



Technology Delivered

Technology Used:

- Visual Studio, Windows Phone SDK 8.0, Windows 8 SDK 8.0
- .NET 4.5, MVVM Light, XAML, CSS, REST, JSON, SSO
- AWS (EC2, EB, RDS, S3, Route 53, CloudWatch)
- Social login and sharing to Facebook

WINDOWS MOBILITY FOR SCHOOLS

Challenge

Our challenge was to simultaneously deliver mobile applications on the Windows Phone 8 and Windows 8 platforms that would safely provide content sharing for thousands of K-12 schools, colleges and universities across the country. The applications allow students, parents and teachers to take, share, and interact with photos and videos of school activities.

The applications needed to integrate directly with existing yearbook authoring software, image and video repositories, identify management systems, and ERP to allow content to flow freely between the applications.

Our client envisioned a system that was:

- Personalized and user-friendly
- Moderated for appropriate content
- Flexible, reliable and state-of-the-art
- Supportive of academic progress
- Easily maintained across platforms

Solutions

sdg was responsible for the complete software development lifecycle including project management, business analysis, user experience design, architecture, development, and quality assurance. The team created the applications leveraging .NET portable class libraries. It resulted in core application code that is maintained only once, but shared between both the Windows Phone 8 and Windows 8 applications, even though the user interfaces for the applications were optimized for their respective platforms.

The responsiveness demanded by modern mobile users was realized in both applications through asynchronous programming using Async and Await. At the user interface level, both applications make use of integration with device cameras and gps systems for geo-location services. Additionally, the charms bar search, data suspension, live tiles, and badge integration were included in the project.

Benefits of the new system included:

- One easily maintainable application-level code base
- Two platform specific user interfaces
- Near real time access to photos and videos for students, parents and staff
- 24/7 live content moderation via mechanical turk
- Apps deployed to the Windows Phone 8 and Windows 8 stores

sdg consultants served our client in the following roles:

- Agile project delivery
- User experience and interface design
- Application design, architecture, and development
- Web services integration
- Quality assurance management

Leveraging our partnership, sdg engaged user experience architects and applications architects from Microsoft throughout the project to review and provide feedback, resulting in two world-class applications.