Project Plan
Microsoft Team System Web Client

Team 6. TechSmith
CSE 498, Collaborative Design

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Fall 2009
Project Overview

- Silverlight Web Client to interface with Microsoft Team Foundation Server
- Provide Cross-Platform accessibility to a diverse user group
- Provide integrated application lifecycle management tools and processes
- Provide search, management, and visualization of key data and relationships
Functional Specifications

- User Validation
- Robust Search
- Filter Search Results
- Modify and Link existing Work Items
- Add and Link new Work Items
- Visual reporting of key data relationships
- Templating of diverse project data
Design Specifications

- Intuitive, functional, and fluid interface
- Rich visual interaction with Team System
- Useful search and filtering tools
- Cross-browser compatibility
- Cross-platform compatibility
- Improves upon current Team System interaction
Screen Mockups

User Validation Screen

TechSmith Team Foundation Client

Server
"tfs-app01"

Project
"Camtasia"

Username
"test"

Password
*****

Remember me

Login
Screen Mockups

Home Tab

TechSmith Team Foundation Client

Last build: 9/17/2009 2:18pm
Build status: Success

My Work Items:
Screen Mockups

Search Tab
Technical Specifications

• Client-Server Interaction
  – TFS client API does not directly interact with XAML in Silverlight applications
  – Client application must communicate through an exposed web service through .NET RIA services

• .NET RIA & Silverlight Interaction
  – Client application declares and interfaces with the Domain Context
  – Data is submitted or queried through the Domain Context to the Domain Service as part of the RIA
  – The Domain Service interfaces with the TFS API to retrieve or update TFS data
Architecture Illustrated

Architecture Overview

Windows User

Silverlight-Enabled Browser

Mac User

Silverlight-Enabled Browser

Microsoft Team Foundation Server
Architecture Illustrated

Server Architecture

- Client Tier
  - Team Foundation System
  - Client API

- Application Tier
  - Team Foundation System
  - Web Services
  - SharePoint Services
  - Reporting Services

- Data Tier
  - Operational Store
  - Data Warehouse
System Components

- **Hardware Platforms**
  - Windows Web Server
  - Windows Application/Database Server

- **Software Platforms / Technologies**
  - Microsoft Expression Blend 3 with Silverlight 3
  - .NET RIA Services with .NET Framework 3.0
  - Microsoft Team Foundation Server 2008
  - Microsoft SQL Server 2008
  - Windows 7 and Mac OS X 10
  - Internet Explorer 8, Mozilla Firefox 3.5, Apple Safari 4, Google Chrome 3
Testing

Portability Testing
• Windows and Mac combatable
• Internet Browser interoperability

Scalability and Performance Testing
• User base of less than 100 concurrent users
• Scalability testing with virtual machines
• Performance testing on local Capstone Server
• Performance testing at TechSmith production environment

Usability Testing
• Client application used by software engineers, user experience designers, test specialists, information developers, and project managers
• User pilots with TechSmith’s “Good to Awesome Quality Group”
Risks

- Team Foundation Server
  - Hosting TFS on local capstone server
  - Communication with TechSmith’s TFS Admin

- .NET RIA Services
  - Permit communication between Silverlight & TFS
  - Extend existing RIA prototype

- User Interface design specification
  - Little to no creative influence from TechSmith
  - Initial design, refine with extensive user testing