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

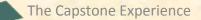
# Screen Mockup: Mobile Apps

◀	То	•					
1	2	2 3 4				<u>5</u>	
Event 1							
Event 2							
Ever	nt 3						
Day	Мог	nth	Ne	ws	S	ettings	

Day/Week view

◀	Month							
	1	2	3		4	5	6	
7	8	9	1(		11	12	13	
14	15	16	1		18	19	20	
21	22	23	24	4	25	26	27	
28	29 •	30	31					
Event 1								
Event 2								
Da	Day Mont		h News			Settings		

Month view



# Screen Mockup: Mobile Apps

News							Settings					
News Item 1 Snippet of the news									Notific	cations:		
News Item 2									Category 1: NO			
Snippet of the news						100	Category 2: NO					
ews It	em 3 of the news.						Disable All: YES					
ews It	em 4								Auto a	dd to ca	lendar:	
Snippet of the news							1	Category 1: YES				
ews It nippet	of the news.									gory 2:	NO	
								12				
Day	Month	News	Settings						Day	Month	News	Settings
								100				

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# Screen Mockup: Web App

#### **Events**

Add Event	Event 1	Date	Category
Show Events	Event 2	Date	Category
Add News Show News	Event 3	Date	Category
Search Events	Event 4	Cate	Category
	Event 5	Date	Category
	Event 6	Date	Category
	Event 7	Date	Category
	Event 8	Date	Category
	Event 9	Cate	Category
	Event 10	Date	Category

Main screen – lists events

Add Event	Event Information		
Show Events			
Add News	Title	Event Title	
Show News Search Events			
CODE CIT CADING	Date	ciate	
	Category		
	Galagory	1000	-22

Add event screen

Add Event

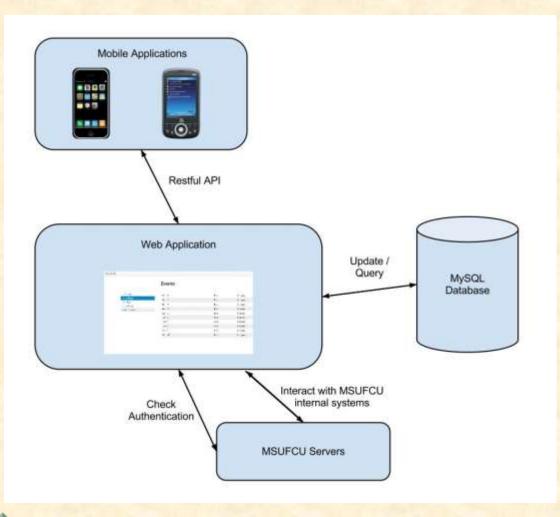
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## **Technical Specifications**

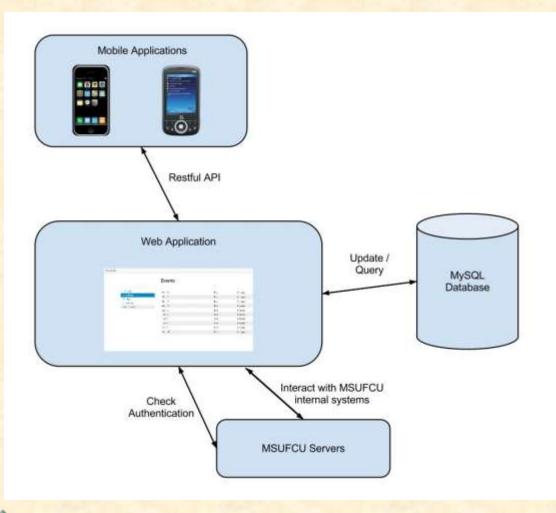
- Mobile App
  - Java using Eclipse IDE w/ Android SDK
  - Objective C using Xcode
- Web App
  - MySQL database
  - PHP5
- HTTPS

# 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