From Students…
…to Professionals

The Capstone Experience

Project Plan
Cloud-Based Athletics Digital Operations Center

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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
    o Schedules
    o Health Records
    o 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