MICHIGAN STATE UNIVERSITY

Project Plan

Extending Apps with Cloud Asset Sharing

The Capstone Experience

Team TechSmith

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From Students…
…to Professionals

Project Overview

- Desktop application for sharing Camtasia and Snagit assets
- Assets are images, callouts, sequences, etc…
- Application synchronizes with Azure cloud server
- Users can share and rate each others' assets

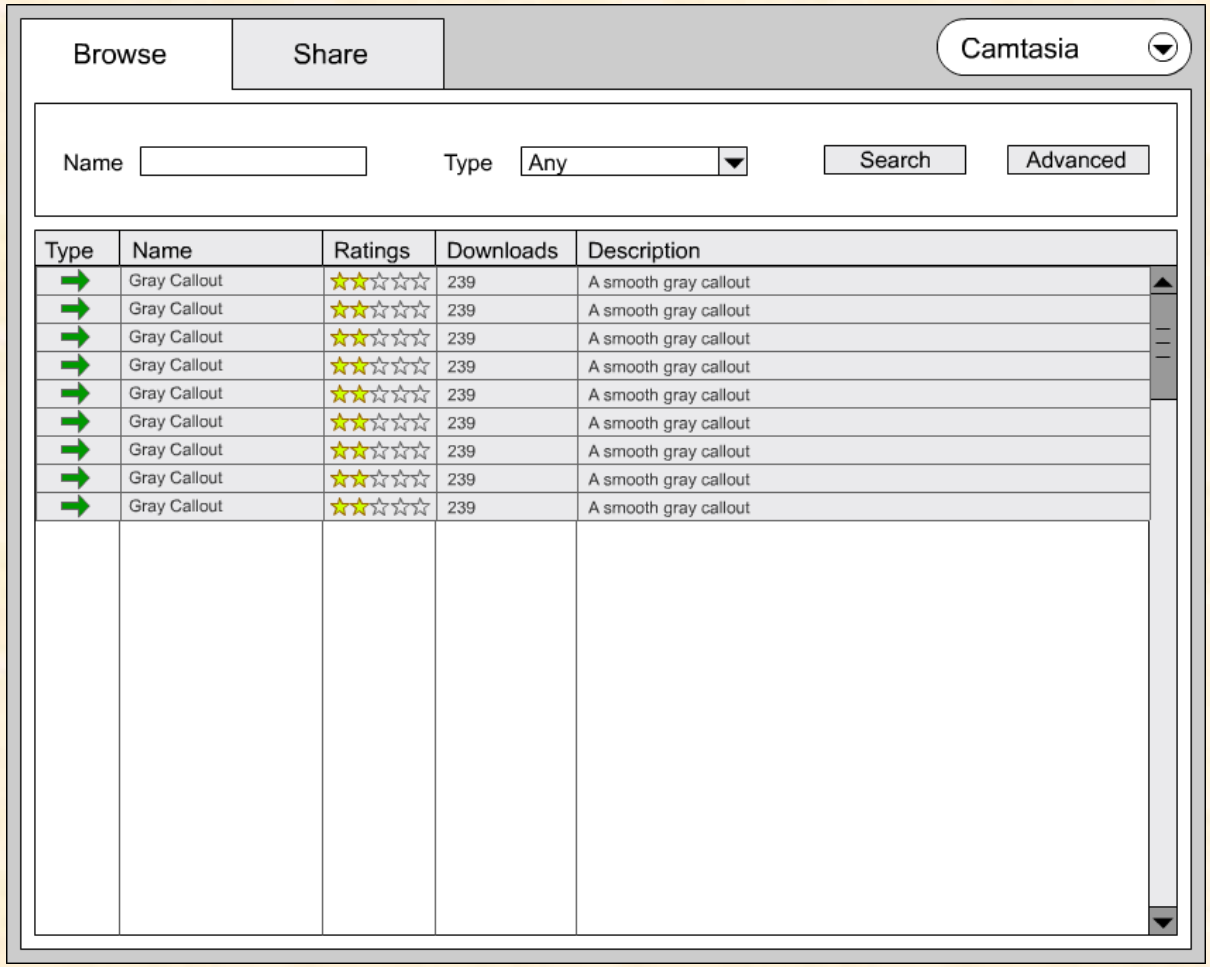
Functional Specifications

- The desktop application will:
  - Allow creation and editing of asset groups
  - Upload and set metadata on assets
  - Search through publicly shared assets
  - Download assets and place them in the correct locations
- The Windows Azure server application will:
  - Listen for requests from the desktop application
  - Make database queries
  - Return results

Design Specifications

- Drop down menu to toggle between Camtasia and Snagit
- Two tabs – “Browse” and “Share”
- Browse Tab
  - Regular search
  - Advanced search
  - Display results and allow for downloading
- Share Tab
  - Display local and remote libraries
  - Enable creation of asset groups
  - Allow for uploading of existing local assets
  - Allow for managing of remote assets

Screen Mockups



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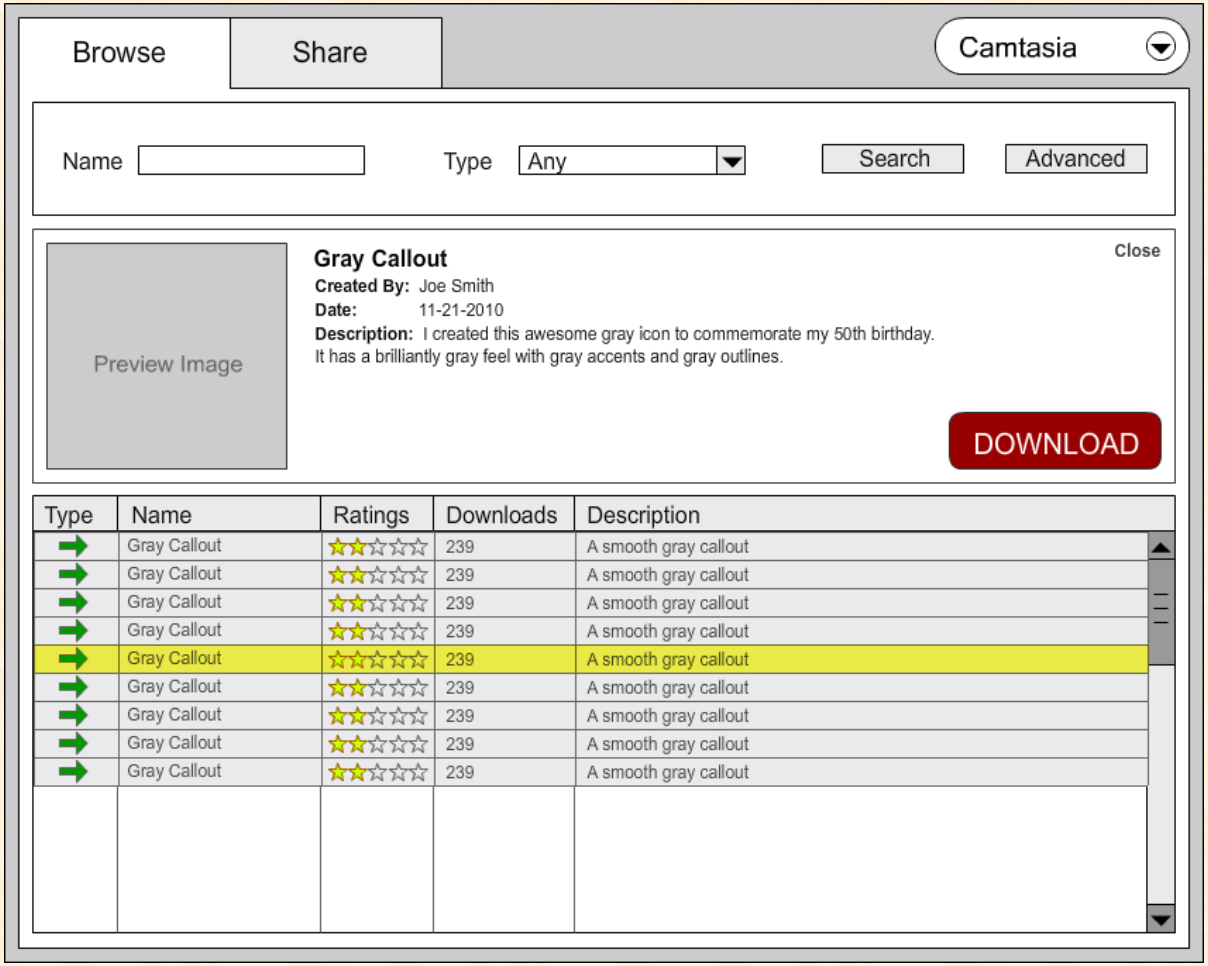

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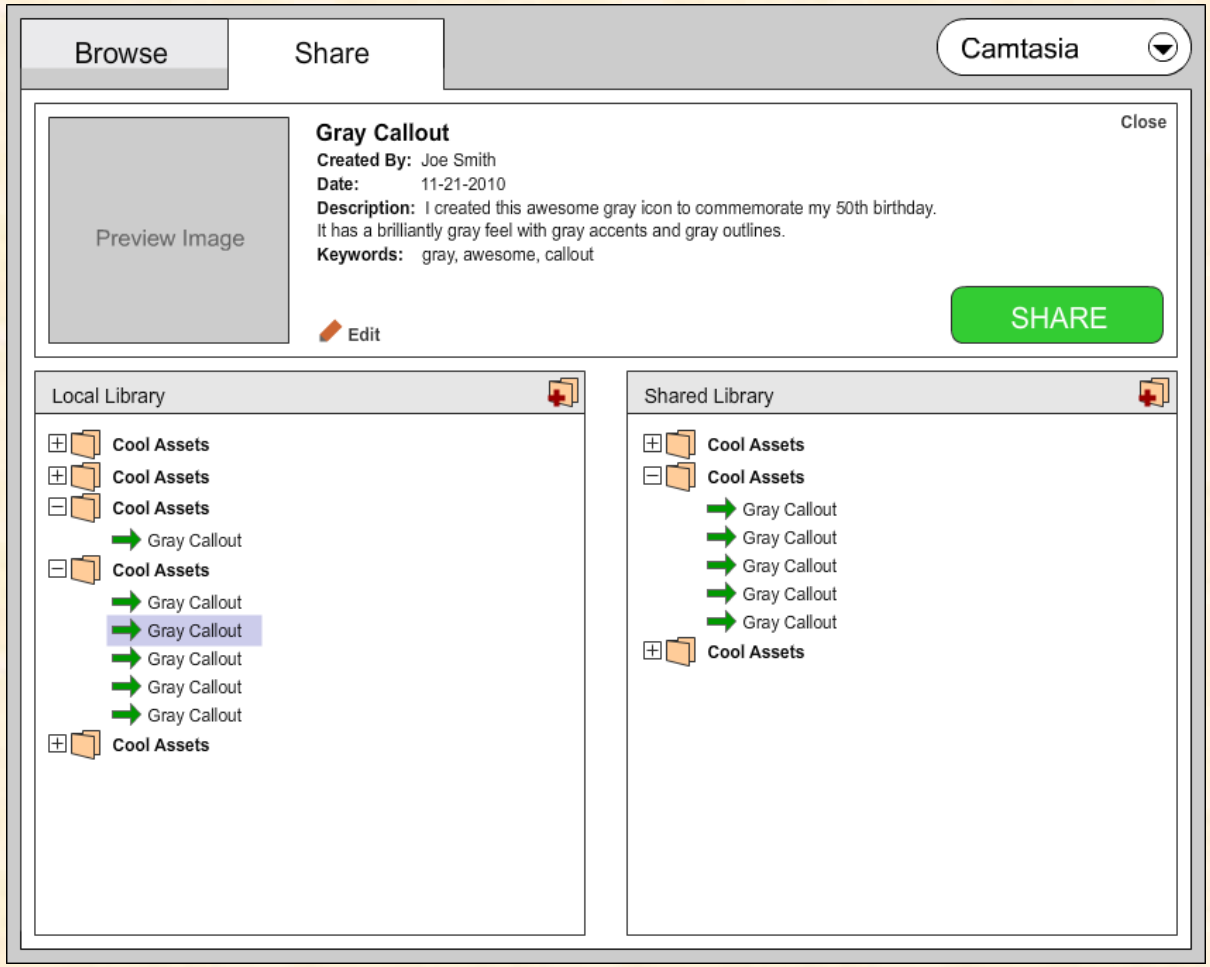
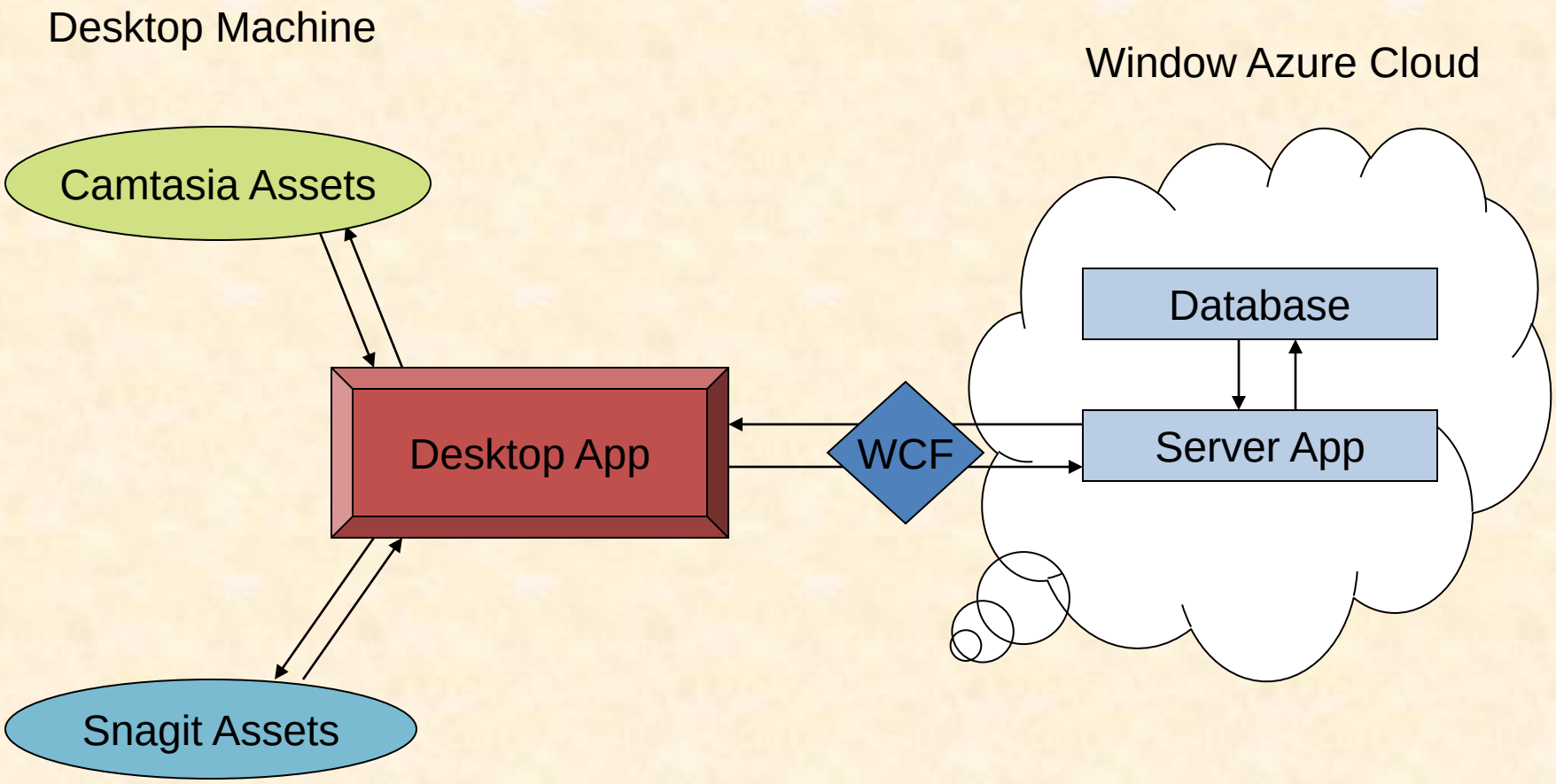


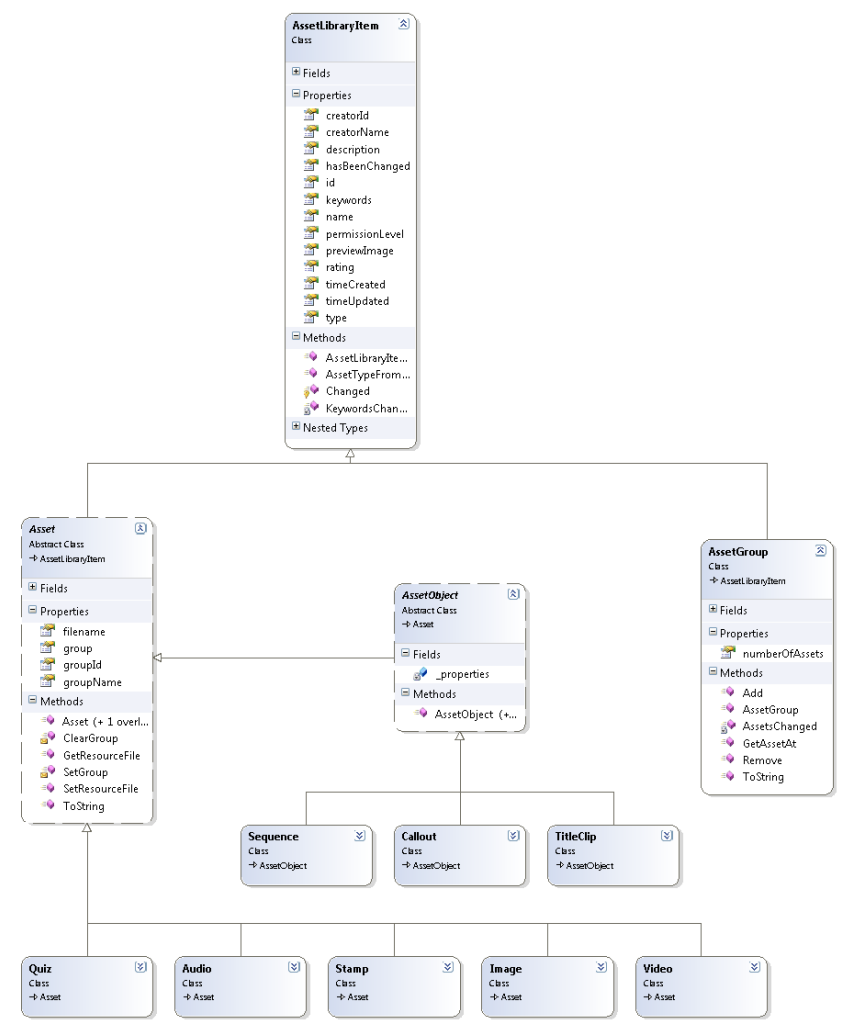
Technical Specifications

- Desktop Application will be in C#, WPF
- Server Application will be in ASP.NET
- Communication will use WCF
- Files stored as blobs in database

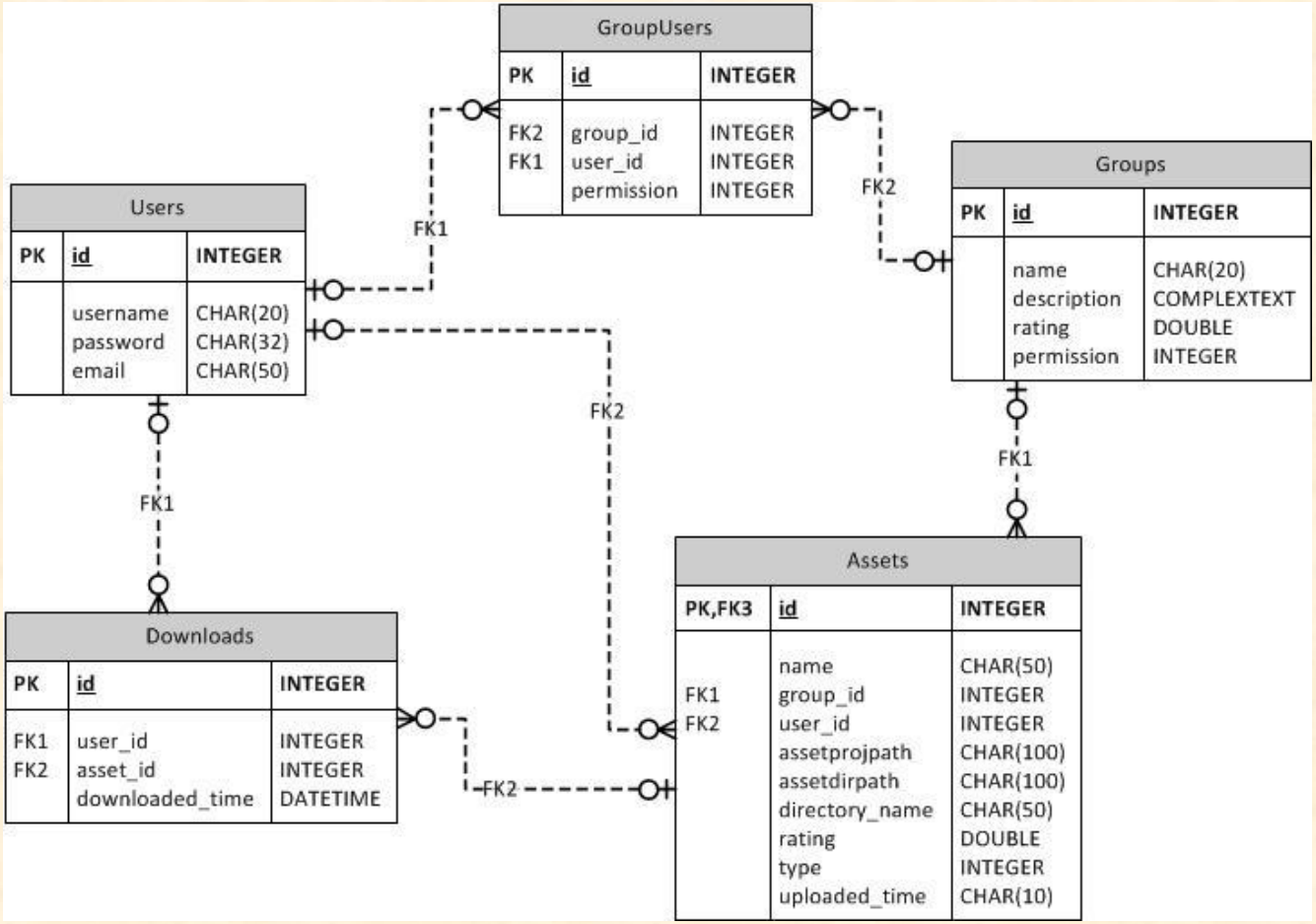
Communication Diagram



Desktop Application Class Diagram



Database Layout



System Components

- Hardware Platforms
  - Windows Azure Cloud
  - TechSmith providing Azure account for both dev and production
  - Users will not necessarily know Azure is being used
- Software Platforms / Technologies
  - C#, WPF, WCF, Visual Studio
  - Will not be cross platform

Testing

- Testing will be done with unit tests in Visual Studio
- User testing will be done for feedback after beta

Risks

- **Windows Azure**

  Risk: None of the team has had any experience Windows Azure.

  Difficulty: Low

  Importance: High

  Mitigation: Study documentation, create test apps.

- **Programming Languages**

  Risk: We will be using C#, ASP.NET, WCF and WPF, which most of the team has little or no experience with.

  Difficulty: Low

  Importance: High

  Mitigation: Study documentation, create test apps.

Risks

- **Rendering Preview Images**

  Risk: Not all assets have images that can be easily converted into previews, and others use non-standard rendering to create the final image.

  Difficulty: Moderate

  Importance: Moderate

  Mitigation: Create standard images for previews that cannot be easily rendered.
- **Determining Sharable Assets and Metadata**

  Risk: We need to know information about assets, such as names and descriptions, which is stored in XML for some Camtasia assets. The representatives have specified the XML should be treated as a “black box” and should not be used, but the information is not stored anywhere else.

  Difficulty: High

  Importance: High

  Mitigation: The TechSmith representatives will talk to higher ups and try to work out a solution.