

Project Plan

Microsoft Team System Web Client

Team 6. TechSmith
CSE 498, Collaborative Design

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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

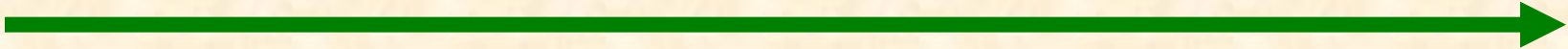


Design Specifications

- 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

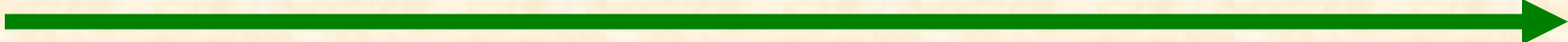
Password
••••••

Remember me

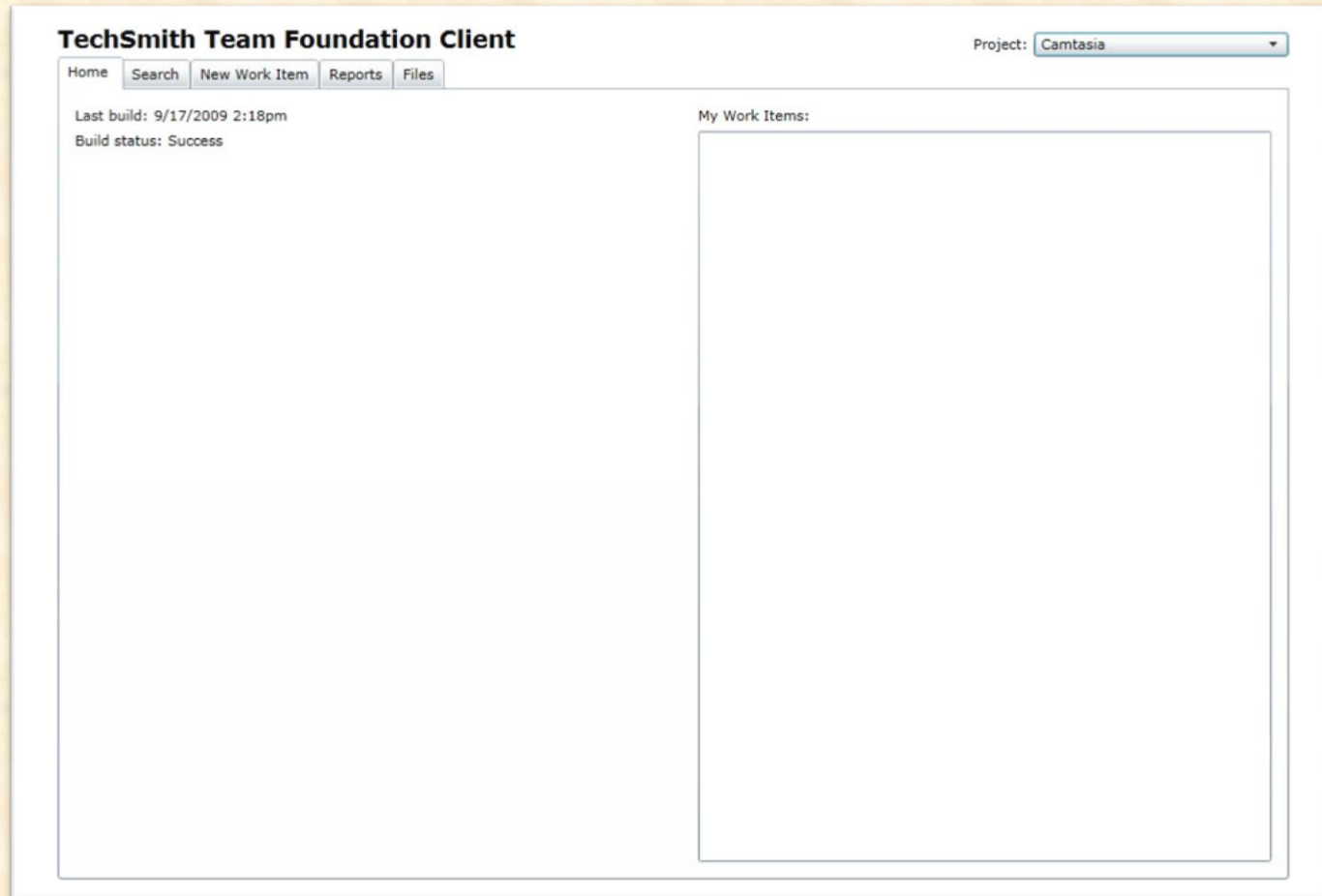
Login



Screen Mockups

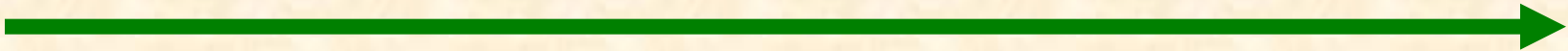


Home Tab





Screen Mockups



Search Tab

TechSmith Team Foundation Client Project:

Home **Search** New Work Item Reports Files

ID or Keyword(s):

Items assigned to me Search within description Show only bugs

Item State:

<input type="checkbox"/> Active	<input type="checkbox"/> Done
<input type="checkbox"/> Cancelled	<input type="checkbox"/> In Progress
<input type="checkbox"/> Closed	<input type="checkbox"/> Not Done
<input type="checkbox"/> Deferred	<input type="checkbox"/> Resolved
<input type="checkbox"/> Deleted	<input type="checkbox"/> Testing

Sprint:

Start Date:
End Date:

My Queries: Team Queries:

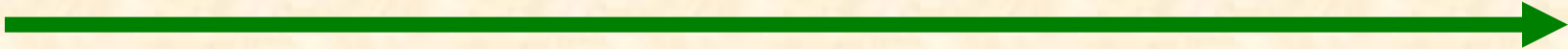


Technical Specifications

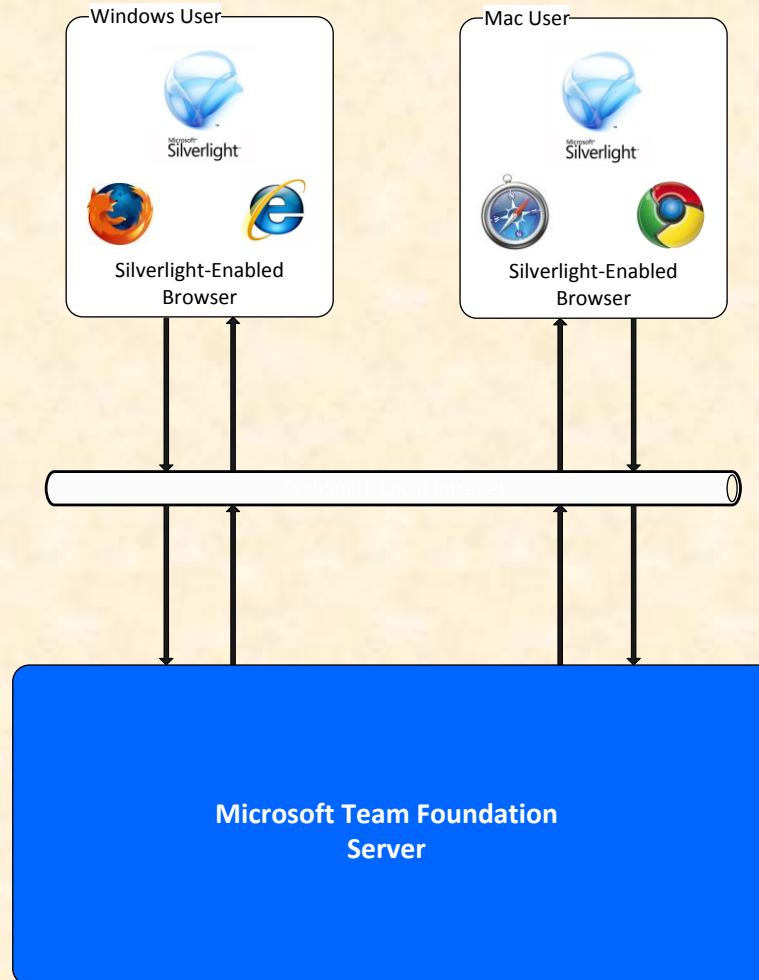
- Client-Server Interaction
 - TFS client API does not directly interact with XAML in Silverlight applications
 - Client application must communicate through an exposed web service through .NET RIA services
- .NET RIA & Silverlight Interaction
 - Client application declares and interfaces with the Domain 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

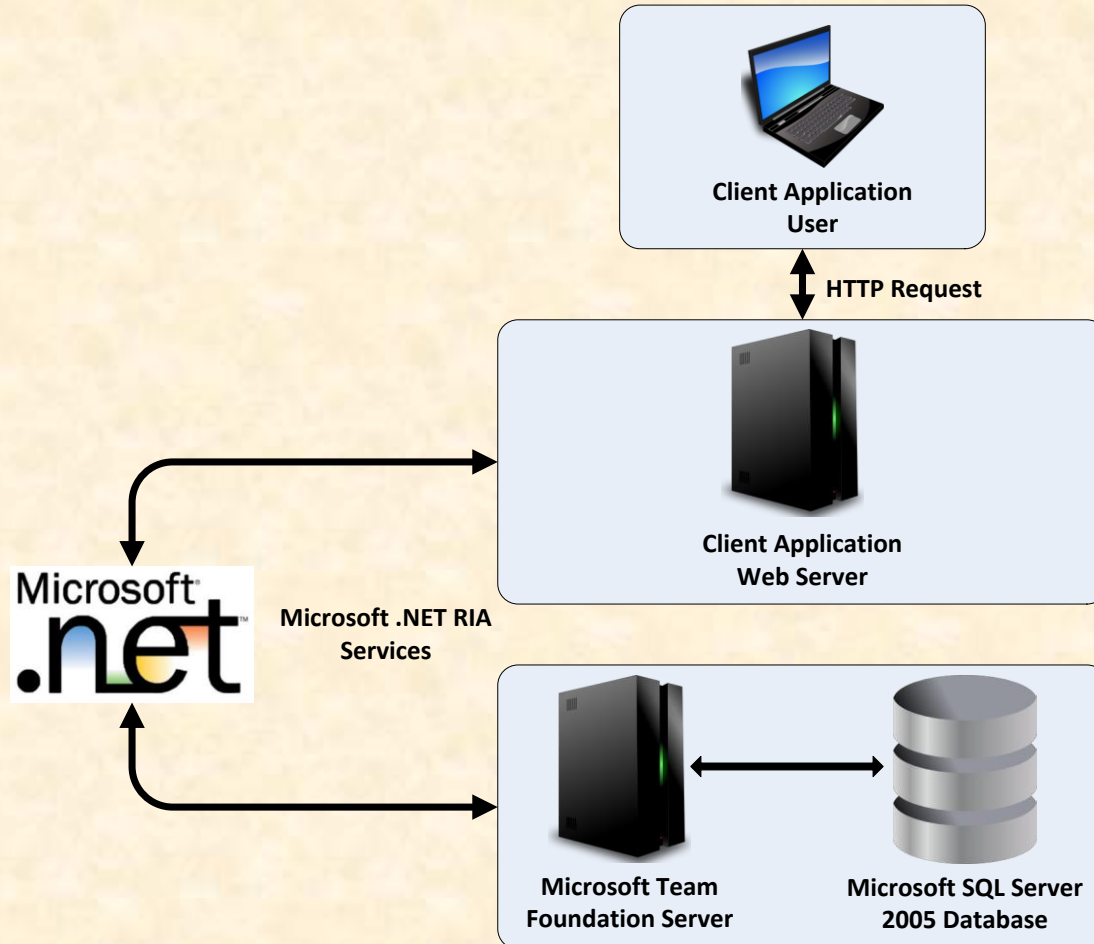




Architecture Illustrated

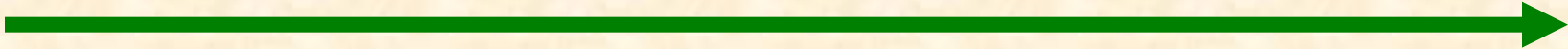


Client Architecture

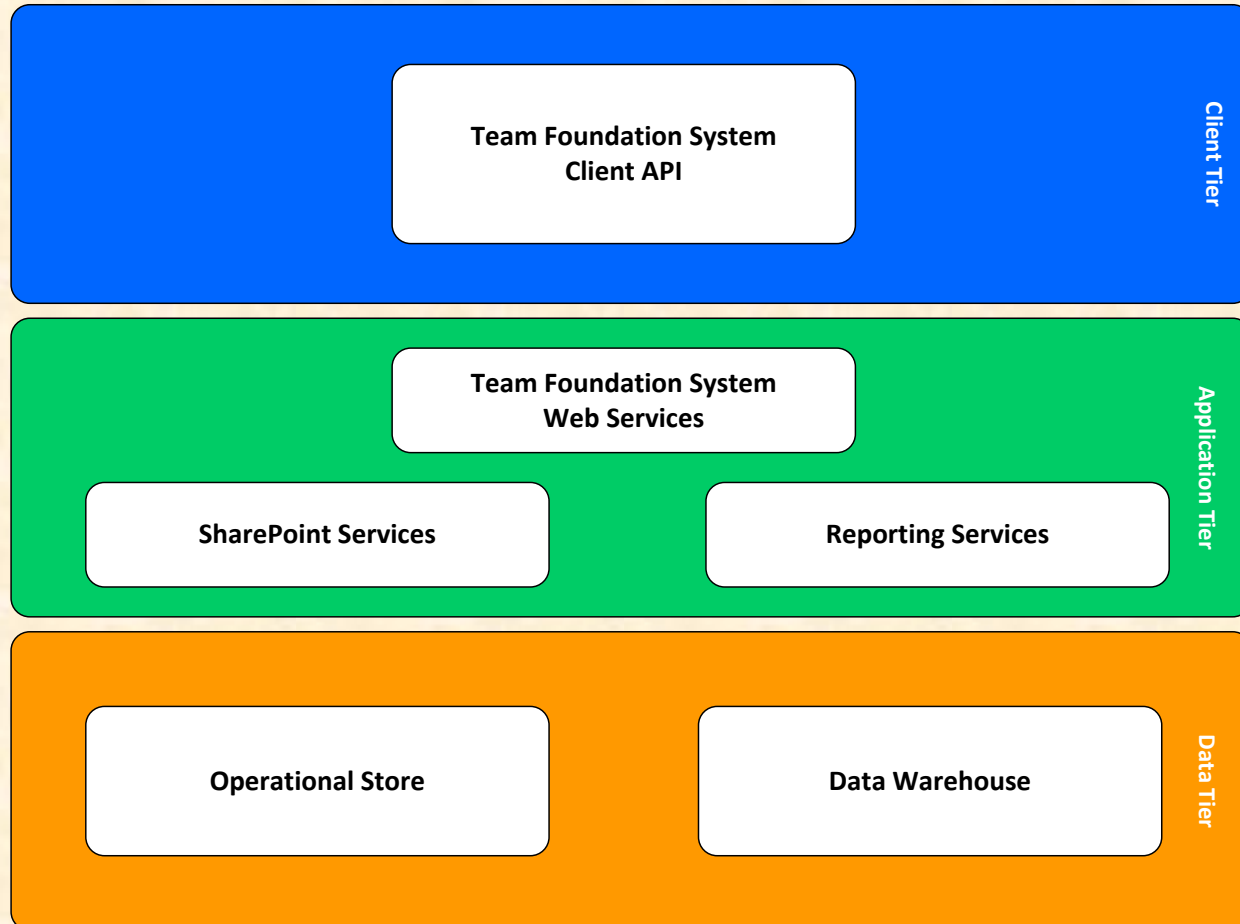




Architecture Illustrated



Server Architecture





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