MICHIGAN STATE UNIVERSITY

Project Plan

WhiteCaps: Mobile Whiteboard Capture Solution

The Capstone Experience

Team TechSmith

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From Students…
…to Professionals

Project Overview

WhiteCaps

- Mobile devices that capture whiteboards and other information
- Cloud to hold whiteboard images and metadata
- Web client to manage user profiles and whiteboard captures as stored on the cloud

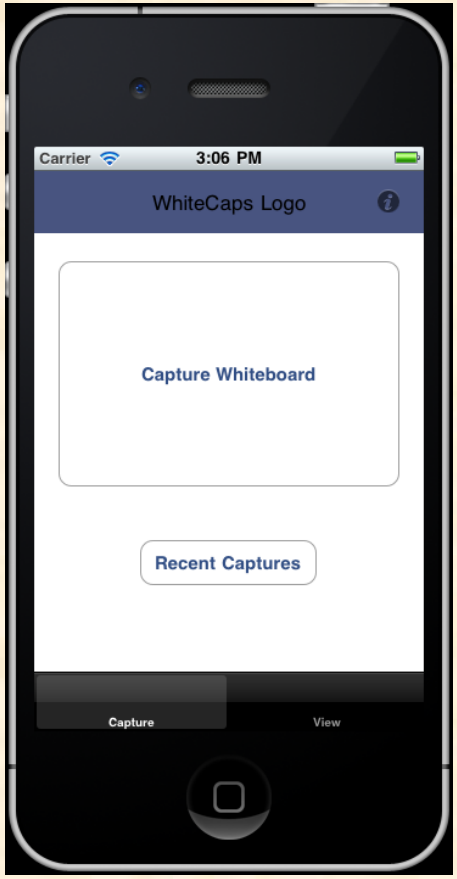
Functional Specifications

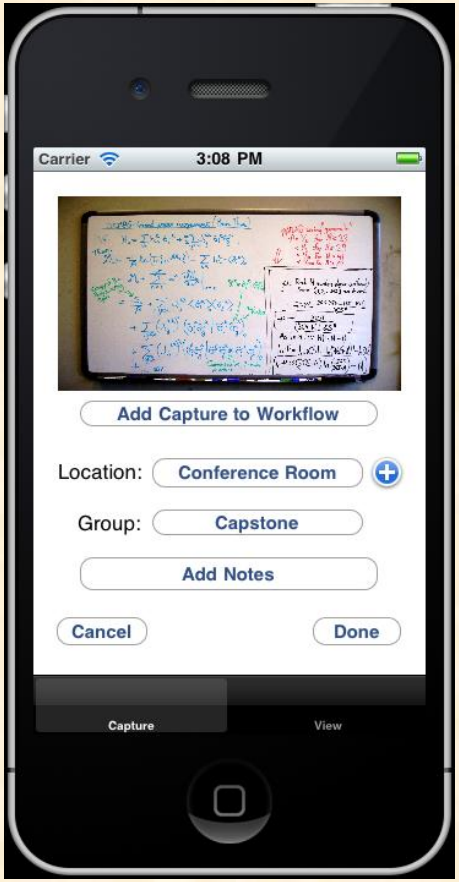
- Mobile apps must take whiteboard captures and upload to the cloud.
- Users must be able to attach text and voice notes to each capture.
- The device should be able to detect its location and attach it to the capture as well as allow the user to type in a location and scan a QR code to associate with that location.
- Users must be able to add a hash tag for the meeting name that will be used for searching and associating captures to each other.
- Need to be able to interpret QR codes, to retrieve location data.

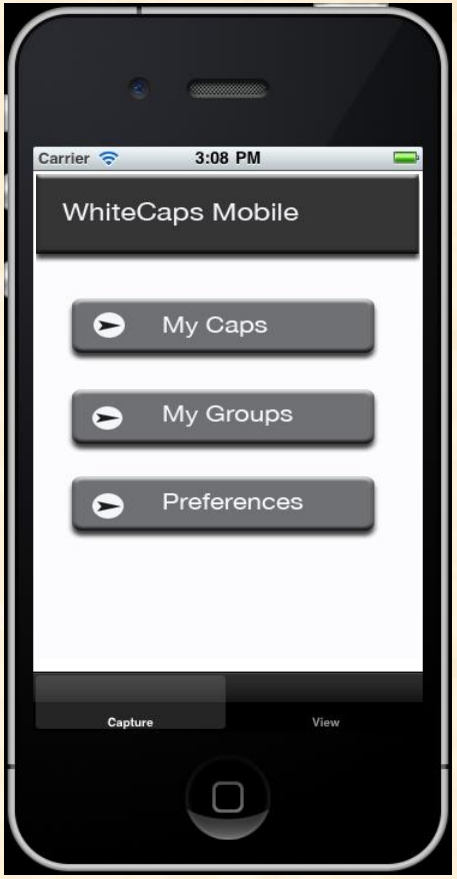
Design Specifications

- Simplistic and clean mobile application
- Want to be able to capture a whiteboard and upload in < 30 seconds
- The desktop web browser will have more content than the mobile application
- All three applications should follow the Model, View, Controller pattern

Screen Mockups







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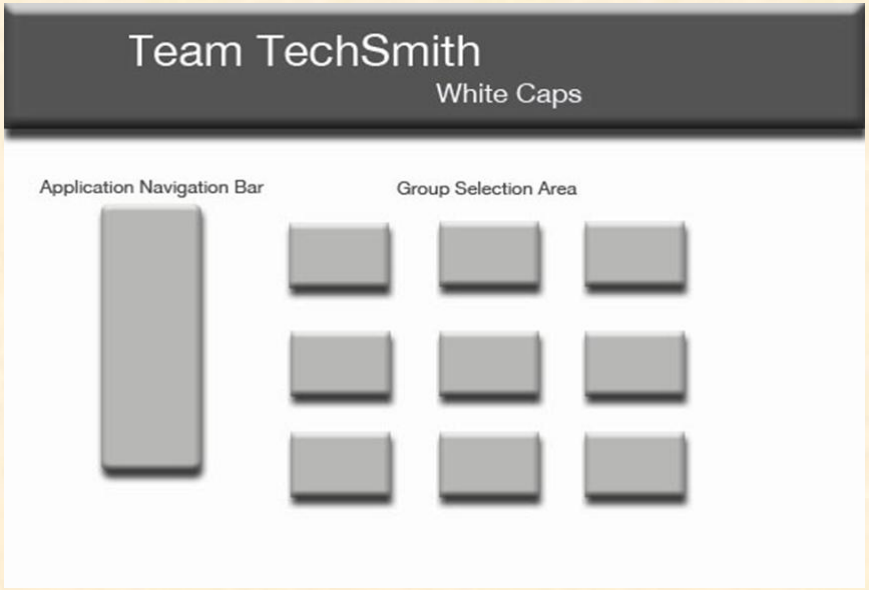
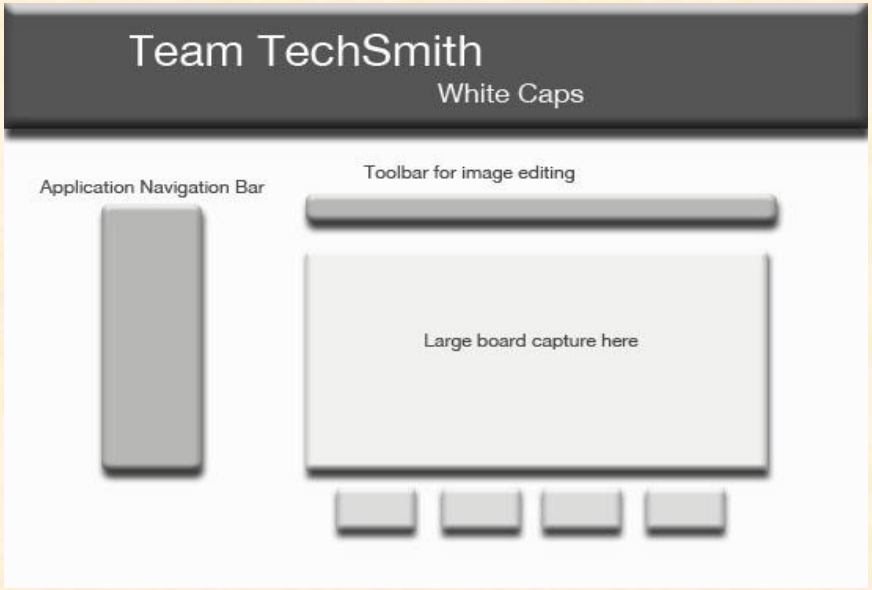
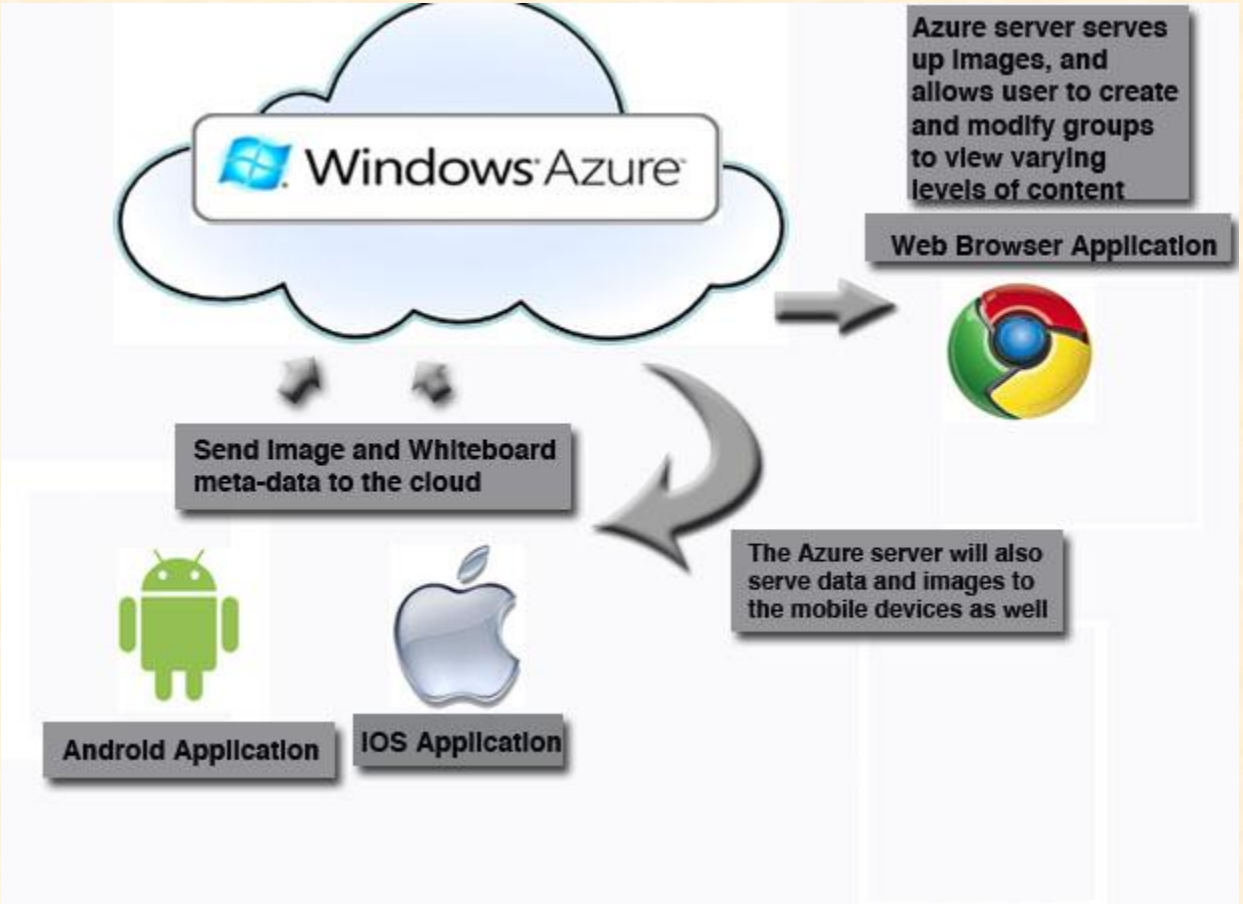




Technical Specifications

- iPhone app must be compatible with iOS v3.1+
- Android app must be compatible with Android v2.1+
- The web interface must work with all major web browsers.
- The back-end must run on Windows Azure Cloud Service.

System Architecture



System Components

- Hardware Platforms
  - iPhone
  - Android enabled smartphones
  - A desktop computer with a web browser
- Software Platforms / Technologies
  - Microsoft Windows Azure
  - Android SDK
  - iPhone SDK

Testing

- Lots of input on design of mobile app from client contact.
- Going through use cases multiple times.
- Having client contact go through the use cases multiple times.
- Distribute development versions to TechSmith employees for testing and feedback.

Risks

- Unknown results if multiple users manipulate an image simultaneously
  - Mitigation: Discuss possible solutions with client contact and within our team
- Sending data from a mobile phone to an Azure server.
  - Mitigation: Create a simple application to accept data from mobile phones and store it on the server.
- Figuring out the Android SDK and java for Android
  - Mitigation: Go over as much documentation and tutorials as possible, and write simple apps.
- Making sure the Android app is compatible with different android devices.
  - Mitigation: Test on other phones than the test phone given to us by TechSmith.
- Staying on the same page as client contacts.
  - Mitigation: Constant contact between us and the client contact so we can deliver the product they want.