Project Plan
Spotlight: Discovering Clubs and Student Organizations
The Capstone Experience
Team Michigan State University ITS
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Functional Specifications

• Assist students in discovering MSU clubs/organizations based on personal interests, major, etc.
• Simplify the registration process for prospective members
• Provide group and event recommendations based on interests and major
• Club leaders have centralized app for club information and announcements
Design Specifications

• Discover page: list clubs and events based on suggestion algorithm
• Group page: Show all information about group and allow executive board members to edit
• Announcements: Display updates from groups
• Search bar and filters to find specific clubs
• Map interface to show events happening nearby
Screen Mockup: Mobile User Profile

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Major: Computer Science
Interests: active, swimming

Home  Discover  Clubs  Me
Screen Mockup: Mobile Discover

Discover Clubs

- Swimming Club
- Water Polo Club
- Fencing Club
- Dodgeball Club
- Ski Club
Screen Mockup: Mobile Group View
Screen Mockup: Mobile Announcements
Screen Mockup: Web User Profile
Screen Mockup: Web Group View

CLUBS

MY CLUBS
- Running Club
  Active
- Swimming Club
  Swimming, Active

SUGGESTED CLUBS
- Rock Climbing Club
  Swimming, Active
- Water Polo Club
  Active, Swimming
- Fencing Club
  Active, Sport
- Ski Club
  Active, Winter, Ski
Screen Mockup: Web Announcements

Swimming Club
TAGS: Active, Swimming

PRESIDENT: Alice Green
Contact: swimclub@msu.edu

Description:
We are the swimming club! We love to swim (obviously), hangout, make new friends, and go on adventures! We typically meet at IM West every Wednesday night at 8pm for an hour swim session. Feel free to stop by anytime!

Events:
- Welcome Back OpenSwim
  Where: IM West
  When: 1/18/1777 @ 7PM
- Movie Night 2
  Where: 1279 Anthony
  When: 1/24/1776 @ 7PM

Recent Announcements:
Technical Specifications

• Cloud-based server-less API and NoSQL database hosted in AWS
• Scalable with On-demand pricing and performance
• User profiles and accounts secured and managed by Amazon Cognito
• Maps and location information from Google Maps and Apple Maps
System Architecture

User Devices

Web
Android
IOS

Map Services

Google
Apple

Amazon Web Services

Cognito
Gateway
Lambda
DynamoDB
System Components

• Hardware Platforms
  ▪ IOS
  ▪ Android
  ▪ Web (mobile responsive)

• Software Platforms / Technologies
  ▪ Amazon Web Services
  ▪ IOS: Swift
  ▪ Android: Kotlin
  ▪ Web: Vue
Risks

• Risk 1 (Easy)
  ▪ Allow non-MSU affiliated users to take full advantage of app
  ▪ Ask user for all information and authenticate without netID
• Risk 2 (Medium)
  ▪ Allow users to locate groups / events and show nearby events happening soon
  ▪ Get data from Google Maps and Apple Maps APIs. Open links in local map apps.
• Risk 3 (Hard)
  ▪ Suggesting relevant groups and events to users
  ▪ Algorithm comparing user’s major and interests to population and tags of groups and events.
• Risk 4 (Hard)
  ▪ Integrating club membership registration
  ▪ Procedural user on-boarding for club membership
Questions?