

ComponentOne Provides Fast, Cost-effective Data Visualization Controls for Windows 8

Overview

Country or Region: Pittsburgh, USA **Industry:** Software development

Customer Profile

ComponentOne, division of GrapeCity® Provides custom controls for Windows developers

Business Situation

ITSBITS, a customer software developer, was headed into the consumer space, but required a consumer-oriented interface on a very tight timeline. These controls had to appeal to a consumer audience and be fully compatible with Microsoft Visual Studio 2012 and the new Windows 8 platform.

Solution

To fulfill these needs, ITSBITS turned to ComponentOne, a Microsoft Gold Certified partner, and it's Studio for WinRT XAML that delivered snap-in software controls for Visual Studio 2012 with full support for Windows 8 and Windows RT, enabling ITSBITS to achieve its goals.

Benefits

- Visually pleasing, Windows Storecompliant controls
- ... Reduced development time and cost
- ... Visual Studio 2012 multi-platform

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Wallace Allison, CEO, ITSBITS, Trussville, AL, USA

ITSBITS Inc. needed to build a new Windows 8 application that would provide dynamic response to large, fast-changing data sets. At the same time, the company had to respond to a fast time to market as well as the Microsoft approval process for inclusion in the Windows 8 Store. By utilizing custom controls provided by ComponentOne and its Studio for WinRT XAML product, ITSBITS was able to meet these challenges and even lay the groundwork for deploying its application across more devices and platforms.





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> Greg Lutz, Product Manager, ComponentOne



Situation

ITSBITS, a Trussville, AL-based software development company, began building its first Windows 8 application as soon as beta code became available. ITSBITS' brainchild, called "Burn the Mortgage" and internally known as BTM, is a consumer-oriented application that allows users to explore monthly mortgage payment scenarios that could save up to \$100,000 or more in interest over the life of their mortgage. The company invested time into both development as well as the learning curve required to program effectively for the new operating system. However, getting BTM ready for the Windows 8 Store presented ITSBITS with several challenges.

First, the application needed to present an attractive consumer-oriented look and feel that would look and work equally well on both a Windows 8 desktop and a Windows RT tablet, and eventually the Windows 8 Phone. This look and feel also had to conform to the Windows 8 Store UI guidelines, which would be subject to an approval process. Next, as customers played out different "what if" scenarios, ITSBITS had to be sure that BTM displayed results quickly no matter what the underlying CPU hardware might be. To support Windows RT devices, BTM would have to provide a fast yet still visually effective and attractive response to fastchanging data on low-strength CPU devices. Last, the application had to be ready in time for the 2012 holiday season, which represented a significant time crunch for a small development shop.

Solution

Though ITSBITS was willing to attempt building its own UI controls, consumer-

Visual Studio Case Study

oriented visual development was not an internal area of expertise. Additionally, with the time crunch looming, the company decided to evaluate using third-party components. The company initially tried other companies' components to meet its needs, but was disappointed by inconsistent performance and little support. So ITSBITS engaged with ComponentOne, a Microsoft Gold Partner since 1987, and a division of GrapeCity Inc., based in Pittsburgh, PA. ComponentOne has over 850 employees, a worldwide customer base, and a software development product, Studio for WinRT XAML, which provides snap-in software controls for the Microsoft Visual Studio 2012 development system that fully support Windows 8 and Windows RT. "By the time we found ComponentOne, we'd been looking for a while," recalls Wallace Allison, CEO of ITSBITS. "We really needed to find a solution by then and Studio for WinRT XAML looked like the perfect fit."

The key feature that attracted ITSBITS to ComponentOne Studio for WinRT XAML was its consistent support for the Windows 8 user interface. "Before we decided to go with ComponentOne's solution, we had done several tests with various controls from its competitors," Allison commented. "But they didn't work consistently across operating system platforms or devices, and there wasn't much in the way of support or documentation."

ITSBITS needed to have BTM deployed as part of the Windows 8 Store, which meant the app would need to be evaluated and approved for compatibility by Microsoft. ITSBITS were concerned because they couldn't afford the extra time it would take to recode the application in case it didn't pass the first time. "We encounter many customers with this kind of requirement," says Greg Lutz, product manager at ComponentOne. "To meet that need, we designed the latest version release of Studio for WinRT XAML to help Windows 8 developers pass these guidelines and build applications that immediately conform to the new Windows Store requirements."

According to both Lutz and Allison, Studio for WinRT XAML takes UI conformity one step further. The product's software controls not only work seamlessly with the Windows 8 UI themes, but actually look stunning even with the tightly controlled Windows 8 visual environment. "It was exactly what we needed," says Allison. "To be successful in the consumer space, your app needs to pop, and the ComponentOne controls were a big help to us there." By using pre-built controls, ITSBITS wasn't just improving its look and feel; it was also shaving considerable time off its development clock.

However, ITSBITS still had to be sure that BTM could react visually to fast-changing and potentially very large data sets on hardware devices that wouldn't be nearly as CPU-strong as a desktop PC. ComponentOne Studio for WinRT XAML provides enhanced controls that aren't included in the base Windows RT package from Microsoft, including numeric input as well as fast data visualization and charting. Its Chart for WinRT XAML dynamic charting control supports multiple 2D chart types, flexible data binding, and run-time interaction, among other features. Lutz commented, "We offer all kinds of controls like data grids, document viewers, and calendars; but data visualization for Windows RT is especially useful and popular with customers working towards moving to Windows 8."

The Chart for WinRT XAML control allowed ITSBITS to let its users change data quickly and often, while still providing attractive visual results, all on the lightweight CPUs driving the Windows RT platform. "Building these controls right was very important to us and critical to Studio for WinRT XAML's success," says Lutz. "The fact that Windows 8 delivers one experience across multiple devices is huge with developers. But they need the tools to build those apps quickly and easily." Asked where ComponentOne was headed in this area, Lutz replied, "Windows 8 Phone is a big target on our roadmap. We also want to add even more visually appealing controls to all the Windows 8 platforms, like cover flow-style browsing or book controls for turning pages in documents and e-books."

Studio for WinRT XAML controls met ITSBITS' current needs with unexpected ease. Upon receiving Studio for WinRT XAML, ITSBITS tested Chart for WinRT XAML in multiple scenarios and found the control to be fast and reliable. ITSBITS also found that Studio for WinRT XAML integrated seamlessly into the new Microsoft Visual Studio 2012 development platform. ITSBITS easily undertook this integration in-house and built a test-viable trial of the application using the new Chart control on top of its existing code base in less than a day. "We really liked this, and not just because it was easy," says Allison. "We have plans for BTM that go beyond the Windows 8 platform, and Visual Studio helps with that because it supports so many development stacks, like HTML5 and JavaScript. Because ComponentOne's suite of controls snapped into Visual Studio so cleanly, we know we can still use it when we code for other platforms."

The seamless integration of ComponentOne Studio for WinRT XAML with Visual Studio 2012 provided both a dynamically responsive and visually attractive UI for BTM in a fraction of the time it would have taken ITSBITS to build one in-house.

Benefits

Visually pleasing and Windows Store-compliant controls

Chart for WinRT XAML provided ITSBITS with more than 30 chart types as well as rich styling, animations, and markers among other features. And while the look and feel of its charts conforms to the designated Windows 8 user interface themes, all these capabilities weren't available in the base Windows RT development toolkit. By extending those tools using Studio for WinRT XAML, ITSBITS was able to deliver a professional-looking, consumer-grade UI in a faster and more cost-effective model than building inhouse.

Multi-platform support extended to ComponentOne Studio Enterprise Microsoft Visual Studio 2012 supports multiple development platforms, including XAML, HTML5, JavaScript, C#, and Microsoft Visual Basic .NET. ComponentOne offers Studio Enterprise, which bundles all of their component suites for web, Windows, and mobile platforms into one product. Developers like ITSBITS can use Studio Enterprise and Visual Studio 2012 to build an application for any Windows 8 deployment platform and then reuse most of that code when expanding their applications to another platform.

Reduced development time and cost

Together, Visual Studio 2012 and ComponentOne Studio for WinRT XAML simplify the effort developers need to spend on front-end design. This includes not just functionality, but also compliance with new Windows Store guidelines for Windows 8 apps. An attempt by ITSBITS to do UI development in-house likely would have taken multiple tries to pass the Windows 8 Store evaluation process, which meant the company likely would have missed its holiday deadline and spent significant additional dollars on multiple recodes. Fortunately, with an easy Visual Studio 2012 IDE and the compliancecentric controls provided by ComponentOne, an initial version of the application was ready for testing in less than a day.

Microsoft Visual Studio 2012

Visual Studio 2012 is loaded with new capabilities for Windows 8, the web, Microsoft SharePoint, mobile, and cloud development. It also offers application management lifecycle tools needed to break down team barriers and reduce cycle times, through its tight integration with Team Foundation Server 2012. Visual Studio 2012 has a redesigned user interface that streamlines everyday tasks and improves productivity. It comes purposebuilt to help developers thrive in an environment where ideas are at a premium and speed is of the essence.

