

MICHIGAN STATE
UNIVERSITY

Project Plan

Mobile Calendar

The Capstone Experience

Team MSUFCU

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From Students...
...to Professionals

Project Overview

- Build a solution to share company wide events
- Always available with smartphones
- User friendly
- Native look and feel
- Simple



Functional Specifications

- Mobile
 - Display events
 - Display news
 - Alert users when a relevant event will occur
 - Create, edit and remove events by the admins
 - Add to Personal calendar.
- Web
 - Display, create, edit and remove events
 - Display, create, edit and remove news
 - Used by admins only

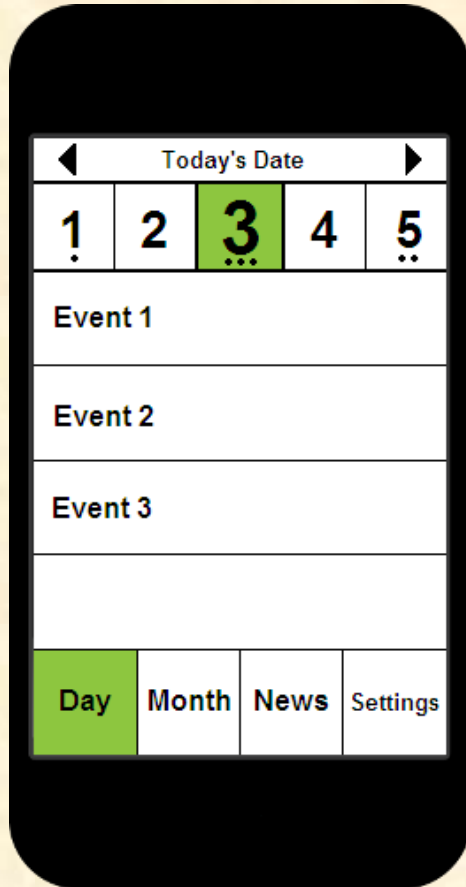


Events

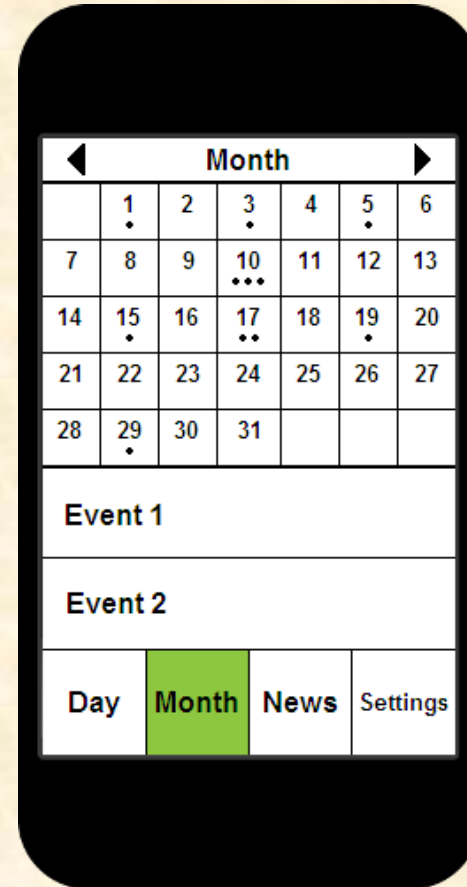
- General attributes & features:
 - Title
 - Description
 - Date
 - Location
- Special features:
 - Map
 - Link to other internal systems
 - Participants



Screen Mockup: Mobile Apps



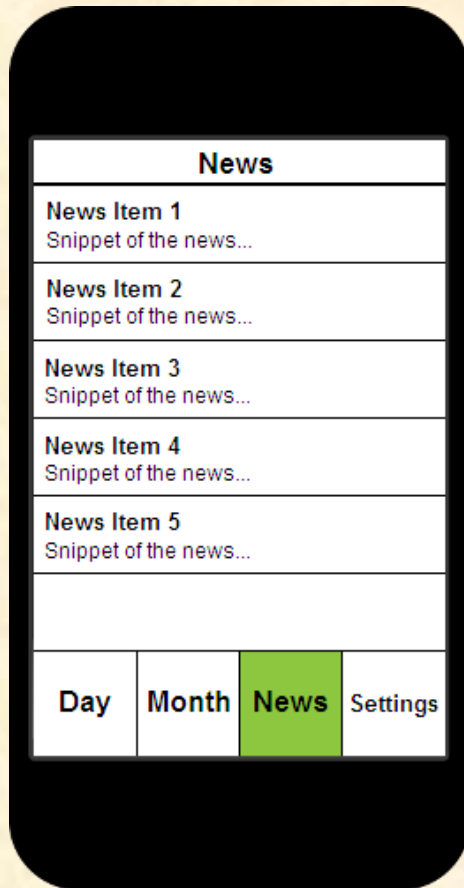
Day/Week view



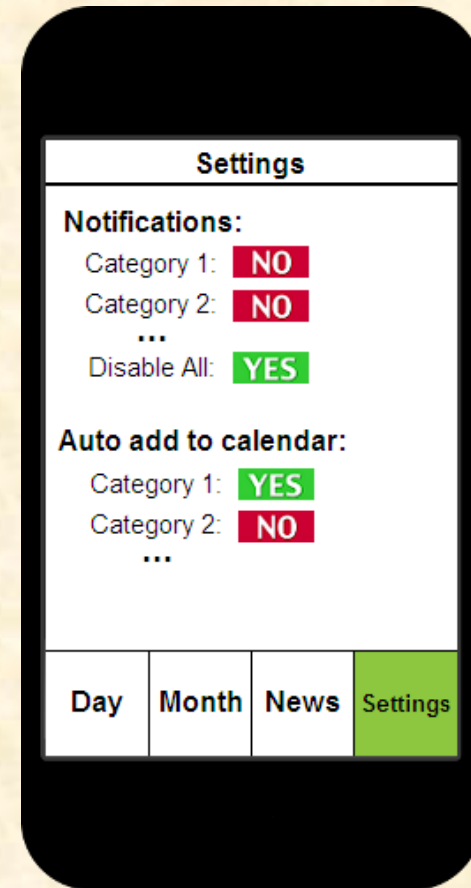
Month view



Screen Mockup: Mobile Apps



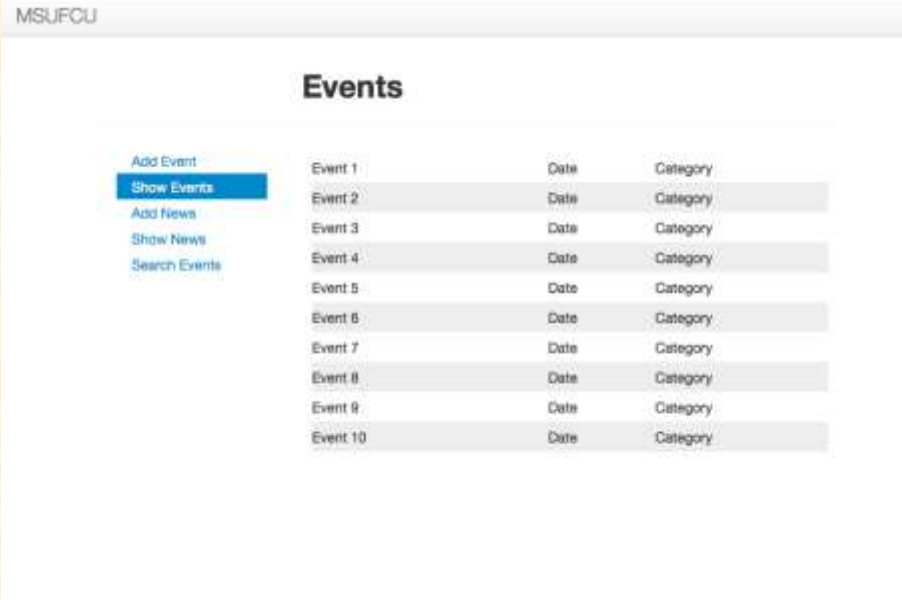
News



Settings

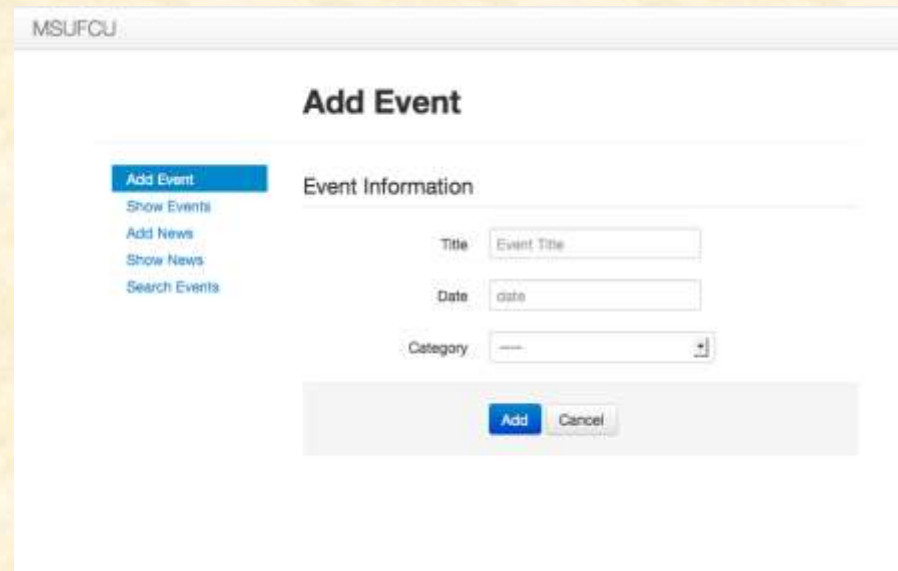


Screen Mockup: Web App



Main screen – lists events

Add event screen

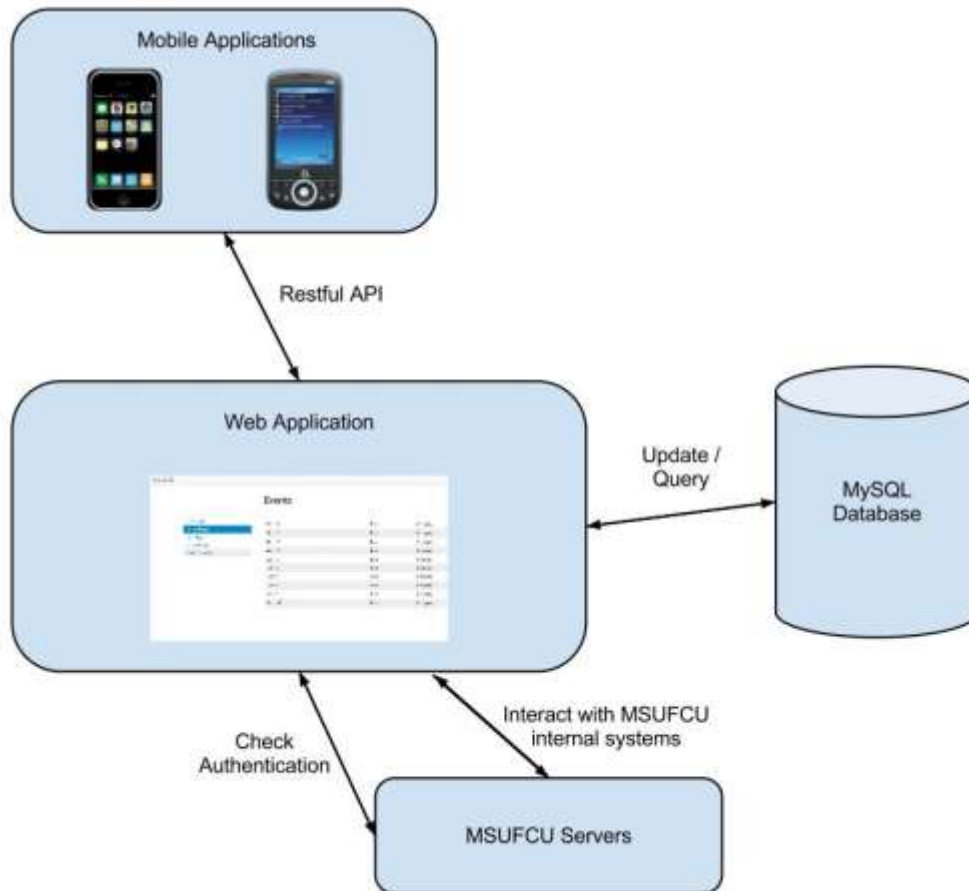


Technical Specifications

- Mobile App
 - Java using Eclipse IDE w/ Android SDK
 - Objective C using Xcode
- Web App
 - MySQL database
 - PHP5
- HTTPS



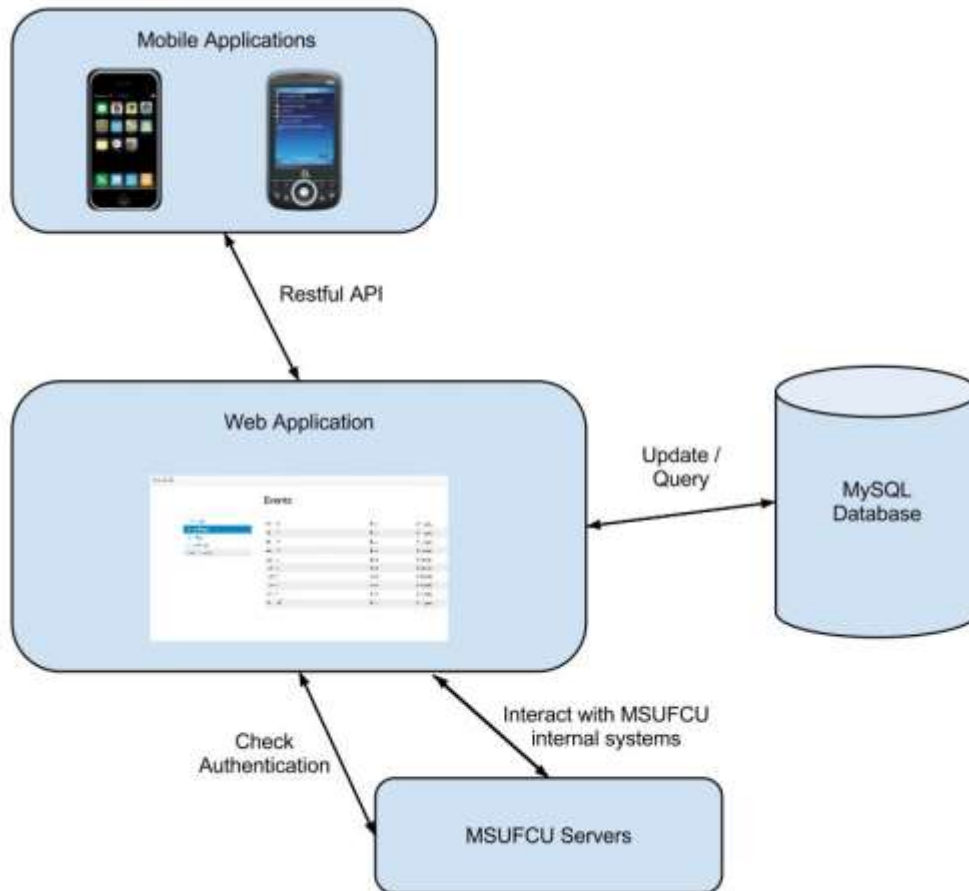
System Architecture



- **Web App**
 - Event Viewing
 - Event Management
 - Event Searching
- **Mobile App**
 - Queries Web App
- **MySQL Database**
 - Stores Event/News Data
 - Authentication Keys
 - Privileges
- **MSUFCU Server**
 - Holds Account Info



System Architecture



- On First Login
 - Web App Generates Key
 - Stored in device and database
- Allows system admin to deactivate account



System Components

- Hardware Platforms
 - Android
 - iPhone/iPad
 - Linux server
- Software Platforms / Technologies
 - Ubuntu server w/ PHP, MySQL and Apache
 - Android API Level 8+
 - iOS version 5+



Testing

- Authentication and privileges
- Proper date handling
 - Eg. Warning for trying to add events for a past date
 - Eg. Proper partitioning of dates
- Encryption
- All major features



Risks

- Server Configuration
- Integrating our system into the client system.
- Android: design paradigm
- Android: data acquisition and manipulation
- Push notifications system

