuration sections**, 660–664
  - Custom constants (option)**, 783
  - custom events**, 185
  - custom profile provider**, 487, 489
  - Custom Projections**, 389–390
  - custom resource files**, 692–694
  - CustomerManagement tab**, 618
  - CustomerProxy class**, 728
  - customErrors section**, 738–739
  - CustomerVisualizer class**, 731, 732
  - Customize dialog box**, 32
  - CustomRoles**, 484
  - CVS**, 108. *See also SourceSafe repository*
  - cyclomatic complexity**, 893
- ## D
- data binding controls**, 376–378
  - Data Compare tool**, 919–920
  - data components (web controls)**, 530–533

- Data Connection property, 125**
- data connections, 289, 365, 366, 368, 374, 418**
- Data Connections node, 289, 365, 366, 368, 374, 418**
- Data Driven Test Results section, 318**
- Data Generation Plan, 914–916**
- Data Generator Wizard, 920**
- data input (threat modeling), 436**
- data integrity, 436, 447, 448, 449, 450, 464, 468, 799**
- Data Link Properties dialog (utility), 327**
- data protection (threat modeling), 436**
- Data Source (connection property), 672**
- Data Source Configuration Wizard, 326, 327, 328, 332, 374, 419, 667, 671**
- Data Sources window, 328, 331, 338, 339, 353, 357, 361, 365, 374–375, 381, 580, 582, 584, 585**
- Data UI Customization section, 121, 378–379**
- Database Diagram Editor, 365, 373**
- database diagrams, 373**
- Database Edition (VSTS), 911–921**
  - best practices, 921
  - Data Compare tool, 919–920
  - Data Generation Plan, 914–916
  - database refactoring, 917–918
  - database unit testing, 916–917
  - Offline Schema Projects, 912–914
  - Power Tools, 920
  - Schema Compare tool, 918–919
  - SQL-CLR Database Project, 911–912
  - T-SQL Editor, 920
- Database Schema, offline, 912–914**
- database windows (in Visual Studio), 365–379**
- databases**
  - AdventureWorks. See AdventureWorks database
  - connection strings. See connection strings
  - connectivity, 365
  - Northwind, 581–590
  - refactoring, 917–918
  - relational, 226, 325, 363, 369, 402, 667. See also DataSets
  - unit testing, 916–917
    - ChecksumCondition, 920
    - ExpectedSchemaTestCondition, 920
- DataBinding, 325, 331, 333, 334, 342, 349, 350. See also binding**
- DataColumns, 325**
- DataContext, 405, 408, 409, 410, 411, 414, 416, 530, 607**
- DataGridView, 26, 126, 127, 353–355, 358, 359, 361, 374, 381, 412, 583, 730**
- DataList, 530**
- DataPager, 531–533**
- DataRows, 325**
- DataSets, 325–330**
  - data source added to, 326–328
  - designer, 328–330, 587
  - mobile application, 582–590
  - strongly typed, 325, 326
- DataTables, 325, 729**
- datatips, 11, 54, 407, 408, 698, 701, 702**
- DD. See Deployment Diagram**
- debug = “true” option, 737, 758**
- debug attribute, 737, 758**
- Debug class, 754–756**
- Debug Info (setting), 786**
- Debug menu, 6, 32**
- debug messages, outputting, 755–756**
- debug proxies, 723–729**
- Debug Source Files section, 87**
- Debug tab, 96–97, 710**
  - enable debuggers, 96–97
  - start action, 96
  - startup options, 96
- Debug Visualizer, LINQ to SQL, 407, 408**
- DebuggerDisplay attribute, 728**
- Debugger class, 754**
- debugger option**
  - ASP.NET, 735, 736
  - Native Code, 736
  - Silverlight, 736
  - SQL Server, 736
  - Web Site projects, 736
- DebuggerBrowsable attribute, 724, 727**
- DebuggerDisplay attribute, 724–725**
- DebuggerHidden attribute, 725**
- DebuggerNonUserCode attribute, 726**
- DebuggerStepperBoundary attribute, 727**
- DebuggerStepThrough attribute, 726**
- DebuggerTypeProxy attribute, 727, 728**
- DebuggerVisualizer attribute, 730, 732**
- debugging**
  - add-ins, 864
  - advanced techniques, 751–766
  - ASP.NET code (server-side), 735–741
  - attributes, 723–727
  - with breakpoints, 711–721

- with code, 753–756
  - customization, 723–729
  - with delayed signing, 476–477
  - DTE and, 847
  - extending, 96
  - JavaScript
    - AJAX, 743
    - client-side, 741–743
    - dynamically generated, 742
  - LINQ, 390–391
  - low-level, 705–706
  - mixed-mode, 765
  - mobile applications, 579
  - multi-threaded, 704, 763–764
  - .NET Framework source code, 760–763
  - remote, 759–760
  - running applications, 756–760
    - attaching to web application, 757–758
    - attaching to Windows process, 757
  - Silverlight, 736, 743–744, 750
  - SQL server stored procedures, 736, 764–765
  - for Visual Studio 2005, 843
  - visualizers and, 729–733
  - Web Application projects, 736–737
  - web applications, 735–750
- debugging windows, 697–710**
- Debug.ListThreads, 48**
- Debug.Threads, 48**
- declarative languages, 230**
- decrypting symmetric keys, 458–460**
- default instances, 217–218, 223, 672**
- DefaultSwitch, 292**
- DefaultValue attribute, 28–29**
- Define DEBUG constant and Define TRACE constant (option), 783**
- delayed signing, 476–477**
- Delegate entity, 278**
- delegates, 209–210**
- Delta Report, 941**
- DEM. See Device Emulator Manager**
- dependencies, manual, 780–781**
- dependency properties, 620**
- Dependency Tool, 920**
- deployment**
- add-ins, 864–865
  - ClickOnce, 101, 102, 103, 564, 565, 817–824
  - with installers, 803–816, 833–836
  - macros, 877
  - mobile application, 831–836
  - MSI, 564, 565, 803–816, 833–836
- Deployment Diagram (DD), 881, 885–886**
- depth of inheritance, 893**
- Descending keyword, 390**
- Description attribute, 28, 311**
- DESCryptoServiceProvider symmetric algorithm, 449**
- design skins (mobile applications), 569–571**
- buttons, 570–571
  - enable/disable, 570
  - orientation, 570
- design time layout, 11, 12**
- designer files, 29, 179, 333, 585, 588, 682–683**
- Developer Edition (VSTS), 891–901**
- developing**
- add-ins, 861–863
  - macros, 872–876
- Development Tools Extensibility. See DTE**
- device applications. See mobile applications**
- device emulation, 500–502**
- Device Emulator Manager (DEM), 495, 501–502, 579**
- Device Security Manager (DSM), 495–502, 579, 580**
- device emulation, 500–502
    - connecting, 501
    - cradling, 501–502
    - security configurations, 495–500
- diagrams**
- AD, 882–885
  - class
    - creating, 275–276
    - entities for, 278
    - exporting, 281
    - instantiating objects, 53
    - static methods, invoking, 52
    - View Class Diagram button, 15
  - database, 373
  - Database Diagram Editor, 365, 373
  - DD, 881, 885–886
  - SD, 881, 887–889
  - VSTS Architect Edition, 881–889
- DialogDebuggerVisualizer abstract class, 731**
- dictionary**
- in-memory, 487
  - object, ViewData, 641, 642, 643
  - Properties, 320
  - replacements, 164
  - resource, 603, 604

**Dim keyword, 190, 191**  
**disabled add-ins, 563–564**  
**Disassembly window, 706**  
**DisplayName attribute, 28**  
**DIV tag, 58**  
**DLL base address, 783, 787**  
**DMA, 502**  
**Do not reference mscorlib.dll (setting), 786**  
**Dock property, 125, 128, 129–130, 585**  
**docking, 6, 26, 33–35, 130, 572, 574**  
**Document Explorer, 74–75**  
**document object model, 144, 393**  
**Document Outline window, 58–59, 60, 61, 515**  
    Control Outline mode, 59–61  
    copy/paste function, 61  
    hierarchical view, 61  
    HTML outlining, 58–59  
**document outlining, 58**  
**documentation, 131–149**  
    inline commenting, 131–132  
    MSDN, 48, 63, 74, 76, 77, 78, 145, 765, 882,  
        896, 897, 908, 916, 918, 920  
    Sandcastle tools, 131, 144–146, 149  
    Task List comments, 147–149  
    XML comments, 131, 132–144, 149  
**document-level customizations (VSTO), 549**  
    creation of, 551–556  
**documents/windows, DTE and, 845–846**  
**DoesNotMatch, 313**  
**Don't save any changes option, 778**  
**Dotfuscator, 472–475, 477, 478**  
**DownloadFile, 221**  
**drag-and-drop code generation tool, 282–284**  
**Draw a Pie Chart snippet, 258**  
**DSACryptoServiceProvider, 450**  
**DSM. See Device Security Manager**  
**DTE (Development Tools Extensibility), 842–848. See also add-ins; macros**  
    commands and, 846–847  
    debugging and, 847  
    documents/windows and, 845–846  
    overview, 844–847  
    projects/solutions and, 844–845  
**duck typing, 230**  
**dynamic compilation, 105**  
**Dynamic Help, 74, 76**  
**dynamic languages, 230–231**  
**dynamic properties, 659–660**  
**dynamic scoping, 231**

## E

**ECDiffieHellmanCng, 450**  
**ECDsaCng, 450**  
**ECMA Strong Name, 439**  
**Edit and Continue, 720–721, 740**  
    rude edits, 721  
    Stop Applying Code Changes option, 721  
**Edit Columns command, 127**  
**Edit Custom Component Set, 51**  
**Edit DataSet with Designer, 328, 375**  
**Edit Rows and Columns command, 128**  
**Edit.CompleteWord, 248**  
**Edit.GenerateMethodStub, 248**  
**Edit.ImplementAbstractClassStubs, 248**  
**Edit.ImplementInterfaceStubsExplicitly, 248**  
**Edit.ImplementInterfaceStubsImplicitly, 248**  
**Edit.InsertSnippet, 248**  
**EditItemTemplate, 531**  
**editor space, 6, 36–39**  
**Edit.ParameterInfo, 248**  
**Edit.QuickInfo, 248**  
**EditRoleGroups command, 529**  
**Embedded Resource, 23, 678, 680, 681, 682, 688**  
**embedded resource files, 23, 223, 631, 681, 682, 688**  
**EmptyDataTemplate, 531**  
**EmptyItemTemplate, 531**  
**Enable Edit and Continue option, 104**  
**Enable optimizations (option), 782**  
**Encapsulate Field, 267–268, 285**  
**encapsulation, 207, 267**  
**encrypting**  
    connection strings, 674–676  
    symmetric keys, 454–457  
**EndsWith, 313**  
**Enterprise security policy, 439, 440, 441**  
**entities, 282. See also specific entities**  
**Entity Data Model (ADO.NET), 414, 415**  
**Entity Framework (ADO.NET), 414**  
**Entity Framework Tools (ADO.NET), 414**  
**Enum entity, 278**  
**Environment node, 34**  
**environment settings, 4, 5, 14, 48, 109**  
**Equals (instance method), 174, 184**  
**error handling, 740–741**  
    application-level errors, 741  
    page-level errors, 740

- Error List window, 12**
  - ErrorProvider control, 347, 352, 359, 526**
  - eval keyword, 536**
  - event handlers, Silverlight, 630–631**
  - Event Logs node, 290–292**
  - evidences, 438–439**
  - Evjen, Bill, 546**
  - «example» tag, 134–135**
  - Excel (Microsoft), 547, 549**
    - document, 549
    - template, 549
    - workbook, 549
  - Excel option (TFS), 929–930**
  - «exception» tag, 135–136**
  - exceptions. See also error handling**
    - ‘Break when an exception is thrown’ option, 739
    - Exception Assistant, 707–710, 735, 739
    - Exceptions window, 707–710
    - management, threat modeling and, 436
    - try-catch exception handling, 259, 314, 740
    - unwinding, 709–710
    - web application, 737–740
  - excluded code (metric), 893**
  - execution point, 719–720**
    - moving, 720
    - stepping through code, 719–720
  - ExpandableObjectConverter, 693**
  - ExpectedException attribute, 314**
  - ExpectedSchemaTestCondition, 920**
  - Export Template Wizard, 152, 153, 154, 155, 156, 226, 227**
  - Expression Blend (Blend), 601–604**
  - Expression Builder, 66, 67**
  - expression holes, 397–398**
  - expression trees, 188, 195, 196, 197, 198, 232**
  - Extend to Typed DataSets, 920**
  - extender controls, 125. See also control extenders**
  - Extender Provider, 351**
  - Extender Wizard, 541**
  - extensibility, Visual Studio. See add-ins; automation model; macros; VSPackages**
  - eXtensible Application Markup Language. See XAML**
  - Extension attribute, 194**
  - extension methods, 193–195**
    - My Extensions tab, 101–102, 228
  - extern aliases, 205–206**
  - external code, 726**
  - Extract Interface, 268–269, 285**
  - Extract Method, 265–267**
- ## F
- F#, 232–238**
    - code snippets and, 262–263
    - downloading/installing, 233
    - features, 236–238
    - Interactive Prompt, 234–235
    - interactive window, 235, 236
    - lazy evaluation, 237–238
    - lists, 236–237
    - pattern matching, 237
    - project creation, 233–236
  - favorites, Help, 78**
  - File Alignment (setting), 787**
  - File Disassembler add-in, 472**
  - File menu, 12**
  - file resources. See resource files**
  - FileLogTraceListener, 292**
  - Fill method, 329, 330, 332, 337, 587**
  - Find and Replace, 63–73**
    - options, 69, 73
    - Quick Find, 64–67
    - Quick Replace, 63, 65
  - find dialog options, 69**
  - Find In Files, 68–69**
  - Find Symbol, 64, 72, 79**
  - Firefox, 696, 626**
  - floating tool windows, 6, 34, 35, 74**
  - FlowLayoutPanel control, 128**
  - fn, 196, 197**
  - Font properties, 125**
  - Fonts and Colors node, 31, 36–37, 242**
  - fonts/colors options, 36–37**
  - For new solutions use the currently selected project as the startup project (option), 779**
  - foreign cultures. See cultures**
  - Foreign Key Relationships dialog box, 369, 370**
  - foreign keys, 332, 336, 915**
  - Form Collection category, 746**
  - form editor, 117**
  - Form Region, Outlook, 547, 557–561**
  - FORM tag, 58, 59**
  - Formatting and Advanced Binding dialog box, 333, 377, 378**
  - Formatting toolbar, 518**

## **FormBorderStyle property, 119**

### **forms (Web), 117. See also MVC**

- controls/HTML elements
  - formatting, 518–519
  - positioning of, 515–518
- designing, 513–526
- HTML Designer, 505, 513–515, 517, 520, 546
- HTML Source Editing toolbar, 524–525
- MVC v., 635
- partial types and, 179
- validation tools, 524–526
- Web Content Accessibility Checker, 525, 526

### **forms (Windows), 117–130**

- appearance properties, 119
- controls
  - adding, 121–122
  - automatic positioning, 123–124
  - container, 127–129
  - docking/anchoring, 129–130
  - locking design, 124
  - positioning, 122
  - service-based, 125–126
  - setting properties, 124–125
  - smart tag tasks, 126–127
  - vertically aligning, 122, 123
- design preferences, 120–121
- layout properties, 119
- partial types and, 179
- Properties window, 117–119
- window style properties, 120
- Windows Forms Designer, 23, 44, 179, 570
  - Data UI Customization section, 121, 378–379
  - preferences, 120–121
  - WPF Designer v., 598
- WPF applications and, 605–607

### **Forms namespace, 591**

### **forms-based authentication, 485. See also authentication; user authentication**

### **From statement, 386–387**

### **FromXMLString, 467**

### **full-screen mode, 38**

### **FullTrust, 438, 439, 442**

### **Func, 196, 197**

### **function breakpoints, 712–713**

### **functional languages, 231–232**

### **functions, 371–372**

### **Functions (report view), 897**

## **G**

### **GAC. See Global Assembly Cache**

### **general development settings option, 4, 6**

### **Generate Data Forms, 584, 585**

### **Generate debug info (option), 783**

### **Generate method, 691**

### **Generate Method Stub, 272–273**

### **Generate serialization assemblies (option), 783**

### **GenerateMagicNumber method, 470, 473, 475, 478**

### **GenerateMethods property, 330**

### **GenerateMethodStub command, 248**

### **Generic Tests, 908**

### **generic types, 171–175**

- constraints on, 174–175
- consumption of, 172–173
- creation of, 173–174

### **GetData method, 220, 329, 330, 360**

### **GetEnumerator method, 690**

### **GetManifestResourceNames, 682**

### **GetManifestResourceStream, 682**

### **GetObject method, 682, 689, 731, 732**

### **GetRolesForUser method, 484**

### **GetStream function, 682**

### **GetString function, 682**

### **Getting Started solution, 8**

### **GetValue, 222**

### **Global Assembly Cache (GAC), 19, 25, 159, 161, 438, 688, 795, 799, 809**

### **global identifier, 204–205**

### **Global keyword, 24, 208**

### **Global namespace, 204, 205**

### **GridSize property, 120**

### **Group By statement, 389**

### **GroupSeparatorTemplate, 531**

### **GroupTemplate, 532**

### **GUIDs, 158, 612, 617, 713**

## **H**

### **Handles keyword, 342**

### **Hanselman, Scott, 546**

### **hard disabling, 563**

### **Hardware Button control, 572–573**

### **Hash, 438, 441**

### **hash code, 192**

### **hash password, 493**

### **hash value, 441, 448, 450, 454, 455, 457, 799**

**Hash-Based Message Authentication Code (HMAC) implementations, 448****hashing, 448–449****hashing algorithms**

- MD5, 448
- RIPE–160, 448
- RIPEMD160Managed, 448
- SHA–1, 448
- SHA1Managed, 448
- SHA–2, 448
- SHA256Managed, 448

**Headers Collection category, 746****Health Monitoring, 735, 748–749****Height property, 118****Hello World, 83**

- F# and, 234–236
- IDE components and, 7–12
- resource file, 679
- Silverlight application, 631

**Help (Visual Studio 2008), 73–79**

- contextual, 73
- customizing, 78–79
- Document Explorer, 74–75
- Dynamic, 74, 76
- favorites, 78
- Search window, 76–77

**Help 2, Microsoft (.HxS), 131, 144, 147****help, Microsoft-compiled HTML (.CHM), 131, 144, 146****HiddenMethod, 725, 726****history (of file)**

- SourceSafe repository, 114–115
- TFS, 935

**History window, 935****Hit Count, 715–716****HMAC (Hash-Based Message Authentication Code) implementations, 448****HMACMD5, 449****HMACRIPEMD160, 449****HMACSHA1, 449****HMACSHA256, 449****Horizontal Spacing command, 124****hosting process, 96–97****HTML**

- .CHM format, 131, 144, 146
- as declarative language, 230
- Designer, 505, 513–515, 517, 520, 546
- elements, Web forms and, 515–519
- object tag, 633
- outlining, 58–59

Source Editing toolbar, 524–525

**httpcfg.exe command, 427****.HxS (Microsoft Help 2), 131, 144, 147****I****IComparable interface, 56, 175****icon/bitmap loading, 688****ICrudActions, 282, 283****IDataErrorInfo, 277, 278, 359****IDE (Macros), 842, 844, 852, 853, 861, 869–870, 871, 876, 878****IDE (Visual Studio 2008)**

- complexity of, 63
- components, 6–7
  - Hello World project and, 7–12
- customization options, 31–45
- extensibility. See add-ins; automation model; DTE; macros
- Find and Replace. See Find and Replace Help. See Help
- Properties window. See Properties tool window
- Solution Explorer. See Solution Explorer Toolbox. See Toolbox
- workspace control, 47–61

**IEnumerable, 189, 193, 194, 195, 198, 245, 246, 386, 387****Ignore White Space, 919****lIf function, 209****IIS (Internet Information Services), 545–546****IL Dasm, 469–471, 479****Image Library, 161****immed alias, 49****Immediate window, 48–49, 55, 97, 700–701**

- IntelliSense and, 49, 701

**imperative languages, 230****ImplementAbstractClassStubs command, 248****ImplementInterfaceStubsExplicitly command, 248****ImplementInterfaceStubsImplicitly command, 248****implicit typing, 189–191****Import and Export settings, 43–45****include tag, 136–137****Incremental Search, 71–72****indenting**

- block, 57
- smart, 57

## **InfoPath (Microsoft), 548, 549**

- 2003, 551
- 2007, 551
- form templates, 550, 551
- Toolkit for Visual Studio 2005, 551

## **InfraRed, 502**

## **inheritance connector, 279**

## **Initial Catalog connection property, 672**

## **initialization vector, 453, 454, 455, 458, 459**

## **InitializeComponent, 684**

## **inline commenting, 131–132**

## **inline shortcuts, 126**

## **in-memory dictionary, 487**

## **Input Panel control, 573–576**

## **Insert Snippet dialog box, 257**

## **Insert Table dialog box, 518, 519**

## **InsertItemTemplate, 532**

## **InsertSnippet command, 248**

## **installers, 803–816, 833–836**

- building, 803–808
- custom actions for, 812–814
- customizing, 809–812
- MSI, 803, 833–836
- Service, 814–816
- web application, 830–831
- Windows version 3.1, 564

## **integrated development environment. See IDE**

## **Integrated Security (connection property), 673**

## **integrity, of data, 436, 447, 448, 449, 450, 464, 468, 879**

## **IntelliSense, 241–251**

- bad code feedback, 242
- code generation functions, 284
- code snippets. See code snippets
- commands, 248
- configuration files and, 663–664
- extended, 250–251
- Immediate window and, 49, 701
- list, translucent, 244
- member lists, 244, 249, 253
- options, 247–250
  - C#-specific, 249–250
  - general, 247–248
- parameter information, 246
- Quick Info, 247, 248
- schemas, adding, 251
- smart tags, 242–243
- statement completion, 249
- stub completion, 245–246
- wavy lines, 241, 242, 245

## **word/phrase completion, 243–244**

- in context, 243–244
- member lists, 244, 249, 253
- XML comments and, 144, 251

## **Interactive Prompt, F#, 234–235**

## **interface constraints, 175**

## **Interface entity, 278**

## **Internal Compiler Error Reporting, 786**

## **Internet Information Services. See IIS**

## **Internet Zone, 102, 103, 439**

## **interoperation of languages, 232**

## **Intranet Zone, 439, 821**

## **invariant culture, 686, 687**

## **invocation, 230**

## **Invoke Method, 52, 55, 299**

## **IResource Reader, 690**

## **IResource Writer, 690**

## **IronPython, 231, 238**

## **IronRuby, 83, 231, 238, 548**

## **IRulesList interface, 352**

## **IsAvailable, 221**

## **IsFalse, 313**

## **IsInstanceOfType, 313**

## **IsNot operator, 207–208**

## **IsNull, 313**

## **IsSubsetOf, 313**

## **item templates, 151–155**

## **itemname, 158**

## **items, 83. See also work items**

- Add New Item dialog box, 18–19
- MSBuild project file, 791

## **ItemSeparatorTemplate, 532**

## **ItemTemplate, 532**

## **iterators, 201–202**

## **IWizard interface, 151, 159–160, 161–164, 167**

# J

## **JavaScript**

- debugging (client-side), 741–742
- web applications and, 536–537

## **Just My Code option, 708, 726, 761**

## **just-in-time compiled, 469**

# K

## **key containers, 464, 467, 675, 676**

## **Key keyword, 192**

## **Keyboard group, 79, 247**

**keyboard mappings, 4, 39, 247**

**Keyboard Options page, 252**

**keyboard shortcuts, 39–40**

- Command window and, 47–48
- IntelliSense commands, 248
- macros and, 40

**keys**

- asymmetric, 450–453
- foreign, 332, 336, 915
- private, 450, 451, 452, 453, 454, 455, 459, 464, 467, 798, 801
- public keys, 438, 450, 453, 454, 455, 457, 459, 467, 795, 798, 801
- secret, 448, 449
- symmetric, 448, 449
  - creating, 453–454
  - decrypting, 458–460
  - encrypting/signing, 454–457
  - receiving message, 462–464
  - sending message, 460–462
  - verification, 457–458

**keyword**

- alert, 536
- Ascending, 390
- ByVal, 245
- Descending, 390
- Dim, 190, 191
- eval, 536
- Global, 24, 208
- Handles, 342
- Key, 192
- lazy, 237
- new, 175
- Operator, 181
- Partial, 178, 179
- static, 202
- this, 194
- unsafe, 95
- Var, 190, 232, 536
- yield, 202

## L

**labeling, 923, 937–938**

**lambda expressions, 195–198**

**Language Filter, 75**

**Language Integrated Queries. See LINQ**

**language parity, 199, 210**

**Language Version (setting), 786**

**languages, 229–238**

CLS and, 232

declarative, 230

dynamic, 230–231

F#. See F#

functional, 231–232

imperative, 230

interoperation, 232

online list, 229

selection of, 229–230, 232

**language-specific features**

C#, 199–207

VB.NET, 207–210

**large screens, 35**

**Layout category, 119**

**LayoutTemplate, 532**

**lazy evaluation, 237–238**

**lazy keyword, 237**

**LDD. See Logical Datacenter Designer**

**#light, 234**

**'Line numbers' checkbox, 38**

**line-level tracking, 38–39**

**lines of code (metric), 892**

**LINQ (Language Integrated Queries), 383–391**

ADO.NET and, 405

as borrowed paradigm, 232

debugging/execution, 390–391

expression trees and, 188, 195, 196, 197, 198, 232

LinqDataSource, 530–531

providers, 383–384

query pieces, 386–390

XML creation with, 397–398

**LINQ to Entities, 403, 414–416**

ADO.NET Entity Data Model, 414, 415

ADO.NET Entity Framework, 414

ADO.NET Entity Framework Tools, 414

**LINQ to SQL, 403–414**

ADO.NET and, 403

Debug Visualizer, 407, 408

designer, 404, 405, 410, 412

inserts/updates/deletes, 408–409

object model, creation of, 404–406

object-relational mapping framework, 403, 416

objects, binding, 411–414

querying with, 407–411

stored procedures and, 409–411

**LINQ to XML (XLINQ), 393–402**

expression holes, 397–398

Paste XML as XElement, 395–396

querying capabilities, 398–399

## **LINQ to XML (XLINQ) (continued)**

- schema support, 400–401
- XML literals, 394–395, 397, 398
- XML object model, 393–394
- LinqDataSource, 530–531**
- Linux, 626, 627, 633**
- list tag, 137–138**
- listeners, 756**
  - FileLogTraceListener, 296
  - SharedListeners, 294
  - trace, 292, 654, 655
- lists, F#, 236–237**
- ListView, 531–533**
- literals**
  - string, 37, 326, 394, 677
  - XML, 394–395, 397, 398
- Load Symbols option, 705**
- Load Tests, 906–908**
- Local Database Cache object, 420, 425, 429**
- Local Intranet Zone, 439, 821**
- Locals window, 703**
- LocalTestRun.testrunconfig file, 309, 310, 899**
- Location property, 119**
- Lock Controls command, 124**
- Locked property, 124**
- locking attributes, 657**
- LoggedInTemplate, 529**
- logging**
  - Event Logs, 290–292
  - My namespace and, 291–292
  - threat modeling and, 436
- Logical Datacenter Designer (LDD), 881, 884–885**
- login form, 491–492**

## **M**

- MAC (Message Authentication Code) implementations, 448**
- machine policy code groups, 439**
  - ECMA Strong Name, 439
  - Internet Zone, 102, 103, 439
  - Local Intranet Zone, 439, 821
  - Microsoft Strong Name, 439
  - My Computer Zone, 439
  - Restricted Zone, 439
  - Trusted Zone, 439
- machine.config, 649**
- machinename, 158**
- Macro Explorer, 869, 870, 876, 878**
- macros, 867–878**
  - anatomy of, 868
  - Command window and, 47
  - deployment, 877
  - developing, 872–876
  - keyboard shortcuts and, 40
  - recording, 871–872
  - running, 876–877
  - tracepoints and, 719
- Macros IDE, 842, 844, 852, 853, 861, 869–870, 871, 876, 878**
- MACTripleDES, 449**
- magic numbers, 471, 472**
- Maintainability Index, 893**
- Make Same Size menu, 123**
- Manage Styles window, 519, 520, 521, 522, 523**
- Managed C++, 471, 765**
- Managed Code Analysis Tool, 893–894**
- management classes, 293–294**
- management events, 295–297**
- manual dependencies, 780–781**
- Manual Tests, 908**
- many-to-many relationship, 338, 339**
- margin handles, 517**
- master pages, 534–535**
- 'Match case,' 66**
- 'Match whole word,' 66**
- Matches (assertion), 313**
- Maximum number of parallel project builds (option), 778**
- MaximumSize property, 119**
- MD5, 448**
- MD5Cng, 449**
- MD5CryptoServiceProvider, 449**
- Member Body scope, 257**
- Member Declaration scope, 257**
- member lists, 244, 249, 253**
- Memory windows, 705–706**
- Merge dialog box, 113–114**
- merging, 107, 108, 110, 113–114, 923, 936, 939**
  - Auto Merge, 936
  - Merge Changes tool, 116, 936
- Message Authentication Code (MAC) implementations, 448**
- message queues, 297–299**
  - private, 297, 298, 299
  - public, 297, 298
  - system, 297, 298

- metadata, 131, 309**
- Method Call Result dialog box, 53**
- methods. See *specific methods***
- Metrics, Code, 891–893**
  - class coupling, 893
  - cyclomatic complexity, 893
  - depth of inheritance, 893
  - excluded code, 893
  - lines of code, 892
  - Maintainability Index, 893
- Microsoft Help 2 (.HxS), 131, 144, 147**
- Microsoft Intermediary Language. See MSIL**
- Microsoft Office 2007 primary interop assemblies (PIAs), 564**
- Microsoft Office suite. See Access; Excel; InfoPath; Office applications; Outlook; Project; SharePoint; Visio; Word**
- Microsoft Solution Framework, 923. See also CMMI Process Improvement; MSF for Agile Software Development**
- Microsoft Strong Name, 439**
- Microsoft Synchronization Services for ADO.NET. See Sync Services**
- Microsoft Visual SourceSafe. See SourceSafe repository**
- Microsoft Visual Studio 2008. See Visual Studio 2008**
- Microsoft Visual Studio 2008 IDE. See IDE**
- Microsoft-compiled HTML help (.CHM), 131, 144, 146**
- Microsoft.Sdc.Task, 792**
- MinimumSize property, 119**
- miscellaneous files, 41–42, 84**
- mixed-mode debugging, 765**
- mobile applications, 567–594**
  - controls, 571–579
  - data source, 580–582
  - DataSet, 582–590
  - debugging, 579
  - deployment, 831–836
    - CAB files, 831–833
    - MSI installer, 803, 833–836
  - design skins, 569–571
    - buttons, 570–571
    - enable/disable, 570
    - orientation, 570
  - DSM and, 495
  - Hardware Button control, 572–573
  - Input Panel control, 573–576
  - Northwind database, 581–590
  - Notification control, 576–579
  - project settings, 580
  - smart device project, creation of, 567–569
  - Toolbox and, 571–579
  - Windows Mobile APIs, 567, 590–594
    - configuration namespace, 590–591
    - Forms namespace, 591
    - Notification Broker, 593–594
    - Status namespace, 592
    - Telephony namespace, 592–593
- modeling, with Class Designer, 275–288. See also Class Designer**
- Model-View Controller. See MVC**
- Modules (report view), 897**
- Modules window, 704–705**
- Mono, 626**
- Moonlight, 627**
- Move Schema, 920**
- MRefBuilder tool, 145**
- MSBuild, 787–793, 920, 939, 940, 942**
  - build customization and, 787–793
  - build.proj, 145, 146
  - configuration files, 787
  - earlier versions, 18, 773
  - “MSBuild project build output verbosity,” 43, 779–780
  - Options property page, 510
  - project file
    - items, 791
    - properties, 791
    - targets, 792
    - tasks, 792–793
  - schema, 791–793
    - project files and, 89
    - project types and, 88
  - tasks (Power Tools), 920
  - Team Foundation Build and, 939–941
  - upgrading, 773
  - Visual Studio 2008 and, 787–790
- mscorlib.dll, 786**
- MSDataSetGenerator tool, 325, 326, 582, 590**
- MSDN documentation, 48, 63, 74, 76, 77, 78, 145, 765, 882, 896, 897, 908, 916, 918, 920**
- MSF for Agile Software Development, 923, 924, 928, 931, 941, 943, 945**
- MSI deployment, 564, 565, 803–816, 833–836**
- MSI installer, 803, 834–836**

**MSI SPY, 811****MSIL (Microsoft Intermediary Language), 469****MSIL Disassembler, 469–471, 479****MSMQ, 297–299****Multiline option, 126****multiple screens, 6, 35, 38, 575****Multiple Startup Projects, 86****MultipleActiveResultSets, 673****multiple/tabbed window toggling, 6, 7****multi-threaded debugging, 704, 763–764****MVC (Model-View Controller), 512, 546, 625, 634–645, 736**

architecture, 635–636

benefits, 635

controllers/action methods, 638–641

framework, 634–635

open source and, 761

project creation, 636–637

URL routing, 644–645

Views, 641–644

Web forms v., 635

**My Computer Zone, 439****My Extensions tab (Visual Basic), 101–102, 228****My namespace, 211–228**

classes in top level, 212–213

contextual, 215–217

extending, 224–226

functionality, 218–228

logging and, 291–292

methods/properties added to, 224–225

overview, 218–228

packaging/deploying, 226–228

structure of, 211–212

using, in code, 213–214

C#, 214

**My objects, 212–213**

access to

by class library/console apps, 217

Web-based, 216

Windows-based, 215

default instances, 217–218

**My Solution, 50****My Work Items query, 926****My.Application, 212, 218–219**

My.Application.Info, 212, 218, 219

My.Application.Log, 212, 215, 218, 224

**MyClassLibrary, 87****MyClassLibraryTest, 87****My.Computer, 212, 217, 219–222**

My.Computer.Audio, 219–220

My.Computer.Clipboard, 220

My.Computer.Clock, 220

My.Computer.FileSystem, 220

My.Computer.Info, 221

properties, 221

My.Computer.Keyboard, 221

My.Computer.Mouse, 221

My.Computer.Network, 221–222

My.Computer.Ports, 222

My.Computer.Registry, 222

**My.Forms, 212, 223****My.Log, 213****My.Request, 213, 223****My.Resources, 213, 223, 224****My.Response, 213, 223****My.Settings, 213, 224****MyStringHelper class, 225, 226****\_MYTYPE, 217****My.User, 213, 217, 224****My.Webservices, 213, 217**

## N

**namespace. See also My namespace**

alias qualifier, 203–204

Configuration, 590–591

Forms, 591

Global, 204, 205

root, 158

Status, 592

System.Diagnostics, 312, 723, 753

System.ServiceProcess, 814

System.Web.Security, 483

Telephony, 592–593

XML, 401, 860

**naming**

assemblies, 795–799

conflicts, 203–206

resource files, 681

**navigating**

code

bookmarks and, 251–253

long blocks, 71–72

stepping through, 719–720

open items, 32–33

**navigation components (web controls), 527****NDoc, 144****nested classes, 729****Nested Master Page, 535**

**.NET assemblies.** See **assemblies**

**.NET Compact Framework, 432, 501, 512, 567, 568, 572, 579, 773, 774**

**.NET Framework**

- ADO.NET. See ADO.NET
- ASPNET. See ASPNET
- code access security, 439, 440–442
- configuration system. See configuration files
- language ecosystem. See languages
- My namespace. See My namespace
- reference source, 760–763
- security, 435–445
- source code, debugging, 760–763
- upgrading to v3.5, 773–774

**.NET, Reflector for, 165, 166, 335, 471, 472, 473, 479, 760, 795, 796**

**netsh command, 427, 615**

**NetworkAvailabilityChanged event, 222**

**neutral culture, 686**

**New Breakpoint dialog box, 713**

**new keyword, 175**

**New Outlook Form Region Wizard, 558–559**

**New Project dialog box, 7–8, 89, 233**

- SQL Server Project, 911

**news channel property, 5**

**next generation web.** See **MVC; Silverlight**

**Nokia, 627**

**non-repudiation, 447, 450, 464, 468**

**non-strict typing, 230**

**Northwind database, 581–590**

**Notepad, 295, 327, 863**

- XML, 396

**Notification Broker, 593–594**

**notification bubble, 576, 577**

**Notification control (mobile applications), 576–579**

**NotSoHiddenMethod, 725**

**Novell, 626, 629**

**n-tiers, 432, 634**

- Sync Services over, 425–429

**null propagation, 178**

**nullable types, 176–178**

**NUnit, 307.** See *also* **unit testing**

## O

**obfuscation, 435, 436, 468, 469–479**

- attributes, 477–479
- decompilers, 471–472
- delayed signing, debugging with, 476–477
- Dotfuscator, 472–475, 477, 478
- GenerateMagicNumber method, 470, 473, 475, 478
- magic numbers, 471, 472
- MSIL Disassembler, 469–471, 479
- ObfuscationAssemblyAttribute, 477–478
- ObfuscationAttribute, 478–479
- reflection, 145, 320, 469, 472, 475, 690
- Reflector for .NET, 165, 166, 335, 471, 472, 473, 479, 760, 795, 796
- strongly named assemblies, 795, 798–799, 801, 896

**ObfuscationAssemblyAttribute, 477–478**

**ObfuscationAttribute, 478–479**

**Object Browser, 50–51, 131**

**object data source, binding and, 355–359**

**object initialization, 187–189**

**Object Lifetime (report view), 897**

**object model**

- document, 144, 393
- LINQ to SQL, 404–406
- .NET, 403
- Outlook, 557–558
- XML, 393–394, 402

**object tag, 633**

**object test bench, 52–55**

- fields/properties, accessing, 54
- instance methods, invoking, 55
- instantiating objects, 53–54
- static methods, invoking, 52–53

**ObjectDumper, 385, 390, 391**

**object-oriented programming, 187, 208, 230, 232, 325, 363, 868, 872**

**ObjectProvider object, 731, 732**

**object-relational mapping framework, 403, 416.** See *also* **LINQ to SQL**

**occasionally connected applications, 417–418, 425, 432, 481, 494.** See *also* **client application services; Sync Services**

**Office applications, 547–565.** See *also* **Visual Studio Tools for Office**

- add-ins, 17, 549–550
- creation of, 557–561
- disabling, 563–564
- unregistering, 562–563
- debugging, 561–564
- deploying, 564–565
- Ribbon. See **Ribbon**

**Office category, 89**

**Offline Schema Projects, 912–914**

**On Run, when build or deployment errors occur (option), 779**

**On Run, when projects are out of date (option), 779**

**OnAddNew method, 335, 336, 346**

**one-to-many relationship, 339**

**Only build startup projects and dependencies on Run (option), 779**

**'Open Folder in Windows Explorer' option, 16**

**open items, navigation of, 32–33**

**open source, 760**

AJAX Control Toolkit, 542

MVC, 760

NDoc, 144

**OpenSerialPort, 222**

**Opera, 626**

**Operator keyword, 181**

**operator overloading, 181–184**

**Option Explicit, 43**

**Option Strict, 43**

**Options dialog box, 31, 45**

advanced checkbox, 31

animated tool windows, 34

AutoToolboxPopulate property, 23

code formatting, 57

control type (default), 378

design skin enable/disable, 570

find and replace options, 73

fonts/colors options, 36–37

form design preferences, 120–121

Import and Export settings, 43–45

IntelliSense options, 247–250

keyboard mapping scheme, 39

miscellaneous files (viewing of), 41, 42

news channel property, 5

Snippet Editor, 261

solution node, 14

statement completion, 249

tabbed/multiple window toggling, 6, 7

tracking changes option, 38–39

VB.NET options, 43

Visual Studio commands, 47

filtering, 40

word wrap, 31

**Order By, 390**

**Ordered Tests, 908–909**

**Organize Usings, 273**

**OSFullName, 221**

**OSPlatform, 221**

**OSVersion, 221**

**Other Project Types node, 233**

**outlining. See also Document Outline window**

automatic, 56–57

document, 58

HTML, 58–59

**Outlook (Microsoft), 549**

2007, 557

development concepts, 557–558

Form Region, creation of, 547, 557–561

object model, 557–558

**output, tracing, 746–747**

**Output window, 12, 699–700**

**overlapping state manipulation, 231**

**Override Members dialog box, 284**

**Owner attribute, 311**

## P

**page-level errors, 740**

**page-level tracing, 744–745**

**Panel control, 127**

**panning tool, 286**

**·para· tag, 138**

**parallel algorithms, 231**

**·param· tag, 138–139**

**Parameter Collection Editor, 330, 344**

**ParameterInfo command, 248**

**parameters. See also specific parameters**

custom, 159

information, IntelliSense and, 246

Promote Variable to Parameter, 272

Remove Parameters, 270–271, 284

Reorder Parameters, 269–270, 284

template, 158–159

**·paramref· tag, 139**

**Parent Property, 406**

**parent-child relationship, 339**

**parity, language, 199, 210**

**partial classes, 56, 179, 225, 281, 412**

**Partial keyword, 178, 179**

**partial methods, 180–181**

**partial trust, 79, 102, 103, 821**

**partial types, 178–181**

**Password (connection property), 673**

**Paste XML as XElement, 395–396**

**PasteXmlAsLinq, 395**

**pattern matching (F#), 237**

**PDAs, 567, 594. See also mobile applications**

**peer-to-peer applications, 417**

**Pending Checkins window, 112–113**

- performance counters, 299–302**
- permission sets, 103, 139, 438, 439, 442**
  - Calculate Permissions button, 102–103
- ‘permission’ tag, 139**
- PHP, 537, 633**
- phrase completion. See word/phrase completion**
- PIAs (Microsoft Office 2007 primary interop assemblies), 564**
- Pick Color button, 161, 162**
- Ping, 221**
- pinned tool windows, 6, 33–34**
- pinning, of file version, 115**
- pipe operator, 237**
- Play function, 219, 220**
- PlaySystemSound function, 219, 220**
- Pocket PC**
  - device, 570, 572, 573
  - emulator, 501
- policy code groups (machine), 439**
  - ECMA Strong Name, 439
  - Internet Zone, 102, 103, 439
  - Local Intranet Zone, 439, 821
  - Microsoft Strong Name, 439
  - My Computer Zone, 439
  - Restricted Zone, 439
  - Trusted Zone, 439
- policy-based security, 437, 439–440. See also code access security**
- portals**
  - Corporate, 882, 883
  - SharePoint, 533, 923, 924
  - Team Portal, 924, 942–943, 946
- Power Tools, 920**
  - ChecksumCondition, 920
  - Data Generator Wizard, 920
  - Dependency Tool, 920
  - ExpectedSchemaTestCondition, 920
  - Extend to Typed DataSets, 920
  - Move Schema, 920
  - MSBuild tasks, 920
  - Process Editor, 944, 945
  - T-SQL Static Code Analysis, 920
- PowerPoint (Microsoft), 547, 549**
- PowerToys, for Class Designer, 285–288**
  - functionality enhancements, 287–288
  - visualization enhancements, 285–287
- Pragma statement, 206–207**
- ‘pretty listing of code,’ 58**
- Preview Data dialog box, 380**
- previewing data, 380**
- primary interop assemblies (PIA), 564**
- Priority attribute, 311**
- private keys, 450, 451, 452, 453, 454, 455, 459, 464, 467, 798, 801**
- private queues, 297, 298, 299**
- Process Editor, 944, 945**
- Process Template Editor window, 945**
- Process Template Manager, 945**
- process templates, 923–925, 944, 945**
- Processes window, 705**
- Professional ASP.NET 3.5: in C# and VB (Evjen, Hanselman, and Rader), 546**
- profile provider, custom, 487, 489**
- Profiler, Stand-Alone, 898**
- profiling tools, 895–898**
  - reports, 897–898
  - sessions, configuring, 896–897
- programming languages. See languages**
- Project (Microsoft), 549, 923, 930–932**
- Project Dependencies window, 86, 87, 88, 780**
- project files, 90**
  - compatibility, 84
  - .csproj files, 88, 90, 104, 506
  - formats, 90
  - SourceSafe repository and, 110
  - .vbproj files, 88, 90, 104, 506, 792
- Project Guidance window, 924, 925, 943**
- project properties, 90–91**
- Project Properties Designer, 400, 481, 482, 483**
  - Application tab, 481, 773
  - Compile tab, 773
  - Publish tab, 817, 819
  - reference application settings and, 664
  - Services tab, 482, 487, 489, 492
  - Settings tab, 489, 658
  - View Application Events button, 493
  - XML schema and, 400
- project settings (configuration files), 658**
- project settings (mobile applications), 580**
- project templates, 155–156**
- projectname, 158**
- projects**
  - Add New Project dialog box, 17–18
  - Class Library, 159, 160, 166, 310, 834
  - default locations, 41
  - dependencies, manual, 780–781
  - DTE and, 844–845
  - Hello World. See Hello World
  - multiple solutions and, 20
  - New Project dialog box, 7–8, 89, 233

### projects (continued)

- Other Project Types node, 233
- settings, 100
- startup. See startup projects
- Track Active Item in Solution Explorer option, 41
- types, 88–89
- Web Application. See Web Application projects
- Web Site. See Web Site projects

**Promote Variable to Parameter, 272**

**Prompt to save all changes, 778**

**properties. See *specific properties***

**Properties dictionary, 320**

**Properties tool window, 12, 25–29, 280–281**

- extending, 27–29
- Windows forms and, 117–119

**property accessibility, 184–185**

**property grid, 22, 26, 245, 276, 319, 370, 522, 531, 577, 583**

**prototyping, 231**

**public keys, 438, 450, 453, 454, 455, 457, 459, 467, 99, 798, 801**

**public nested classes, 729**

**public queues, 297, 298**

**PublicKeyToken, 165, 166**

**Publish item, 825**

**Publish tab, 103, 817, 819, 822**

**publish web applications, 825–827**

**Publisher condition type, 438, 441**

**Python, 231**

## Q

**Quality Indicators report, 942**

**queries. See also LINQ**

- Active Bugs, 926
- All Work Items, 926
- LINQ, 386–390
- LINQ to SQL, 407–411
- My Work Items, 926
- old-school, 384–386
- work item, 924, 925, 926–928, 943, 945

**Query Builder, 329, 330, 343, 345, 372, 375, 376**

**Querystring category, 747**

**queues. See message queues**

**Quick Find, 64–67**

- options, 66–67

**Quick Info, 247, 248**

**Quick Replace, 63, 65**

- options, 66–67

**QuickCRM project, 419, 425, 426, 428**

**QuickInfo command, 244**

**QuickWatch window, 701–702**

## R

**Rader, Devin, 546**

**RaiseEvent, 185**

**Raw View, 729**

**RC2CryptoServiceProvider symmetric algorithm, 449**

**Read Eval Print Loops (REPL), 230, 231, 236**

**recording macros, 871–872**

**red wavy lines, 241, 245**

**Refactor!, 255, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273**

**refactoring, 255, 264–273. See also code snippets**

- actions, 265–273
  - Encapsulate Field, 267–268
  - Extract Interface, 268–269, 285
  - Extract Method, 265–267
  - Generate Method Stub, 272–273
  - Organize Usings, 273
  - Promote Variable to Parameter, 272
  - Remove Parameters, 270–271
  - Rename, 271
  - Reorder Parameters, 269–270
- with Class Designer, 284–285
- code generation and, 282–285
- database, 917–918
- support, 264–265

**reference application settings and, 664**

**Reference Library Components, 23**

**reference source, .NET Framework, 760–763**

**referenced application settings (configuration files), 664–665**

**references. See also service references**

- Add Reference dialog box, 19–20

**References tab (Visual Basic), 97–98, 262, 273**

**reflection, 145, 320, 469, 472, 475, 690**

**Reflector for .NET, 165, 166, 335, 471, 472, 473, 479, 760, 795, 796**

**regions, 56**

**registeredorganization, 158**

**Registers window, 706**

**Regressions report, 942**

**regular expressions, 67**

**relational databases. See databases**

**relationship editing, 369–370**

- relaxed delegates, 209–210**
- Release mode, 87, 755**
- Remaining Work report, 942**
- ‘remarks’ tag, 140**
- remote debugging, 759–760**
- Remove integer overflow checks (option), 782**
- Remove Parameters, 270–271, 285**
- Rename (refactoring action), 271**
- Rename Type Members, 285**
- Rename Types, 285**
- renaming components, 60**
- Reorder Parameters, 269–270, 285**
- REPL (Read Eval Print Loops), 230, 231, 236**
- Replace. See Find and Replace**
- Replace in Files, 70–71**
- replacements dictionary, 164**
- ReplaceObject method, 732, 733**
- Report Definition files, 945**
- Reporting Web Site template, 511**
- reports, 897–898**
  - Actual Quality v. Planned Velocity, 942
  - Allocations (report view), 897
  - Bug Rates, 942
  - Bugs by Priority, 942
  - Burndown Charts, 941
  - Call Tree (report view), 897
  - Caller/Callee (report view), 897
  - Delta, 941
  - Functions (report view), 897
  - Modules (report view), 897
  - Object Lifetime (report view), 897
  - Quality Indicators, 942
  - Regressions, 942
  - Remaining Work, 942
  - Scenarios Details, 942
  - Summary (report view), 897
  - Test Failing, 942
  - TFS, 941–942
- Request Cookies Collection category, 746**
- Request Details category, 746**
- Reset Toolbox option, 24**
- Resgen (Resource File Generator), 679, 682–683**
- Resolve Conflicts window, 936–937**
- resource dictionary, 603, 604**
- resource editor, 680, 681, 682, 689, 692**
- resource fallback process, 687**
- Resource File Generator (Resgen), 679, 682–683**
- resource files, 16, 99, 105, 677–694**
  - accessing, 682, 688–690
  - adding, 680–681
  - applications and, 683–686
  - binary, 680
  - bitmap/icon loading, 688
  - coding of, 690–691
  - Component Resource Manager, 689–690
  - cross-assembly referencing, 689
  - culture, 686–688
    - creating, 686–687
    - loading, 687
  - custom, 692–694
  - definition, 677
  - designer, 682–683
  - embedded, 23, 223, 631, 681, 682, 688
  - Hello World, 679
  - My.Resources and, 223, 224
  - naming, 681
  - Resgen utility and, 679, 682–683
  - resx, 679
    - satellite, 686–688
    - security of, 691
    - text, 677–679
    - XML, 679
- ResourceReader, 691**
- resources, 677, 683. See also resource files**
- Resources tab, 98–99, 680**
- Resource Writer, 691**
- Response Cookies Collection, 746**
- Response Headers Collection category, 746**
- Restricted Zone, 439**
- results window, 70**
- ResultSet, 590**
- resx, 679**
- Resx Data Node, 691**
- ResX File Code Generator custom tool, 683**
- Resx Resource Reader, 691**
- Resx Resource Writer, 691**
- ‘returns’ tag, 140**
- Ribbon (Office 2007), 547, 549, 551, 552, 555, 561**
- RijndaelManaged symmetric algorithm, 449**
- RIPE-160, 448**
- RIPEMD160Managed, 448**
- role authorization, 99, 436, 438, 442–445, 481, 484–485**
- role-based security, 442–445**
- RoleProvider abstract class, 484**
- root namespace, 158**
- root/CIMV2 node, 294, 295**

**RSA algorithm, 452**  
**RSA key container, 675**  
**RSACryptoServiceProvider class, 450, 452, 455, 459, 460**  
**Ruby, 231**  
**rude edits, 721**  
**running macros, 876–877**  
**RunStarted method, 162, 164**  
**runtime layout, 12**  
**runtime section, 652–653**  
**RUP, 923**

## S

**SaaS (Software as a Service), 417. See also Sync Services**

**Safari, 626**

**safeitemname, 158**

**safeprojectname, 158**

**safety checking, 230**

**Sandcastle tools, 131, 144–146, 149**

**satellite resource files, 686–688**

**Save all changes option, 778**

**Save changes to open documents only, 778**

**'Save return value' checkbox, 53**

**SCC (Source Code Control) API, 108, 111**

**SCDL tool, 663**

**Scenarios Details report, 942**

**Schema Compare tool, 918–919**

**Schema Designer view, 381**

**scopes**

Class Declaration, 257

Member Body, 257

Member Declaration, 257

**screens**

large, 35

multiple, 6, 35, 38, 575

**SCRUM, 923, 931, 941**

**SD. See System Diagram**

**.sdf file extension, 421, 494, 582**

**search. See Find and Replace**

**'Search hidden text,' 66**

**'Search up,' 66**

**Search window (Help), 76–77**

**secret keys, 448, 449**

**Section 508, 525**

**SecureString class, 464–466**

**SecureTextbox, 464, 466**

**security**

client application services, 99, 100, 481–494

code access security, 437, 440–442

code groups, 437, 438–439

evidence and, 438–439

machine policy, 439

cryptography, 436, 447–468, 654. *See also* cryptography

DSM, 495–502, 579, 580

evidences, 438–439

foundation of, 437

key concepts, 435–437

in .NET Framework, 435–437

obfuscation, 435, 436, 468, 469–479.

*See also* obfuscation

permission sets, 103, 139, 438, 439, 442

policy-based, 437, 439

resource files and, 691

role-based, 442–445

threat modeling, 435–437

auditing/logging, 436

authentication, 99, 436, 447, 450, 464, 468,

482, 485–487, 528–529

authorization, 99, 436, 438, 442–445, 481,

484–485

configuration management, 436

data input, 436

data protection, 436

data validation, 436

exception management, 436

source code protection, 436

trust and, 437

user identities, 443–444

Web Site Administration Tool, 543–544

**security configurations (DSM), 495–500**

**security policy, 437, 439, 440**

AppDomain, 439

Enterprise, 439, 440, 441

Machine, 439

User, 439

**Security tab, 102–103**

**security.config, 650**

**·see tag, 140–141**

**·seealso tag, 141**

**Select statement, 376, 386, 387, 397**

**SelectedItemTemplate, 532**

**SendKeys method, 221**

**sequential workflow, 550**

**Sequential Workflow Console Application, 617**

**Serializable attribute, 632, 692, 730, 731**

**SerialPortsNames property, 222**

**server error page, 737, 738, 739**

- Server Explorer, 289–304, 366–368**
  - Data Connections node, 289, 365, 366, 368, 374, 418
  - Servers node, 290–304
- Server Variables category, 747**
- Servers node, 290–304**
- Service installers, 814–816**
- Service Reference Settings dialog box, 21**
- service references, 20–21**
  - Add Service Reference item, 20, 428, 615, 629
- ServiceController component, 303, 304**
- Services node, 303–304**
- Services tab, 99–100, 482, 487, 489, 492**
- Session State category, 746**
- Settings and Constraints editor, 886–887**
- Settings tab, 100, 487, 658**
- SetValue, 222**
- SHA–1, 448**
- SHA1Cng, 449**
- SHA1CryptoServiceProvider, 449**
- SHA1Managed, 448**
- SHA–2, 448**
- SHA256Cng, SHA384Cng, SHA512Cng, 449**
- SHA256Managed, 448**
- SHA256/SHA384/SHA512  
CryptoServiceProvider, 449**
- shared add-ins, 465–866**
- shared check-outs, 933, 936**
- SharedListeners, 292**
- SharePoint (Microsoft), 548**
  - lists, 943
  - portal, 533, 923, 924
  - Server 2007, 550
  - workflows, 550
- shelving, 923, 939**
- shortcut code, 132, 133**
- Shortcuts list, 148, 253**
- ShouldSerializeDescription, 29**
- Show as Collection Association, 279**
- Show method, 577, 731**
- ShowDialog method, 731**
- ShowGrid, 121**
- ShowInTaskbar property, 120**
- signing, 450, 454–457**
  - assemblies, 795, 799–801
  - delayed, 476–477
- signing information (process), 450, 828**
- Signing page, 800, 801**
- Signing tab, 100–101, 164, 476, 799, 819**
- Silver project, 619**
- Silverlight, 512, 546, 625, 625–634**
  - applications, hosting of, 633–634
  - controls, 628–629
  - cross browser, cross platform, 626
  - debugging, 736, 743–744, 750
  - event handlers, 630–631
  - SDK version 2, 627
  - Tools for Visual Studio 2008, 627, 628, 634, 645, 743
  - web page interaction, 631–633
- simple breakpoints, 712**
- Single Startup, 86**
- SIP (Soft Input Panel), 573–576**
- Size property, 118**
- .sln file, 85, 111**
- Smart Device category, 89**
- Smart Device Project, 568**
- smart indenting, 57**
- smart tags, 242–243, 549**
  - Windows forms and, 126–127
- Smartphone project, 571**
- SMS messages, 592–594**
- SMTP**
  - provider, 748, 749
  - settings, 542, 543, 545, 546, 654
- SnapLines, 120, 121, 122**
- SnaptoGrid layout mode, 120, 121**
- Snippet Editor, 261**
- snippets. See code snippets**
- soft disabling, 563**
- Soft Input Panel (SIP), 573–576**
- Software and Services (S+S), 417**
- Software as a Service (SaaS), 417. See also  
Sync Services**
- software modeling, with Class Designer,  
275–288. See also Class Designer**
- Solution Explorer, 12, 13–21**
  - common tasks, 15–21
  - context menu, 15–16
  - Ctrl+Alt+L, 13
  - ‘Open Folder in Windows Explorer’ option, 16
  - projects/items, adding, 17–19
  - references, adding, 19–20
  - service references, adding, 20–21
  - SourceSafe repository and, 111
  - TFS and, 932–933
  - Track Active Item in, 41
- Solution Framework, Microsoft, 923. See also  
CMMI Process Improvement; MSF for  
Agile Software Development**

**solution node, visibility of, 14**

**Solution Properties dialog box, 14, 86, 87**

**solutions, 83–88**

- creating, summary steps, 12
- DTE and, 844–845
- file format, 85
- Getting Started, 8
- miscellaneous files, 41–42
- multiple, projects and, 20
- properties, 86–88
- .sln file, 85, 111
- in SourceSafe repository, 111
- StarterProject, 151, 159, 164, 165, 166
- structure, 83–85
- .suo file, 85, 147, 149, 428
- Track Active Item in Solution Explorer option, 41

**Source Code Control (SCC) API, 108, 111**

**source code protection (threat modeling), 435**

**source-control repository, 107–108**

- selecting, 108
- TFS, 932–939
  - Annotate window, 935
  - branching, 939
  - checking in, 934
  - checking out, 933
  - History window, 935
  - labeling, 923, 937–938
  - Resolve Conflicts window, 936–937
  - shelving, 923, 939
  - working offline, 937
- version tracking, 107

**SourceSafe repository, 108–116**

- creating, 110
- environment settings, 109
- files
  - checking in/out, 112
  - history, 114–115
  - merging changes, 113–114
  - pending changes, 112–113
  - pinning, 115
- offline support, 115–116
- Pending Checkins window, 112–113
- plug-in settings, 109
- solution added to, 111
- Solution Explorer and, 111

**specific culture, 686**

**.spf file extension, 494**

**splash screen, 3–4**

**SplitContainers, 61, 127, 130**

**SQL Server**

- connection strings and, 672–672
- stored procedures, debugging, 736, 764–765

**SQL Server 2008, 403, 414**

**SQL Server Compact Edition (SSCE), 367, 421, 422, 424, 425, 494, 581**

**SQL Server Database File, 367, 368**

**SQL Server Management Studio, 366**

**SQL Server Project, 911**

**SQLCEResultSet, 590**

**SQL-CLR Database Project, 911–912**

**S+S (Software and Services), 417. See also Sync Services**

**SSCE. See SQL Server Compact Edition stack frame, 703**

**stacks, 703**

**Stand-Alone Profiler, 898**

**start actions, 751–753**

**Start Page, 5**

**starter kits, 512**

**starter template, 164–167**

**StarterProject solution, 151, 159, 164, 165, 166**

**StartPosition property, 119**

**StartsWith, 313**

**startup configuration section, 652**

**startup projects, 14**

- Current Selection option, 86
- Multiple Startup Projects option, 86
- Single Startup option, 86

**state machine workflow, 550**

**state manipulation, 230, 231**

**stateless algorithms, 231**

**statement completion, 249**

**statements. See specific statements**

**static classes, 202**

**static keyword, 202**

**static methods**

- avoidance of, 183–184
- object test bench and, 52–53

**static typing, 190**

**Status namespace, 592**

**Stepping In (F11), 720**

**Stepping Out (Shift+F11), 720**

**Stepping Over (F10), 720**

**stepping through code, 719–720**

**Stop Applying Code Changes, 721**

**stored procedures, 327, 329, 371–372**

- LINQ to SQL and, 409–411
- SQL Server, debugging, 736, 764–765

**StreamReader, 463, 464**

**StreamWriter, 462**  
**String class, 454, 464. See also**  
**SecureString class**  
**string literals, 37, 326, 394, 677**  
**StringAssert class, 313**  
**Strings, 729**  
**strings, connection. See connection strings**  
**strong name, 438, 441, 476, 798, 799,**  
**800, 801**  
assemblies, 795, 798–799, 801, 896  
Create Strong Name Key dialog box, 800  
ECMA, 439  
Microsoft, 439  
utility, 476

**Struct, 278**  
**structure constraints, 175**  
**stub completion, 245–246**  
**Style Application toolbar, 524**  
**Subscription object, 305, 306, 308**  
**SubscriptionTest class, 306, 308, 311**  
**Subversion, 108. See also SourceSafe**  
**repository**  
**Summary (report view), 897**  
**summary tag, 141–142**  
**.suo file, 85, 147, 149, 428**  
**surround, with code snippets, 259**  
**Symbian OS, 627**  
**symmetric algorithms, 449**  
AesManaged, 449  
DESCryptoServiceProvider, 449  
RC2CryptoServiceProvider, 449  
RijndaelManaged, 449  
TripleDESCryptoServiceProvider, 449, 454, 462,  
463

**symmetric keys, 448, 449**  
creating, 453–454  
decrypting, 458–460  
encrypting/signing, 454–457  
receiving message, 462–464  
sending message, 460–462  
verification, 457–458

**SymmetricAlgorithm abstract class, 449**  
**Sync Services (Microsoft Synchronization**  
**Services for ADO.NET), 417–432, 494**  
background synchronization, 429–431  
client changes, 431  
Configure Data Synchronization dialog box, 420,  
423, 425  
getting started with, 420–425  
Local Database Cache object, 420, 425, 429

occasionally connected applications, 417–418,  
425, 432, 481, 494  
over n-tiers, 425–429  
server direct, 418–420

**Sys.Debug class, 743**  
**System Diagram (SD), 881, 887–889**  
**system queues, 297, 298**  
**system timer, 220. See also timers**  
**System.Diagnostics namespace, 312, 723, 753**  
**system.diagnostics section, 654–655**  
**system.net section, 653–654**  
**system.runtime.remoting section, 653**  
**System.ServiceProcess namespace, 814**  
**system.web section, 655**  
**System.Web.Security namespace, 483**  
**system.webserver section, 655**

## T

### tab

Application, 91–93, 96, 481, 493, 773, 796  
Build, 95, 773  
Customer Management, 618  
My Extensions, 101–102, 228  
Publish, 103, 817, 819, 822  
Resources, 98–99, 680  
Security, 102–103  
Services, 99–100, 482, 487, 489, 492  
Signing, 100–101, 164, 476, 799, 819

**Tabbed Document option, 6, 34**

**tabbed/multiple window toggling, 6, 7**

**table editing, 368–369**

**TABLE tag, 58**

**TableAdapter, 328, 337, 354, 360, 375, 376,**  
**586, 587**

**TableAdapter Configuration Wizard, 375, 587**

**TableAdapterManager, 331, 338, 343**

**TableLayoutPanel control, 128–129**

**Tables and Columns dialog box, 370**

**Tables node, 366, 405, 418**

### tabs

Debug, 96–97, 710  
enable debuggers, 96–97  
start action, 96  
startup options, 96  
Settings, 100, 489, 658  
Trigger, 941  
Web, 104, 735, 740

**tags (smart), 242–243**

Windows forms and, 126–127

### **tags (XML comments), 133–143**

- ©, 134
- code, 134
- example, 134–135
- exception, 135–136
- include, 136–137
- list, 137–138
- para, 138
- param, 138–139
- paramref, 139
- permission, 139
- remarks, 140
- returns, 140
- see, 140–141
- seealso, 141
- summary, 141–142
- typeparam, 142
- typeparamref, 142
- value, 142–143

### **Target CPU (option), 783**

### **Target Framework (option), 783**

### **Task List comments, 147–149**

### **task lists, 253. See also bookmarks**

### **Task Panes, 550, 555**

### **tasks (MSBuild project file), 792–793, 920**

### **Team Explorer, 924, 925, 926, 930, 932, 940, 941, 943**

### **Team Foundation Build (tool), 939–941**

### **Team Foundation Server (TFS), 108, 116, 311, 909, 923–946**

- automation, 944–945
- CMMI Process Improvement, 923, 924, 928, 941
- Excel option, 929–930
- MSF for Agile Software Development, 923, 924, 928, 931, 941, 943, 945
- process templates, 923–925
  - customization, 944, 945
- Project, 923, 930–932
- reporting, 941–942
- Solution Explorer and, 932–933
- source-control repository, 932–939
  - Annotate window, 935
  - branching, 939
  - checking in, 934
  - checking out, 933
  - History window, 935
  - labeling, 923, 937–938
  - Resolve Conflicts window, 936–937
  - shelving, 923, 939

- working offline, 937
- Team Explorer, 924, 925, 926, 930, 932, 940, 941, 943
- Team Portal, 924, 942–943, 946
- Version Control, 932–939
- work items
  - adding, 929
  - initial, 926
  - queries, 924, 925, 926–928, 943, 945
  - tracking, 925–929
  - types, 928, 944

### **Team System Web Access (tool), 943**

### **Telephony namespace, 592–593**

### **templates. See also specific templates**

- AlternatingItemTemplate, 531
- creating, 151–159
- EditItemTemplate, 531
- EmptyDataTemplate, 531
- EmptyItemTemplate, 531
- extending, 159–167
- files, location of, 41
- GroupSeparatorTemplate, 531
- GroupTemplate, 532
- InsertItemTemplate, 532
- item, 151–155
- ItemSeparatorTemplate, 532
- ItemTemplate, 532
- LayoutTemplate, 532
- parameters, 158–159
- process (TFS), 923–925
- project, 155–156
- starter, 164–167
- structure, 156–158

### **temporary window, 33**

### **ternary If operator, 209**

### **TerritoryID textbox, 333, 336, 342**

### **tests/testing features (Visual Studio 2008)**

- Code Coverage tool, 899–901, 903
- Generic Tests, 908
- Load Tests, 906–908
- management, 909
- Manual Tests, 908
- Ordered Tests, 908–909
- unit testing, 305–322
  - databases, 916–917
- Web Tests, 903–906

### **test bench, object, 52–55**

- fields/properties, accessing, 54
- instance methods, invoking, 55

- instantiating objects, 53–54
- static methods, invoking, 52–53
- test cases**
  - assertions about, 312–314
  - creation, 305–308
  - custom properties for, 319–320
  - initializing and cleanup, 315
  - managing large numbers of, 321–322
  - test attributes, 310–312
  - test output, 317–318
  - testing context, 316–318
  - testing private members, 320–321
- Test configuration, 87**
- Test Connection, 326, 368**
- test data, managing, 379–380**
- Test Failing report, 942**
- Test List Editor, 309, 321, 903, 905, 909**
- Test Load Agent, 908**
- test runs, 309, 310, 318**
  - Edit Test Run Configuration, 899
  - Test Run Configuration, 309, 905, 908
- Test Timeouts section, 310**
- Test View window, 308, 316, 317, 321, 909**
- test-and-cast technique, 204**
- TestClass attribute, 310–311**
- TestCleanup attribute, 315**
- TestContext object, 316, 317, 318**
- Tester Edition (VSTS), 903–909**
- TestInitialize attribute, 315**
- TestMethod attribute, 311**
- text resource files, 677–679**
- Text Visualizer dialog box, 729, 730**
- TFS. See Team Foundation Server**
- this keyword, 194**
- Threads window, 704**
- threat modeling, 435–437**
  - auditing/logging, 436
  - authentication, 99, 436, 447, 450, 464, 468, 482, 528–529
  - authorization, 99, 436, 438, 442–445, 481, 484–485
  - configuration management, 436
  - data input, 436
  - data protection, 436
  - data validation, 436
  - exception management, 436
  - source code protection, 436
- time parameter, 158**
- Timeout attribute, 312**
- Timer control, 22, 540**
- timers, 22, 125, 220, 579**
- tooggling**
  - bookmarked/not bookmarked, 251
  - full-screen mode, 38
  - options, in VB.NET, 191
  - pinned/unpinned tool windows, 33
  - regions (expand/condense), 56
  - tabbed/multiple windows, 6, 7
- tool windows, 6. See also Properties tool window; Solution Explorer; Toolbox; specific tool windows**
  - animation, 34
  - default position, 33, 34
  - docking, 33–35
  - floating, 6, 34, 35, 74
  - layout, 31–32
  - pinned, 6, 33–34
  - unpinned, 6, 33–34
  - viewing, 32
- toolbars**
  - controls, Class Designer and, 281
  - Formatting, 518
  - HTML Source Editing, 524–525
  - layout, 31–32
  - Style Application, 524
  - viewing, 32
- Toolbox, 12, 21–25, 277–278**
  - Class Designer tab in, 277, 278
  - components
    - adding, 24–25
    - arranging, 23–24
    - customizing, 23
    - drag-and-drop placement, 21
    - grouping of, 22
    - nonvisual, 22
  - entities in, 278
  - mobile applications and, 571–579
  - Reset Toolbox option, 24
- TopMost property, 120**
- ToString, 174, 184**
- TotalPhysicalMemory, 221**
- TotalVirtualMemory, 221**
- ToXMLString method, 452, 467**
- Trace class, 744, 754–756**
- Trace Information category, 746**
- trace listeners, 292, 654, 655**
- Trace Switches, 756**
- Trace Viewer, 747**
- TraceMode attribute, 745**

## **tracepoints, 717–719. See also breakpoints**

- macros and, 719
- output messages and, 719

## **Trace.Warn method, 747, 748**

## **Trace.Write method, 747**

## **tracing, 735, 744–748**

- application-level, 746
- custom, 747–748
- output, 746–747
- page-level, 744–745

## **Track Active Item in Solution Explorer option, 41**

## **tracking**

- changes, 38–39
- work items, 925–929

## **translucent**

- icons, 34
- IntelliSense list, 244

## **TreeView control, 61, 130, 515, 519, 527**

## **Trigger tab, 941**

## **Triple DES algorithm, 448, 454**

## **TripleDESCryptoServiceProvider symmetric algorithm, 449, 454, 462, 463**

## **trust, security and, 437. See also security**

## **Trusted Zone, 439**

## **TryCast, 208–209**

## **try-catch exception handling, 259, 314, 740**

## **T-SQL Editor, 920**

## **T-SQL Static Code Analysis, 920**

## **type conversions, 182, 183, 184, 682**

## **type inferencing, 94, 173, 191, 198, 383, 385. See also implicit typing**

## **Type parameters, 142, 172, 173, 174, 175, 176, 177**

## **type proxies, 727–729**

## **type soundness, 230**

## **TypeConverters, 690, 692, 693, 694**

## **TypeOf expression, 208, 209**

## **<typeparam> tag, 142**

## **<typeparamref> tag, 142**

## **types**

- anonymous, 191–193, 232, 383, 386, 388, 389
- control, 378–379
- generic, 171–175
- nullable, 176–178
- partial, 178–181

## **typing**

- duck, 230
- implicit, 189–191

non-strict, 230

proto, 231

static, 190

# U

## **UAC (User Account Control), 92–93, 145, 735**

## **UDL (Universal Data Link) files, 327**

## **unit testing, 305–322**

- CurrentStatus property, 305, 306, 308, 314, 316, 317, 320
- CurrentStatusTest method, 308, 309, 311, 312, 317, 318, 899
- databases, 916–917
  - ChecksumCondition, 920
  - ExpectedSchemaTestCondition, 920
- LocalTestRun.testrunconfig file, 309, 310, 899
- Subscription object, 305, 306, 308
- SubscriptionTest class, 306, 308, 311
- test case
  - assertions about, 312–314
  - creation, 305–308
  - custom properties for, 319–320
  - initializing and cleanup, 315
  - managing large numbers of, 321–322
  - test attributes, 310–312
  - test output, 317–318
  - testing context, 316–318
  - testing private members, 320–321
- test runs, 319, 310, 318
  - Edit Test Run Configuration, 899
  - Test Run Configuration, 309, 905, 908

## **Universal Data Link (UDL) files, 327**

## **unpinned tool windows, 6, 33–34**

## **unregistering Office add-ins, 562–563**

## **unsafe keyword, 95**

## **unwinding exceptions, 709–710**

## **updating process, ClickOnce for, 822–823**

## **upgrading**

- to .NET Framework version 3.5, 773–774
- from Visual Basic 6, 774–775
- from Visual Studio 2005, 769–774

## **UploadFile, 221**

## **URL routing, MVC, 644–645**

## **User Account Control (UAC), 92–93, 145, 735**

## **user authentication, 485–487, 528–529.**

*See also authentication*

## **User ID (connection property), 673**

## **user identities, 443–444**

## **User security policy, 439**

**UserControl1**, 23

**userdomain** parameter, 158

**username** parameter, 158

## V

**Validate** method, 346, 347

**ValidateUser** method, 483

**validation**, binding and, 346–353

**validation tools (for Web forms)**, 524–526

HTML Source Editing toolbar, 524–525

Web Content Accessibility Checker, 525, 526

**ValidationAttribute**, 352

**value** tag, 142–143

**Var** keyword, 190, 232, 536

**VBA (Visual Basic for Applications)**, 547, 868

**VBMyResourcesResXFileCodeGenerator**  
custom tool, 683

### VB.NET

C# v., 210

compiler options, 43

language-specific features, 207–210. *See also*  
My namespace

toggle options in, 191

XML literals, 394–395, 397, 398

**.vbproj** files, 88, 90, 104, 506, 792

**vector graphics**, 595, 625, 626

**vector**, initialization, 453, 454, 455, 458, 459

**VerifySignature** method, 458

**Version Control (TFS)**, 932–939

**version tracking**, 107, 114–115

**versioning**, assembly, 797–798

**Vertical Spacing** command, 124

**View Application Events** button, 493

**View Code** button, 12

**View Detail**, 707, 740

**View editor**, 370

**View History**, 114–115, 116, 935

**View White Space**, 38

**ViewData** dictionary object, 641, 642, 643

**Views** node, 366, 370–371

**Visio (Microsoft)**, 547, 549

### Visual Basic

Application Framework, settings, 93

code snippets and, 257–258

Compile page, 781–784

Compile pane, 93–95

My Extensions tab, 101–102

References tab, 97–98

**Visual Basic 6 to .NET converter**, 774–775

**Visual Basic Development Settings** option, 4

**Visual Basic for Applications (VBA)**, 547, 868

**Visual C++**, 840, 850, 852

**Visual Database Tools**, 365–377

**visual guides**, 37–38

**visual impairments**, 525

**visual indicators**, 241, 242

**Visual SourceSafe**. *See* SourceSafe repository

### Visual Studio 2005

debugger for, 843

design skins and, 569

InfoPath 2003 Toolkit for, 551

MSBuild and. *See* MSBuild

nested master pages and, 535

service pack, 506

solution/project file backward compatibility, 84

upgrading from, 769–773

WPF and, 595

### Visual Studio 2008

commands, 47, 701

filtering, 40

extensibility. *See* add-ins; automation model;  
macros; VSPackages

MSBuild and, 787–790

testing features. *See* tests/testing features  
upgrading to, 769–773

### Visual Studio Shell, 841, 848, 851

### Visual Studio Team System (VSTS), 881–921

Architect Edition, 881–889

case study, 881–889

Database Edition, 911–924

Developer Edition, 891–901

Tester Edition, 903–909

### Visual Studio Tools for Office (VSTO), 17, 89, 547–565

3.0 runtime, 564

application-level add-ins, 549–550

creation of, 557–561

document-level customizations, 549  
creation of, 551–556

InfoPath form templates, 551

Office applications

debugging, 561–564

deploying, 564–565

Office project types, 548–551

SharePoint workflows, 550

### visualizers, 729–733

**.VSK** files, 39

**.vsmdi** file, 309, 321

**VSPackages**, 841–842, 846, 850

**VSTO.** See **Visual Studio Tools for Office**

**VSTS.** See **Visual Studio Team System**

## W

**WaitForStatus method, 304**

**watch windows, 701–702**

**wavy lines, 241, 242**

blue, 242

red, 241, 245

**WCAG (Web Content Accessibility Guidelines), 525**

**WCF (Windows Communication Foundation), 609–617**

ASP.NET Web applications and, 610

category, 89

properties/events, 600–601

service

consuming, 615–617

creation, 610–615

Service Host, 427, 615

Service Library, 13, 425, 610, 612, 614, 615, 622

Service template, 511

Test Client utility, 428, 612, 613, 615

WF and, 617–622

WPF and, 609, 615, 623

**Web Application projects, 18, 105**

creating, 510–511

debugging, 736–737

Web Site projects v., 18, 105, 505–506

Web tab, 104, 735, 740

**web applications (ASP.NET), 83, 89, 505–546**

AJAX and, 537–542

client-side development, 535–542

copying, 827

Corporate Services application as, 883

debugging, 735–750

running, 757–758

deployment, 825–831

Edit and Continue, 740

exceptions, 737–740

installers, 830–831

JavaScript and, 536–537

master pages, 534–535

publish, 825–827

start actions, 753

template, 484

WCF and, 610

web controls, 526–533

Web Site Administration Tool, 542–546

**Web category, 89**

**Web Content Accessibility Checker, 525, 526**

**Web Content Accessibility Guidelines (WCAG), 525**

**web controls, 526–533**

data components, 530–533

DataPager, 531–533

LinqDataSource, 530–531

ListView, 531–533

navigation components, 527

user authentication, 528–529

Web Parts, 533

**Web Deployment Projects, 827–829**

**Web forms.** See **forms**

**web, next generation.** See **MVC; Silverlight**

**Web Parts, 533**

**web service data source, 360–361**

**Web Site Administration Tool, 542–546**

application settings, 545

ASP.NET configuration in IIS, 545–546

security section, 543–545

**Web Site projects, 18, 104–105**

Add New Web Site dialog box, 18

creating, 507–510

debugging, 736–737

Web Application projects v., 18, 105, 505–506

**Web tab (Web Application projects only), 104, 735, 740**

**Web Tests, 903–906**

**web.config, 649–650**

**webnamespace, 154**

**WF (Windows Workflow Foundation), 617–622**

WCF and, 617–622

**Where statement, 388**

**White Space**

Ignore, 919

View, 38

**white space indentation, 234**

**Width property, 118**

**wildcards, 66, 67**

**Win32 Crypto API (CAPI), 449**

**Window Style category, 120**

**windows.** See **specific windows**

**Windows Communication Foundation.**  
See **WCF**

**Windows forms.** See **forms**

**Windows Forms Designer, 23, 44, 179, 570**

- Data UI Customization section, 121, 378–379
- preferences, 120–121
- WPF Designer v., 598

**Windows Installer 3.1, 564. See also installers****Windows Management Instrumentation (WMI) infrastructure, 293, 294, 295, 749****Windows Mobile, 501, 568**

- 5.0, 568, 593
  - device, 497, 498, 573
  - Pocket PC device, 570, 572, 573
  - Pocket PC emulator, 501
- 6.0, 627
  - emulator, 497
- APIs, 567, 590–594
  - configuration namespace, 590–591
  - Forms namespace, 591
  - Notification Broker, 593–594
  - Status namespace, 592
  - Telephony namespace, 592–593
- devices, 432, 497, 498, 567
- platform, 495, 496, 568

**Windows Mobile Device Center (WMDC), 497, 501, 502, 579, 581, 836****Windows Presentation Foundation applications.**

See **WPF applications**

**Windows project category, 88–89****Windows Workflow Foundation. See WF windows/documents, DTE and, 845–846****WindowState property, 119****WinRes.exe, 687****WizardClassLibrary, 159, 160, 166****wizards**

- Add SourceSafe Database, 110
- Add-in, 851–855
- Configure Dataset with Wizard, 331
- Connection String, 667–672
- Data Generator, 920
- Data Source Configuration, 326, 327, 328, 332, 374, 419, 667, 670
- Export Template, 152, 153, 154, 155, 156, 226, 227
- Extender, 541
- New Outlook Form Region, 558–559
- TableAdapter Configuration, 375, 587
- XML to Schema Inference, 400

**WMDC. See Windows Mobile Device Center****WMI infrastructure. See Windows Management Instrumentation infrastructure****Word (Microsoft), 547, 549**

- 2003, 551
- 2007, 551
- document, 549
  - customization, 551–556
  - template, 549

**word wrapping, 37, 38, 700****word/phrase completion, 243–244**

- in context, 243–244
- member lists, 244, 249, 253

**work items**

- adding, 929
- initial, 926
- queries, 924, 925, 926–928, 943, 945
- tracking, 925–929
- types, 928, 944

**workflow (SharePoint)**

- sequential, 550
- state machine, 550

**Workflow category, 89****WorkItem attribute, 311****workspace control, 47–61****World Health Organization, 525****WPF (Windows Presentation Foundation) applications, 595–607**

- controls, manipulation of, 598–600
- designer, 597–601
- Expression Blend and, 601–604
- forms, 21
- IronRuby and, 83
- project types, 595, 596
- Silverlight and, 628. See also Silverlight styling of, 601–604
- WCF and, 607, 615, 623
- Windows forms and, 605–607
- Windows project category and, 88, 89

**Write method, 755****WriteException method, 291****Writelf method, 755****WriteLine method, 318, 755****WriteLinelf method, 755****X****XAML (eXtensible Application Markup Language), 230****.xap extension, 631****XElements, 394, 395, 399. See also Paste XML as XElement****XLINQ. See LINQ to XML**

## XML

- based declarative languages, 230
  - comments, 131, 132–144, 149
    - adding, 132–133
    - blocks, 132, 133, 140, 141
    - inline, 131–132
    - IntelliSense and, 144, 251
    - single-line, 132
    - tags, 133–143. *See also* tags
    - Task List, 147–149
    - using, 143–144
  - connection strings *v.*, 667
  - creating, with LINQ, 397–398
  - literals, 394–395, 397, 398
  - namespace, 401, 860
  - Notepad, 396
  - object model, 393–394, 402
  - querying, 398–399
  - resource files, 679
  - schema, 90, 133, 325, 326, 400–401, 663, 787
- XML to Schema Inference Wizard, 400**

- XML To Schema item template, 400, 401**
- XPath, 136, 393**
- XSD file, 326, 328, 400, 582, 587, 590**
- XSLT, 393**

## Y

- year parameter, 158**
- Yellow Screen of Death, 737**
- yield keyword, 202**

## Z

- zip utility, 164, 166**
- 7-zip, 164**
- zones, 439**
  - Internet Zone, 102, 103, 439
  - Local Intranet Zone, 439, 821
  - My Computer Zone, 439
  - Restricted Zone, 439
  - Trusted Zone, 439