Designing for Windows 8

Fundamentals of Great Design
in Windows Store Apps

DELIGHT YOUR USERS WITH BEAUTIFUL APPS THAT CAPTURE THE WINDOWS 8 EXPERIENCE

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*To my parents, who always made me believe
anything is possible*

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About the Author

Brent Schooley is a Technical Evangelist for Infragistics with a focus on mobile platforms. He has been working with Microsoft technologies since 2004. His interests include client- and mobile-application development and user-experience design, with a recent emphasis on Windows 8 and Windows Phone. With keen attention to detail and strong technical and design crossover skills, Brent has always been able to relate to both designers and developers to help them achieve their goals.

About the Technical Reviewer

Alejandro Toledo is an Experience Program Manager and Developer. He recently cofounded a boutique design studio with his brother Arturo, providing experience architecture, user-interface design, and design-education services. Alejandro is also a polyglot involved in an ongoing study of multiple languages spoken around the world. Possessed of an inquisitive mind, Alejandro enjoys spending time with designers and developers, helping them to produce the best possible apps for Windows and Windows Phone. He draws inspiration and energy from his wife and young daughter.

Acknowledgments

Introduction

Windows 8 offers exciting new opportunities for developers and designers. Microsoft has created a platform for touch-first applications that features a clean design language inspired by major design movements. This marks the first time that design is paramount in creating Windows applications. This can be a challenge for Windows developers who may not have had to concern themselves with design before. If you are going to build Windows Store applications, you will have to understand the fundamentals of designing for the platform. Designing for Windows 8 has been written to help both developers and designers understand what is necessary to create well-designed applications for Windows 8.

The book is divided roughly into two parts. The first three chapters introduce design fundamentals and strategies. Chapter 1 provides some insight into the design inspirations that helped shape the design language used in Windows Store application development. Chapter 2 introduces the design principles that will help guide your design process. Chapter 3 provides some design strategies that will help you keep your design focused. The final three chapters provide practical information on how to design your application. Chapter 4 introduces the basic building blocks of Windows Store applications and discusses some styling tips for each. Chapter 5 provides information specific to the Windows 8 platform that you need to keep in mind as you build your application. Chapter 6 brings everything together and shows how to bring applications from other platforms to Windows 8.

The reference application for this book, Running Total, is available from http://bit.ly/runningtotal. This post describes how to get the application up and running and walks through how the application works. The app is still evolving, so I have also created a GitHub project for the application at https://github.com/brentschooley/Running-Total. Both options for getting Running Total include a beta of Infragistics NetAdvantage for Windows UI controls.

Microsoft Design Style Inspirations

In order to truly understand something, it is often important to understand where it originated. This is especially true of design-related topics. Almost everything designed today has roots somewhere in the past. The Microsoft Design Style is no exception. There are three major design influences that contributed to the formation of this design language: Bauhaus (and the related Modern Design Movement), International Typographic Style (also known as Swiss Design Style), and cinematography (and the related discipline motion design). Each of these had an impact on the creation of the design language that has been used in products such as Zune, Xbox 360, Windows Phone, and now Windows 8.

In this chapter, I'll briefly introduce the three major design influences on Windows 8 design style and the Windows 8 design concepts that were based on these influences. This knowledge is the foundation you'll need to understand why certain decisions were made in Windows 8 application design and why they are so vital to the design of your application. Also, to make sure it is perfectly clear why these points are so important, I will offer you an example for each one, using the sample application "Running Total." In Chapter 2, I will tie these concepts to the Microsoft Design Style Principles that are critical to the success of your Windows 8 application design.

Bauhaus and the Modern Design Movement

The late 1910s were years of great artistic exploration and experimentation. Many designs of the time began to favor form over function. Designs that favor form over function feature heavy adornment and contortion of shapes for solely decorative purposes. The founder of the Bauhaus movement, Walter Gropius, had different views about design:

> *Our guiding principle was that design is neither an intellectual nor a material affair, but simply an integral part of the stuff of life, necessary for everyone in a civilized society.*

The key piece of this statement is the part stating "design is neither an intellectual nor a material affair, but simply an integral part of the stuff of life." In essence, what Gropius is saying is that we should not be thinking really hard about how to embellish our designs. It is much more important to allow our designs to represent their content authentically and true to their intended function. Another quote from Gropius that further drives this point home is the following regarding the architecture of the time:

> *A modern building should derive its architectural significance solely from the vigor and consequence of its own organic proportions. It must be true to itself, logically transparent, and virginal of lies or trivialities.*

Though this quote is about architecture, it is just as applicable to our topic if "modern software" is substituted for "modern building." Modern designs should be true to themselves. They also shouldn't be embellished with extraneous things that don't really help explain the concept they intend to convey.

Applying Bauhaus to Running Total

What does this mean for your Windows 8 app? The concepts of the Bauhaus design movement are the guiding force behind a design guidance called *content before chrome*. I will discuss this concept in more detail in Chapter 3, but for now you can think of it as removing all of the buttons and tabs and navigation trees and other application chrome we have in traditional applications. If we strip away all of the chrome that normally gets in the way of our software designs, we can really begin to let the content of our applications shine.

Let's take a look at how these concepts are applied in our Running Total application (see Figure 1-1). One thing you should notice right away is that there is no traditional application menu (File, Edit, etc.). There also are no buttons or tabs on the surface of the application. The top level of runs is grouped by month, but instead of there being a list of months to select, the runs are laid out visually. The group header for the month is a fully interactive piece of content that not only provides the total number of runs for the month but also can be tapped to navigate to that month. Functionality for filtering runs is tucked away

in the app bar at the bottom of the screen. Sharing and Settings functionality that might usually accompany the content have a convenient and consistent location within the Windows 8 Charms bar (more on this in Chapter 2).

Figure 1-1. Screenshot of Running Total main screen with app bar showing Filter

The good news about all of this is that you don't need to focus on creating and designing tabs and buttons and other navigational chrome in Windows 8. You can simply focus on presenting your content without other stuff getting in the way. This will save you some time, and the end result is an application that lets your content shine.

International Typographic Style (Swiss Design Style)

Another key influence on the design style used for Windows 8 applications is what is known as either International Typographic Style or Swiss Design Style. International Typographic Style focuses on a few key concepts: alignment to a typographic grid, clean and consistent typography, clear iconography, use of photographic imagery, and bold use of colors. Because this is probably the most important influence on Windows 8 application design, I will explain each of the related concepts in its own section.

However, before I address each of these concepts in detail, it bears mentioning that you probably see this design style every day without realizing it. It is called

the International Typographic Style because it is used on road signs, subway and train signs, airport signage, and signs leading to such things as bathrooms and stairways in various buildings around the world. Whether you are in New York City or Paris, the signs you see in public areas are designed in such a way as to be familiar to you no matter where you are from. Consistent use of colors and icons helps to guide you to where you need to go.

Typographic Grids

A typographic grid is a system of horizontal and vertical lines that defines the structure of a design. A typographic grid allows for content to be aligned in a consistent manner that usually results in an easy-to-follow organization and information hierarchy. The grid defines sections within the design area, also known as the format, in which elements can be placed and how these elements should be aligned. The simplest grids consist of rows and columns, but some sophisticated grids may define diagonal grid sections as well. A grid is a guideline that should be adhered to but can be broken occasionally for emphasis.

Applying a Typographic Grid to Running Total

The typographic grid for Windows 8 is one of the most rigid and consistent design guidelines in Windows 8. Figures 1-2, 1-3, and 1-4 present screenshots of Windows 8 apps, including Windows Store and Running Total, with some of the major gridlines overlaid above them.
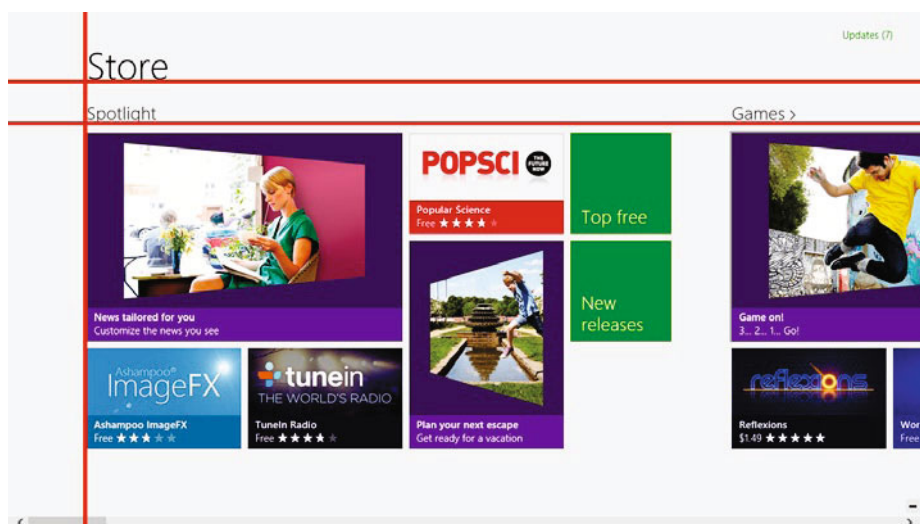
Figure 1-2. Store hub with title and content gridline overlays
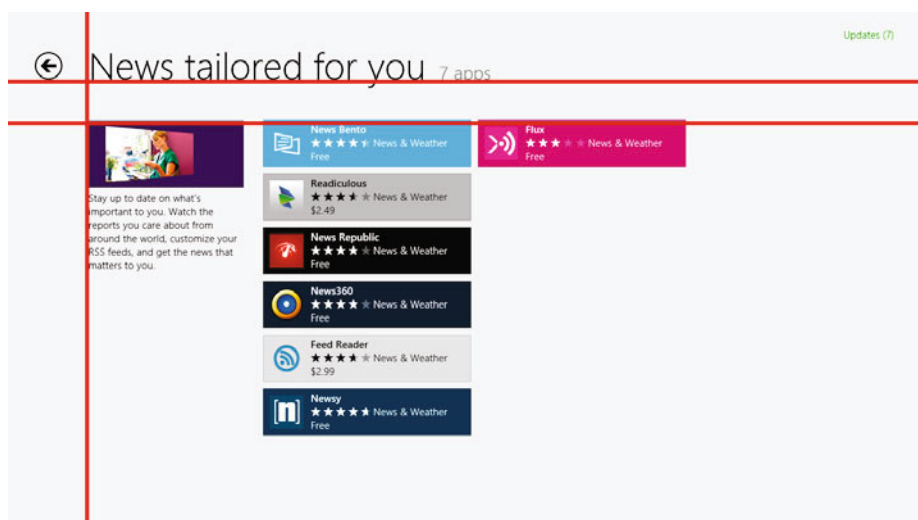
Figure 1-3. Store section details with title and content gridline overlays

Figure 1-4. Running Total with title and content gridline overlays

Notice how the left edge of the title in each of the screenshots is in the exact same location, 120 pixels from the left side of the screen. The baseline of the same title is exactly 100 pixels below the top of the screen. The content region starts 140 pixels below the top of the screen at the same 120 pixels from the left as the title. Why does this matter? This prescribed placement and alignment of key areas of the screen leads to a consistent experience across Windows 8 applications. Your application needs to conform to these guidelines,

or it will stick out like a sore thumb. Thankfully, the application templates provided in Expression Blend and Visual Studio make this a lot easier because the elements in the templates already conform to this grid.

Clean and Consistent Typography

One of the most important parts of a design that focuses heavily on typography is the consistent use of a set of font faces, weights, and sizes. Because the majority of the design will be type, the information hierarchy will be conveyed mostly by font weight and size. Headers, subheaders, section headers, and body type should all be easily distinguishable from one another through the use of some combination of font weight and size. For example, a header might have a very large font size to set it apart from other text. Subheaders could be in a smaller font size but still large enough to indicate that they are headers for a section of the design. The body type will tend to be of a weight and size that is comfortable to read.

Applying Typography to Running Total

Windows 8 defines what is called a type ramp. The type ramp identifies the font size, weight, and, in some instances, color to be used for all cases in the application. For example, the page header for an application page should use the Segoe UI Light font and a font size of 42pt. A subheader on a page will also use Segoe UI Light, but with a 20pt size instead. All items that are used in UI layout will use the Segoe UI font family. It is the most recognizable font in Windows 8. In Figure 1-5, you'll notice how this font is applied in the Running Total application.

Figure 1-5. Screenshot of Running Total with a selection of font sizes and weights

The most important thing to note is that the variety of font sizes and weights helps the content stand out and reinforces the information hierarchy of the application. Since there is very little chrome in a Windows 8 application, this use of typography becomes really important. Following the font guidelines for Windows Store applications will ensure that your application provides an experience that fits the rest of the operating system. Again, the templates provided by the developer tools make this easier for you. Almost all of the text styles you will ever need in your Windows 8 application are defined for you in the styles provided by the templates. All of the default text that is provided in the templates is already styled using these guidelines.

Clear Iconography

Another feature of the International Typographic Style is the use of clearly understandable iconography. Consider the previously mentioned signage that is used throughout the world. Most people recognize the male and female symbols shown on signs indicating restrooms. They may not be able to read the text that appears alongside the icons, but they will still know which door leading to the restroom that is appropriate to them. The icon clearly depicts this concept. There is a very distinct minimalism applied in the construction of the icons used in this type of signage. The icons in this style tend to use a single color and very simple curves and angles.

Applying Iconography to Running Total

Windows 8 has a much cleaner design style than previous versions of the operating system. Gone are the shadowing and gradient effects on toolbar icons. Windows 8's closest feature to a toolbar is the app bar at the bottom or top of the screen. Following is an example of an app bar from Running Total (see Figure 1-6).