

MICHIGAN STATE
UNIVERSITY

Project Plan

Cloud-Based Athletics Digital Operations Center

The Capstone Experience

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*From Students...
...to Professionals*

Project Overview

- Cloud-Based Information Portal for University Athletics
- Resources
 - People (Coaches, Athletes, Managers, Trainers, Etc.)
 - Facilities (Practice, Training, Meeting, Etc.)
 - Etc.
- Information
 - Schedules (People, Facilities, Teams, Etc.)
 - Athlete Health Records
 - Videos (Scouting, Training, Etc.)
 - News Feeds
 - Weather and Travel Conditions
 - Etc.



Functional Specifications

- Role-Based
 - Coach
 - Athlete
 - Trainer
 - Manager
 - Etc.
- Provide Simultaneous Access
 - People Presence
 - Information
 - Schedules
 - Health Records
 - Etc.
 - Calendaring, Emailing, Instant Messaging
 - Video Conferencing
 - Etc.

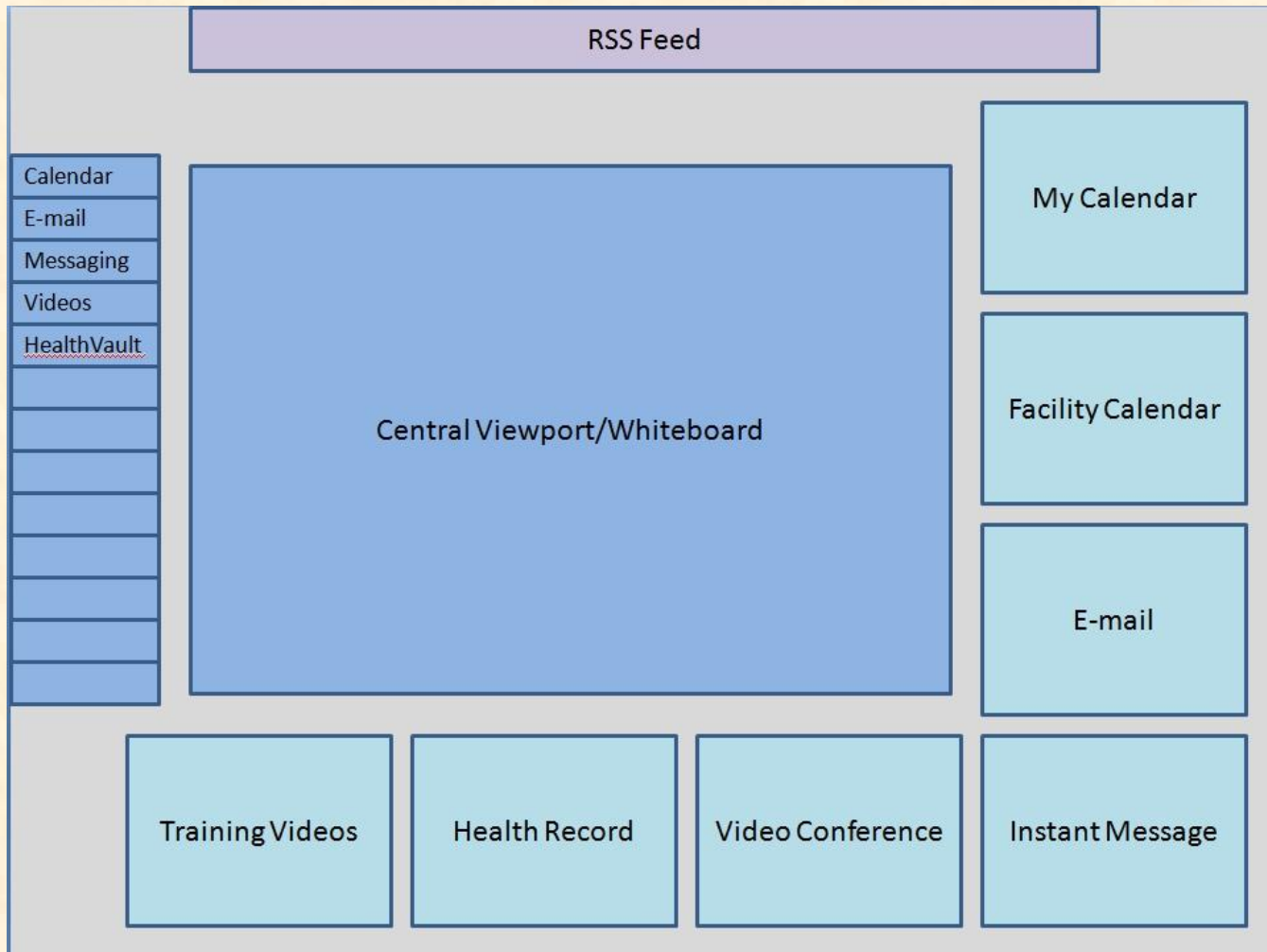


Design Specifications

- Use “Whiteboard” Viewport
- Support Customization
 - Per User
 - Dashboard-Like
- Include Navigation Links Based on Role
- Display RSS Feeds



Screen Mockups

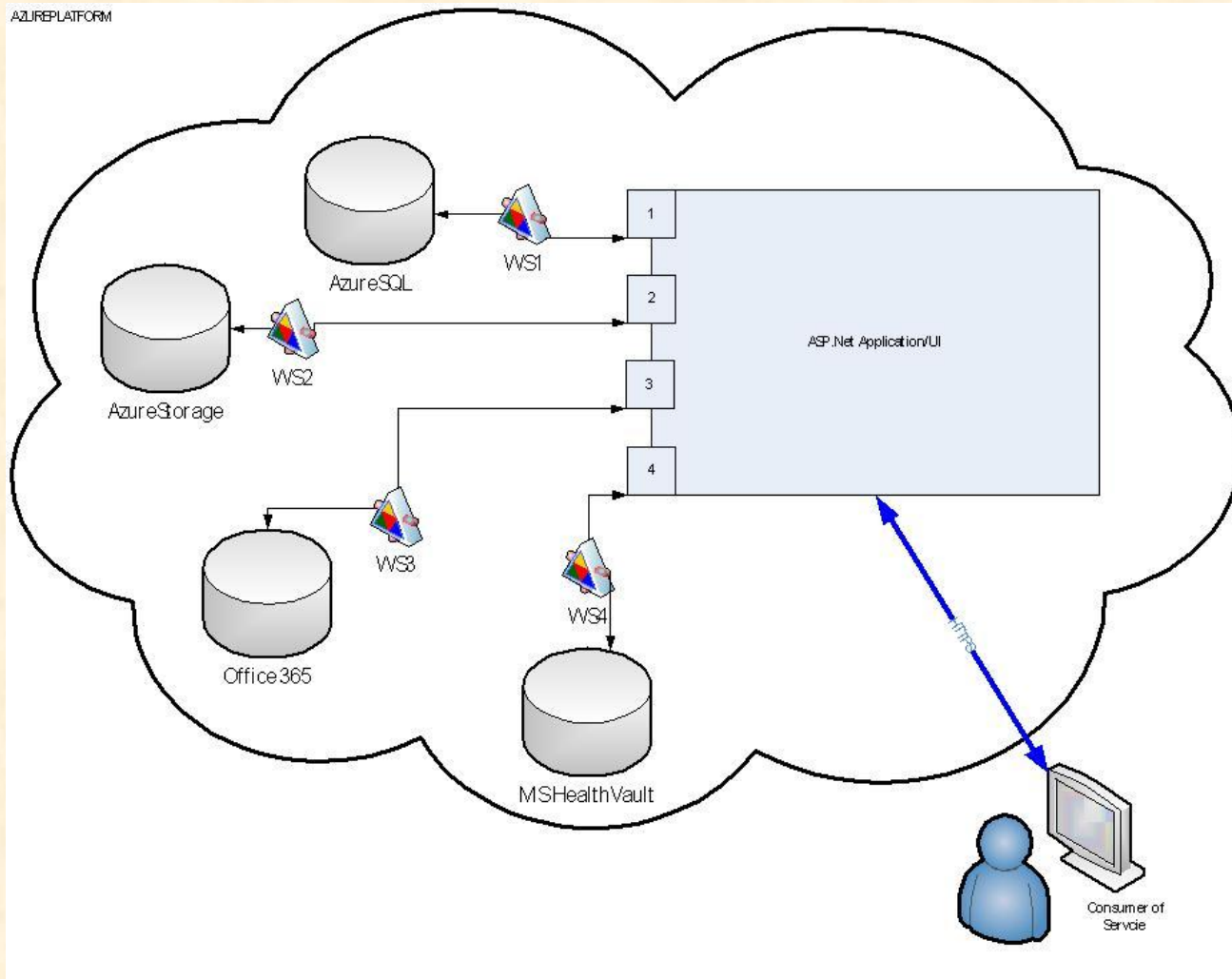


Technical Specifications

- Microsoft SQL Azure
 - User Authentication
 - Resource Information Storage
- Microsoft Azure Storage
 - Cloud Data Store
 - Persistent & Redundant
- Microsoft Health Vault
 - View and Manage Personal Health Records
 - Access Based on Authentication and Role
- Microsoft Office 365
 - Lync Online (Video Conferencing, Instant Messaging, Etc.)
 - Exchange Online (Calendaring, Emailing, Etc.)



System Architecture



System Components

- Hardware Platforms
 - Azure Cloud Platform
 - Windows 7 Professional 64-bit
- Software Platforms / Technologies
 - Microsoft SQL Azure
 - Microsoft Azure Storage
 - Microsoft Office 365
 - Microsoft Health Vault



Testing

- Manually test user privileges to ensure levels of permissions
- Recruit third-party "users" to test ease-of-use of the interface
- Consult client regarding application functionality and make revisions iteratively
- Create unit tests for standard use cases to improve efficiency of testing



Risks

- Privacy
 - Student athlete, personal health record must remain private
 - Solution: SQL Azure ensures proper authentication
- Loss of Internet access
 - Users cannot access site information
 - Solution: Alert users that information is dependent on having Internet access
- UI Crowding
 - The amount of information displayed is overwhelming
 - Solution: A simplistic UI design keeps the display of information clean and managed

