MICHIGAN STATE UNIVERSITY

Project Plan

Spotlight: Discovering Clubs and Student Organizations

The Capstone Experience

Team Michigan State University ITS

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From Students…
…to Professionals

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
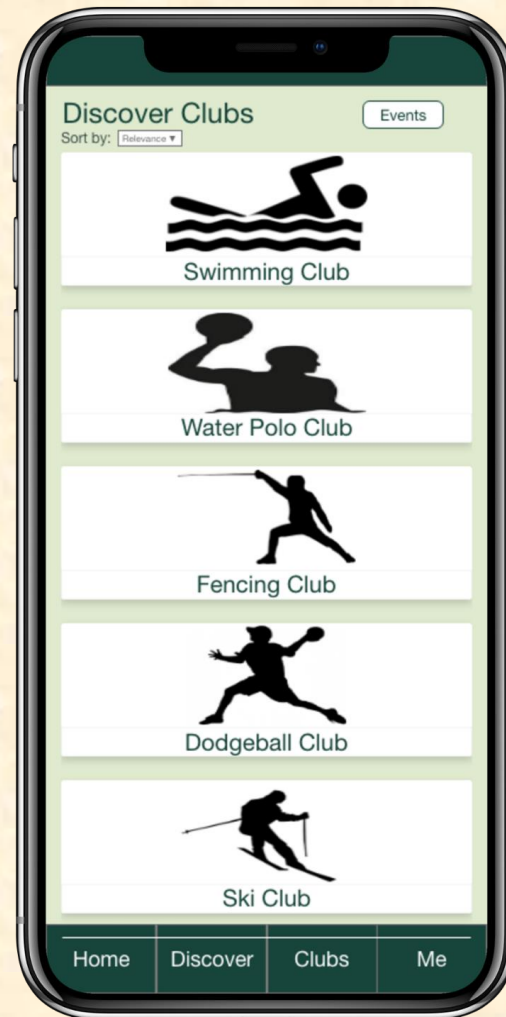
Design Specifications

- 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

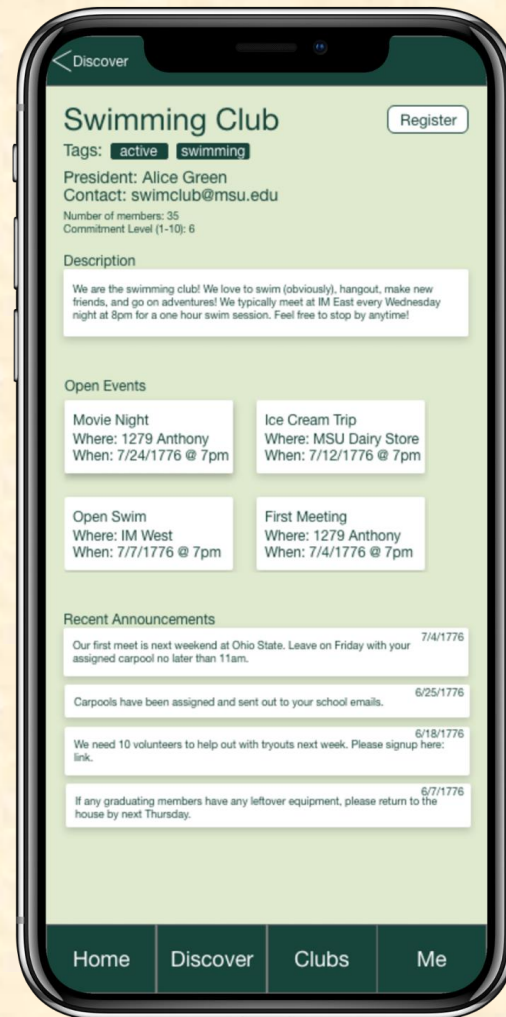- Map interface to show events happening nearby
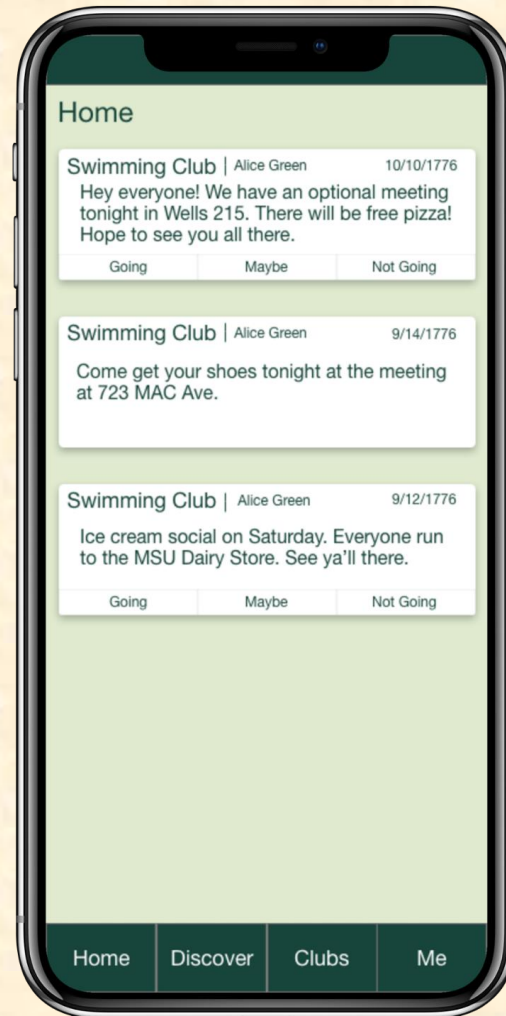
Screen Mockup: Mobile User Profile
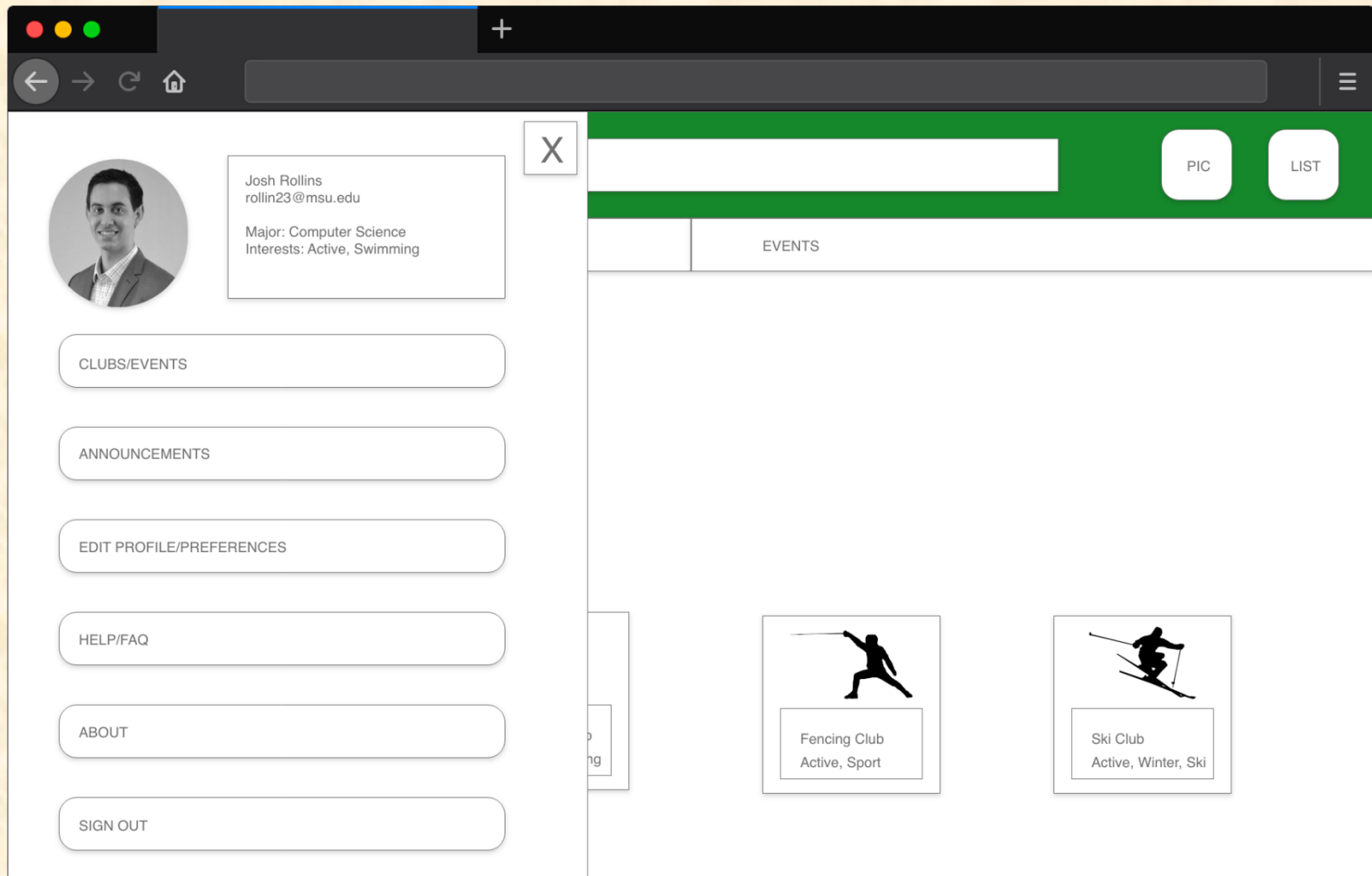
Screen Mockup: Mobile Discover
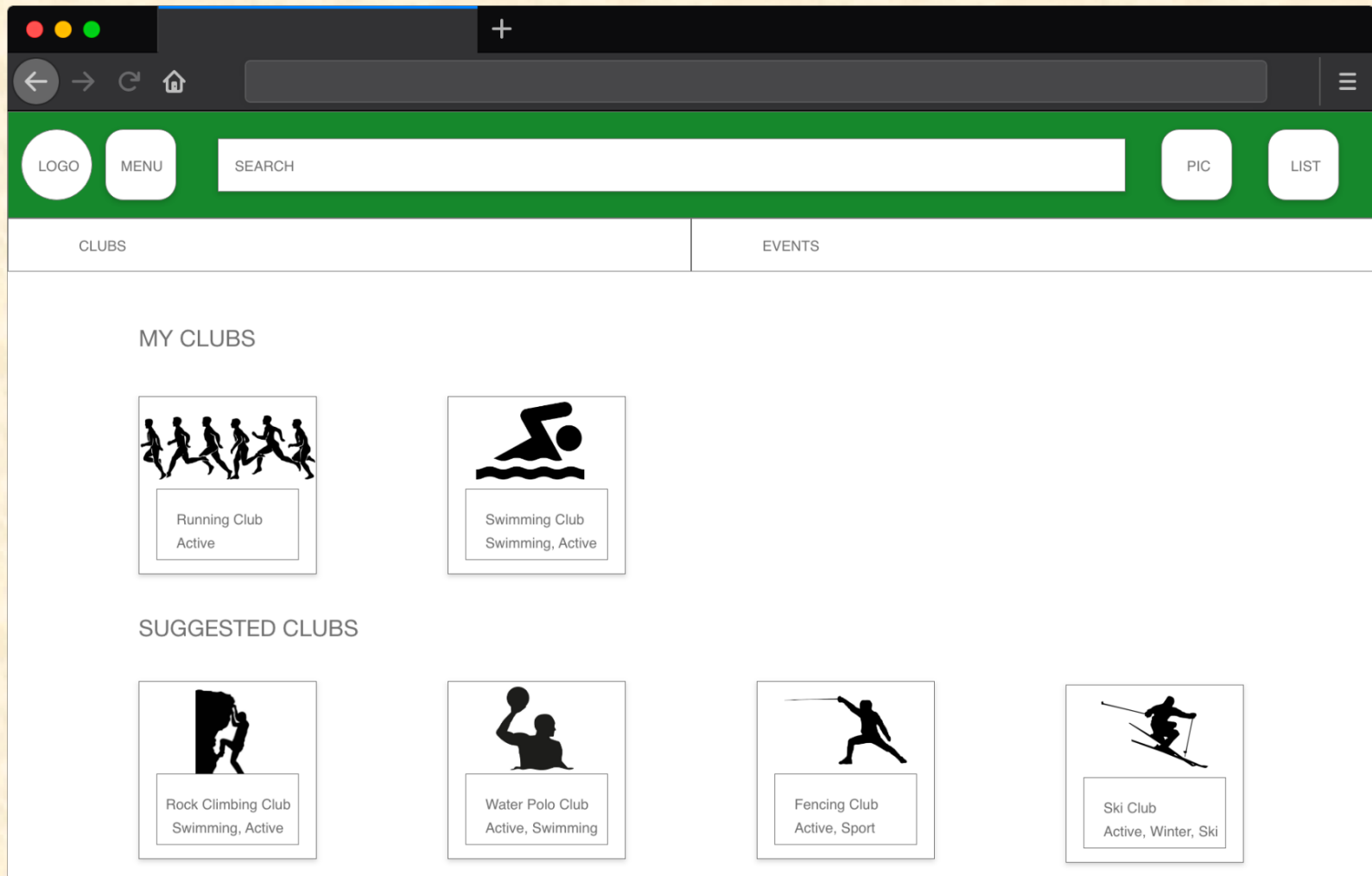
Screen Mockup: Mobile Group View

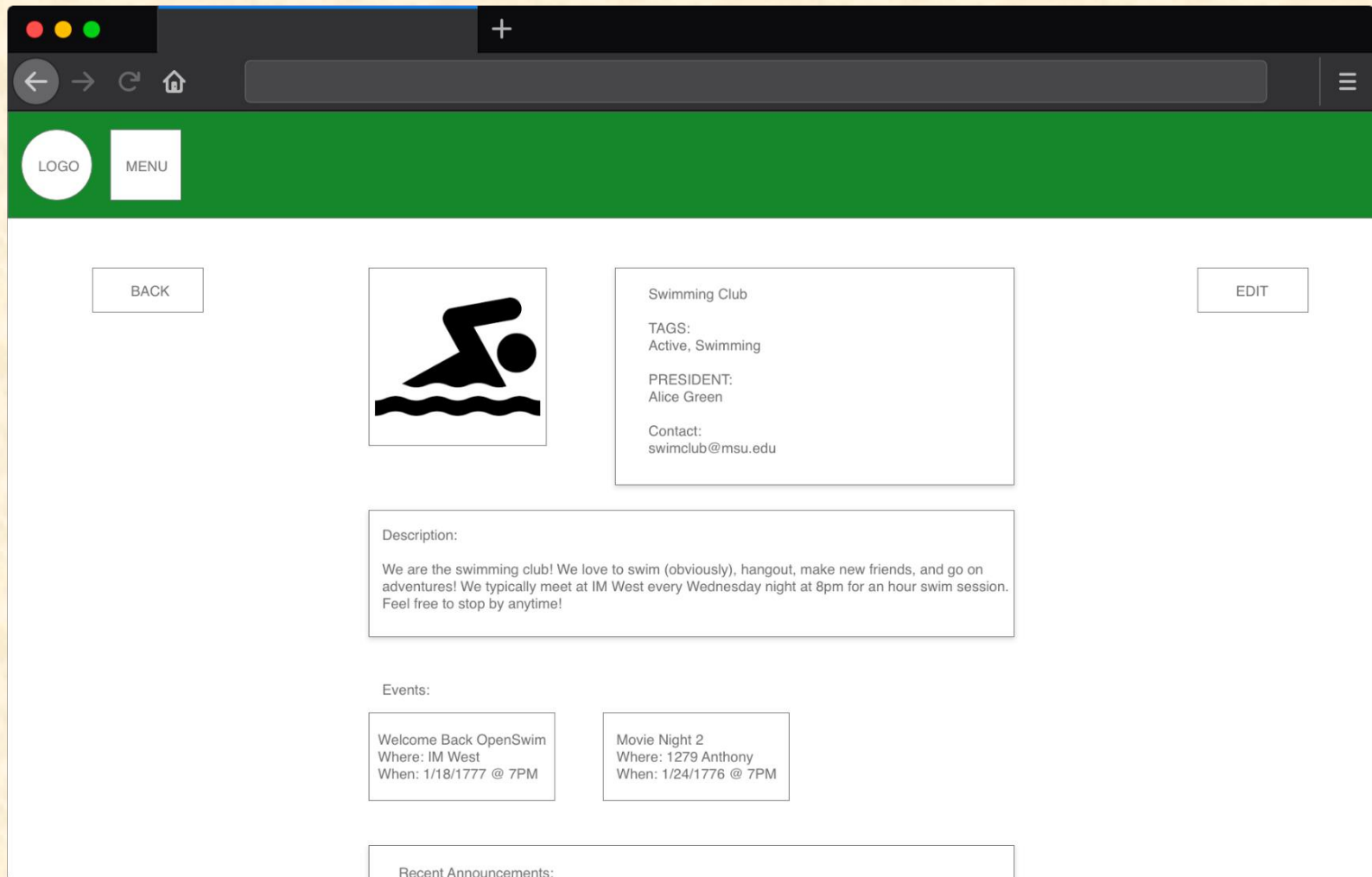# Screen Mockup: Mobile Announcements

Screen Mockup: Web User Profile

Screen Mockup: Web Group View
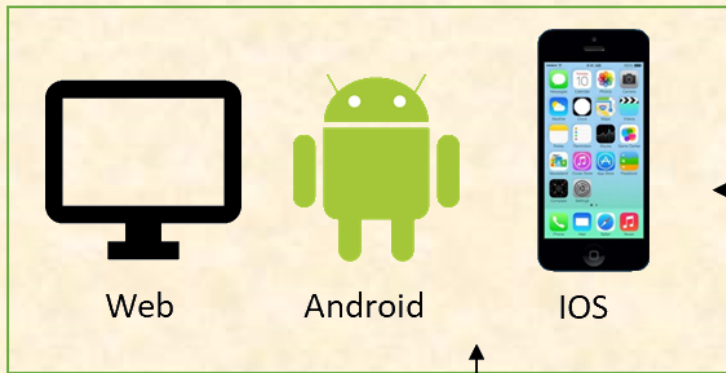
Screen Mockup: Web Announcements

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

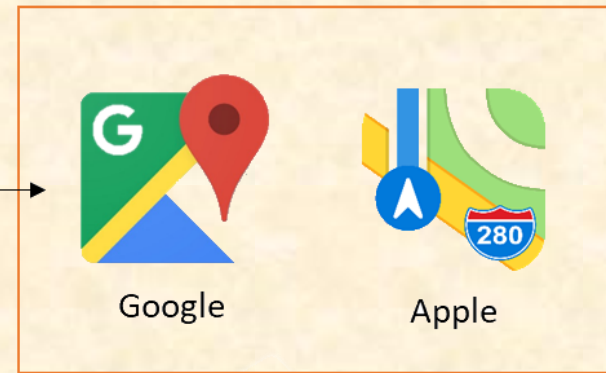- Maps and location information from Google Maps and Apple Maps
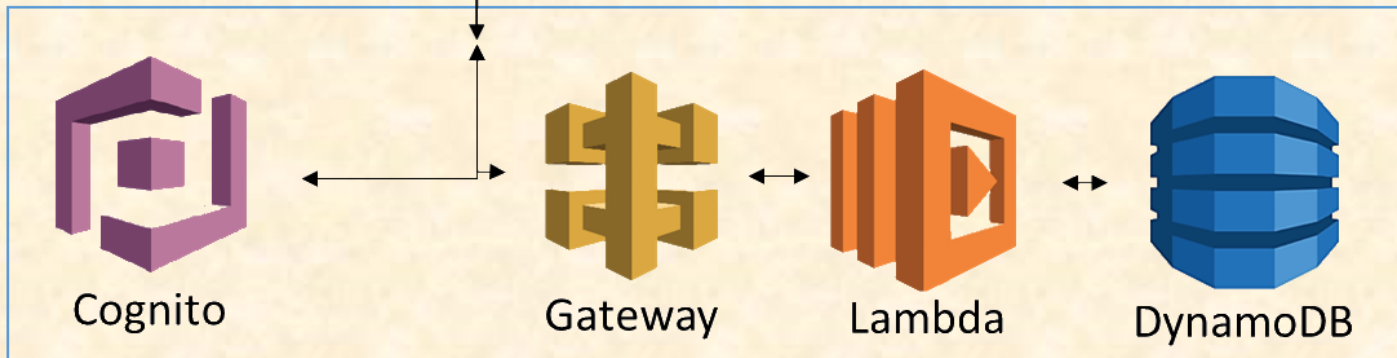
System Architecture

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?