

CHAPTER 1

Getting started with Visual Studio 2012 and Blend for Visual Studio 2012

Welcome to the world of HTML5, CSS3, and JavaScript! These technologies, commonly referred to as simply HTML5, can be used to develop applications for Windows and the web.

This chapter introduces you to the primary tools you need, Microsoft Visual Studio 2012 and Blend for Visual Studio 2012, which are used in the book's lessons. Visual Studio 2012 provides exciting new features. The chapters that follow introduce you to many features in Visual Studio 2012 and Blend.

Lessons in this chapter:

- Lesson 1: Visual Studio 2012 2
- Lesson 2: Blend for Visual Studio 2012 13

Before you begin

To complete this book, you must have some understanding of web development. This chapter requires the hardware and software listed in the "System requirements" section in the book's Introduction.

REAL WORLD A CAREER OPPORTUNITY

You're looking for a career in computer programming, but you don't know what technology to pursue. You want to learn a technology you can use at many companies to make yourself more marketable and to give you the flexibility to move between companies. What technology would you choose to give you this flexibility?

The Internet has exploded. Nearly every company has a website, so why not learn the web technologies?

HTML, CSS, and JavaScript are three closely coupled core web technologies that you can learn to increase your marketability and give you flexibility to choose the company for which you want to work. This is the beginning of your path toward your future career. Learn these technologies well, and you can expand into other programming technologies such as Silverlight, Flash, C#, and Visual Basic.

Lesson 1: Visual Studio 2012

Visual Studio 2012 is a highly useful tool for application development. Depending on the edition of Visual Studio you have, it can provide you with an integrated development environment (IDE) you can use for the entire project life cycle.

After this lesson, you will be able to:

- Identify the available versions of Visual Studio 2012 and the features of each.
- Start a project by using Visual Studio Express 2012 for Web.
- Start a project by using Visual Studio Express 2012 for Windows 8.

Estimated lesson time: 40 minutes

Visual Studio 2012 editions

The following is a list with short descriptions of the editions of Visual Studio that Microsoft offers.

- **Visual Studio Test Professional 2012** Provides team collaboration tools but not a full development IDE. This is ideal for testers, business analysts, product managers, and other stakeholders, but this is not an ideal edition for developers.
- **Visual Studio Professional 2012** Provides a unified development experience that enables developers to create multitier applications across the web, the cloud, and devices. This is an ideal edition for a lone developer or a small team of developers who will be developing a wide range of web, Windows, phone, and cloud applications.
- **Visual Studio Premium 2012** Provides an integrated application lifecycle management (ALM) solution and software development functions to deliver compelling applications for a unified team of developers, testers, and business analysts.
- **Visual Studio Ultimate 2012** Provides a comprehensive ALM offering for organizations developing, distributing, and operating a wide range of highly scalable software applications and services.
- **Visual Studio Team Foundation Server Express 2012** Provides the collaboration hub at the center of the ALM solution that enables small teams of up to five developers

to be more agile, collaborate more effectively, and deliver better software more quickly. Includes source code control, work item tracking, and build automation for software projects to deliver predictable results. This is free.

- **Visual Studio Express 2012 for Web** Provides the tools and resources to build and test HTML5, CSS3, ASP.NET, and JavaScript code and to deploy it on web servers or to the cloud by using Windows Azure. Best of all, it's free.
- **Visual Studio Express 2012 for Windows 8** Provides the core tools required to build Windows Store apps, using XAML and your choice of .NET language or HTML5, CSS3, and JavaScript. This is also free.

If you use Visual Studio Express 2012 for Web, you can work on web projects only, and you must choose a .NET language to start with, such as Visual Basic or C#. If you use Visual Studio Express 2012 for Windows 8, you can work on Windows Store applications only, but you can start with a JavaScript project, and you don't need to set up a website to create small applications. Blend for Visual Studio 2012 also provides the ability to create Windows Store applications with a JavaScript project.

The Visual Studio Express 2012 products are available free on the Microsoft website. You should download and install both Visual Studio Express 2012 for Windows 8 and Visual Studio Express 2012 for Web.

Visual Studio 2012 support for HTML5

Visual Studio .NET 2012 contains a new HTML editor that provides full support for HTML5 elements and snippets. Here is a list of some of the Visual Studio 2012 features that will make your development experience more enjoyable and productive. The new features will be demonstrated and explained later in this book when appropriate.

- **Testing** You can easily test your webpage, application, or site with a variety of browsers. Beside the Start Debugging button in Visual Studio 2012, you will find a list of all installed browsers. Just select the desired browser from the list when you are ready to test.
- **Finding the source of rendered markup** By using the new Page Inspector feature, you can quickly find the source of rendered markup. The Page Inspector renders a webpage directly within the Visual Studio IDE, so you can choose a rendered element, and Page Inspector will open the file in which the markup was generated and highlight the source.
- **Improved IntelliSense** Quickly find snippets and code elements. In the HTML and CSS editors, IntelliSense filters the display list as you enter text. This feature shows strings that match the typed text in their beginning, middle, or end. It also matches against initial letters. For example, "bw" will match "border-width."
- **Reusable Markup** You can easily create reusable markup by selecting the markup and extracting it to a user control.

- **Automatic Renaming** When you rename an opening or closing HTML tag, the corresponding tag is renamed automatically.

CSS3 support

Visual Studio .NET 2012 provides a new CSS editor that offers full support for CSS3, including support for cascading style sheets (CSS), hacks, and snippets for vendor-specific extensions to CSS.

- **Expandable Sections** Use the CSS editor to expand and collapse sections by clicking the plus or minus sign that is displayed to the left of each style entry.
- **Hierarchical Indentation** The CSS editor displays nested styles in a hierarchical fashion, which makes it much easier to read and understand the styles.
- **Add Comments** You can easily comment and uncomment blocks.
- **Color Selector** The CSS editor now has a color selector like the HTML editor.

JavaScript support

Visual Studio 2012 provides many new features to make the JavaScript developer experience more enjoyable and productive. The following is a list of some of the new features and enhancements.

- **Standards-based** Visual Studio 2012 incorporates the JavaScript features of ECMAScript 5 and the HTML5 document object model (DOM).
- **Improved IntelliSense** You can receive improved IntelliSense information for functions and variables by using new elements supported in triple-slash (///) code comments. New elements include `<var>` and `<signature>`. You can also view function signatures on the right side of the statement completion list.
- **Improved editor** JavaScript Editor implements smart indenting, brace matching, and outlining as you write code. For example, if you position your cursor to the left of an open curly brace, the open and closed curly braces are highlighted. This works with curly braces, square brackets, angle brackets, and parentheses.
- **Go To Definition** To locate function definitions in source code, you just right-click a function and then click Go To Definition. You can also put the cursor in the function, and then press the F12 key to open the JavaScript source file at the location in the file where the function is defined. (This feature isn't supported for generated files.)
- **IntelliSense from JavaScript comments** The new IntelliSense extensibility mechanism automatically provides IntelliSense when you use standard JavaScript comment tags (//).
- **Breakpoints** You now have more flexibility when setting a breakpoint. When a single line contains multiple statements, you can now break on a single statement.

- **Reference Groups** You can control which objects are available in global scope by using Reference Groups. Reference Groups is configured on the menu bar by navigating to Tools | Options | Text Editor | JavaScript | IntelliSense | References.
- **Drag-and-drop references** You can drag JavaScript files that have the .js extension from Solution Explorer to the JavaScript code editor, where they are added as references for Visual Studio to use to provide IntelliSense. When adding references by dragging and dropping, they are put at the top of the page in the code editor.

Exploring Visual Studio Express 2012 for Windows 8

When you start Visual Studio Express 2012 for Windows 8, the Start Page screen is displayed. Figure 1-1 shows the Start Page screen, which contains helpful information and links to learning and development resources. On the left side of the Start page are links to create a new project or open a new project. After you create at least one project, you'll see shortcut links to open any of your recent projects.

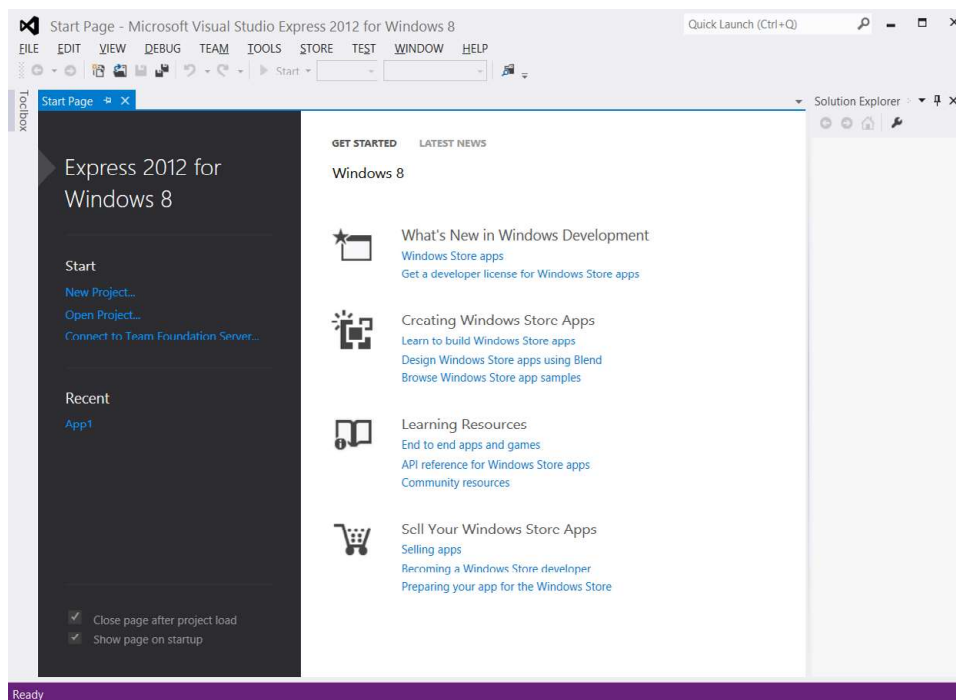


FIGURE 1-1 Visual Studio Express 2012 for Windows 8 Start page

In addition to clicking the New Project link on the Start page, you can start a new project by clicking File and choosing New Project. Figure 1-2 shows the New Project screen, which displays a list of starting templates from which you can choose to start on your new application quickly. You can think of a template as a project on which someone completed the