

MICHIGAN STATE

U N I V E R S I T Y

Project Plan

Volunteer Tracking App

The Capstone Experience

Team SpartanNash

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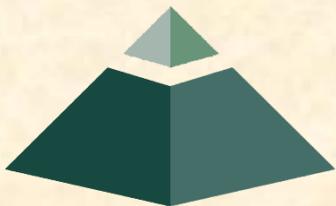
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Michigan State University

Spring 2018



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

Functional Specifications

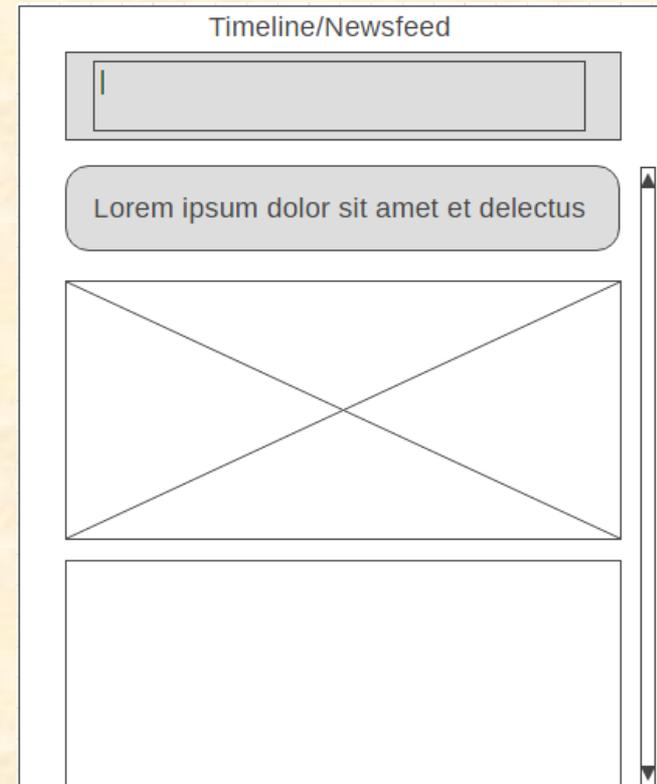
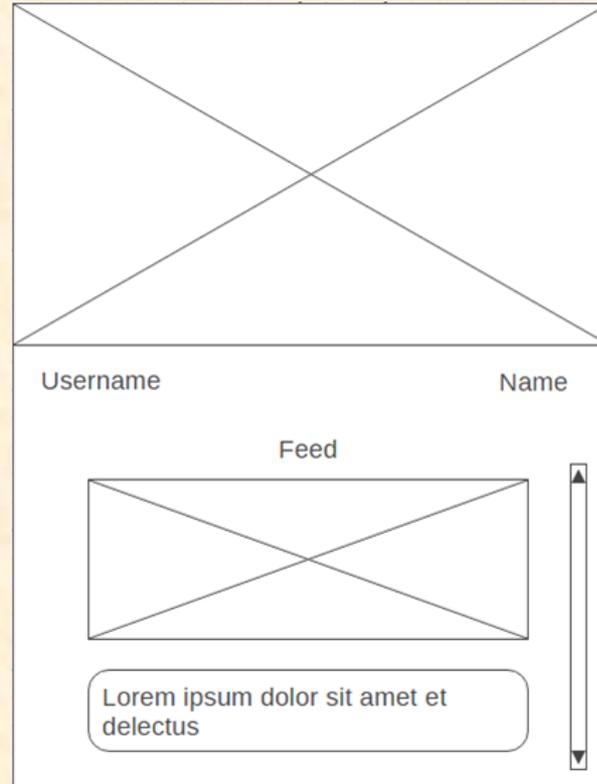
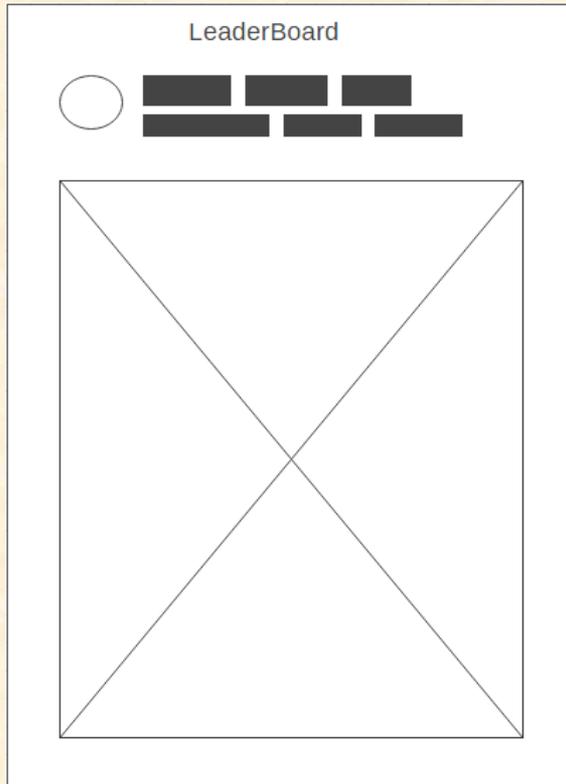
- Problem
 - Current Volunteer Tracking System is manual and needs to be digitized.

- Solution
 - Track Volunteer Hours
 - Gamify the experience
 - Social Media interaction

Design Specifications

- Filling out a digitized form to track hours.
- Timeline feature to share user's posts.
- Leadership boards.
- ChatBox

Screen Mockup: SpartanNash



Screen Mockup: SpartanNash



Username

Password

SIGN IN

Forgot your Password?
Recover



Organization Name *
Enter The Organization Name

Volunteer Activity or Event Name *
Enter The Event Name

Area of support *
None selected ▾

Area not on the list(optional)
Enter the areas

Commitment *
One Time ↕

Date of Event *
01/29/2018

Hour of Event *

Message
Enter extra message here...

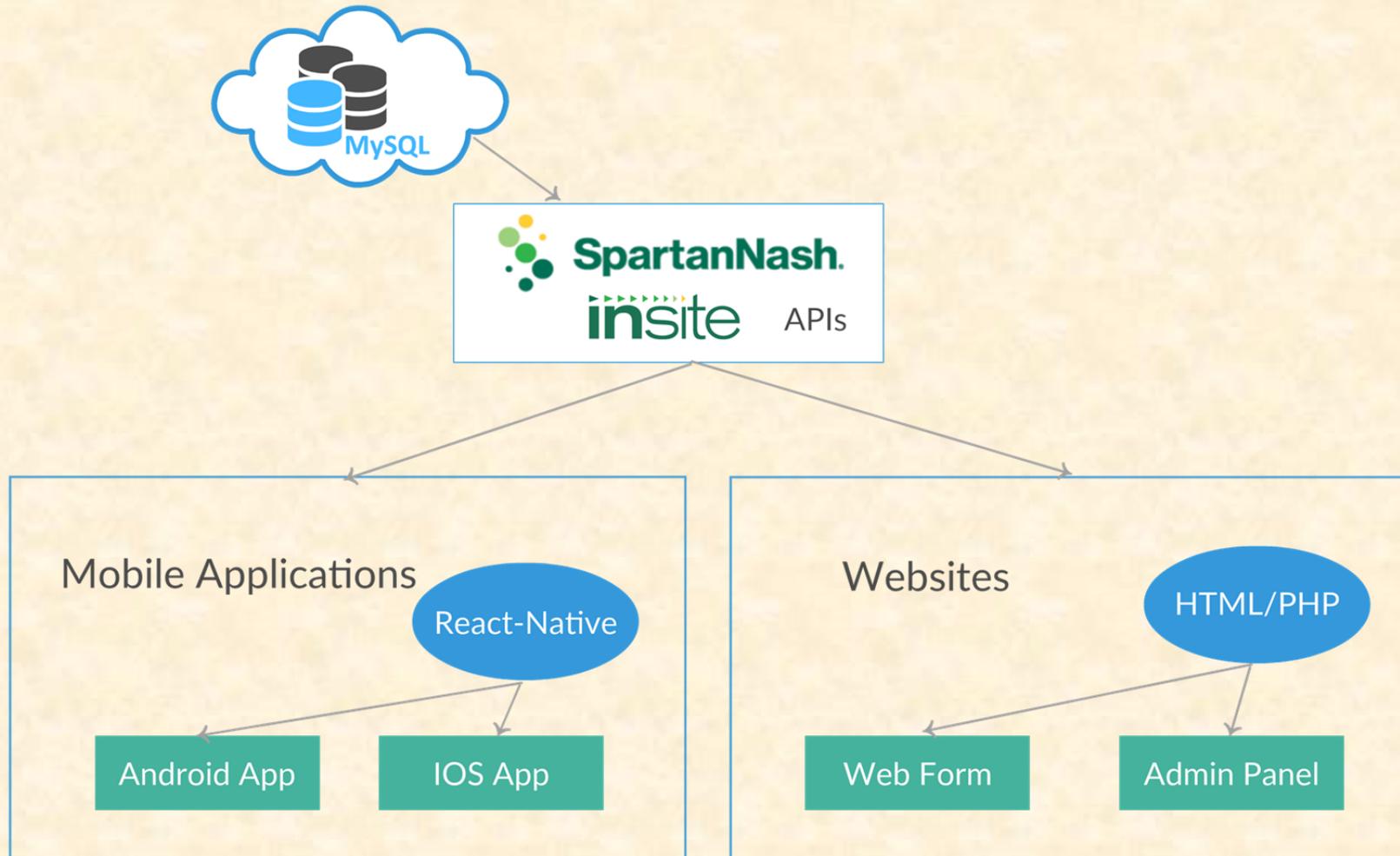
Submit →

Technical Specifications

- **Mobile Application**
 - React Native for cross-platform development in Android and iOS.
- **Web Form**
 - HTML/CSS for the front end.
 - PHP for the back end.
 - HTTP POST and GET requests to communicate with server.
- **API**
 - SpartanNash API to communicate securely with their servers.
- **Database**
 - Database to store user hours, posts and additional information.



System Architecture



System Components

- Hardware Platforms
 - Smartphones that run IOS/Android
 - Any computer with an internet connection and a web browser installed

- Software Platforms / Technologies
 - React Native
 - MySQL
 - Jira

Risks

- Creating software for different OS and screen size.
 - Software needs to adapt to device.
 - Testing on diverse set of devices.
- Scalability
 - Work in real time with 16,000 employees.
 - Test with employees - increasing quantity incrementally.
- Utilizing different React Packages in a cohesive manner
 - Selecting React Native packages that satisfy App requirements.
 - Discuss with client in order to keep consistency with company standards.
- Rejection of UI/structure
 - Interface or workflow may not be acceptable to user base
 - Mediate with client frequently.



Questions?

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