
Santiam Wagon Road: Self Guided Tour

— Group 43 Spring Midterm
Progress Presentation —

Introduction

Project Introduction

- Self guided tour
- Mobile application for interpretive events
 - What is an interpretive event
- Content creation tools for Ranger service volunteers

Our Solution Overview

Three primary components:

1. Content Packages
 - a. Zip archives of tour multimedia assets and map information
 - b. Pre-downloaded allowing complete offline access while on a tour
2. Web Control Panel
 - a. Provides administration interface for overall system
 - b. Allows for creation and publishing of tours
3. Mobile Applications
 - a. Cross platform between iOS and Android
 - b. Shows and download available tours
 - c. Act as virtual tour guide

Recap Project Purposes

Charles Henninger

Android UI

Current Progress

Current/Recent Challenges

- Dynamic Waypoint Lists
- Storing files inside an Android device
- Media Player
- Unzipping files

Further Work

Jiawei Liu

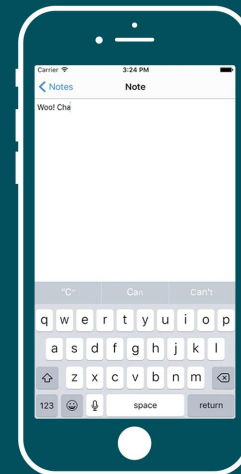
iOS Development

Jiawei

Topics:

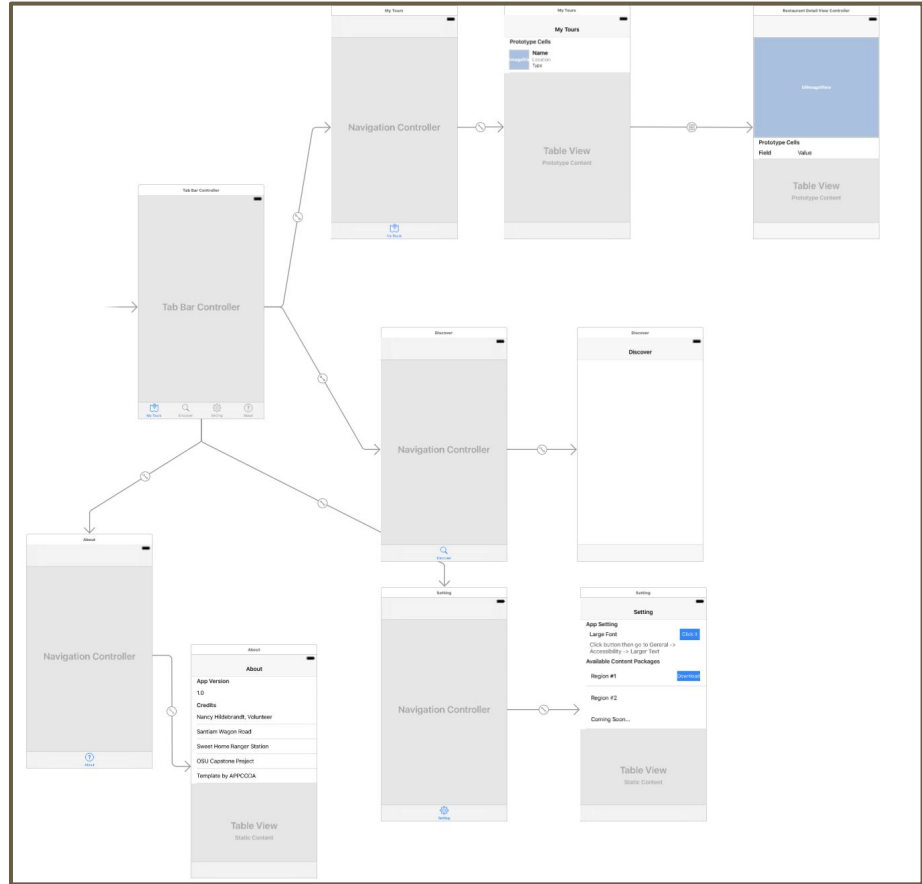
- Demo App in Expo
- Current Progress
- Things left to do
- Problems
- Solutions

```
viewController: UIView  
    weak var textView:  
String = ""  
rView:ViewController  
  
func viewDidLoad() {  
    .viewDidLoad()  
}
```



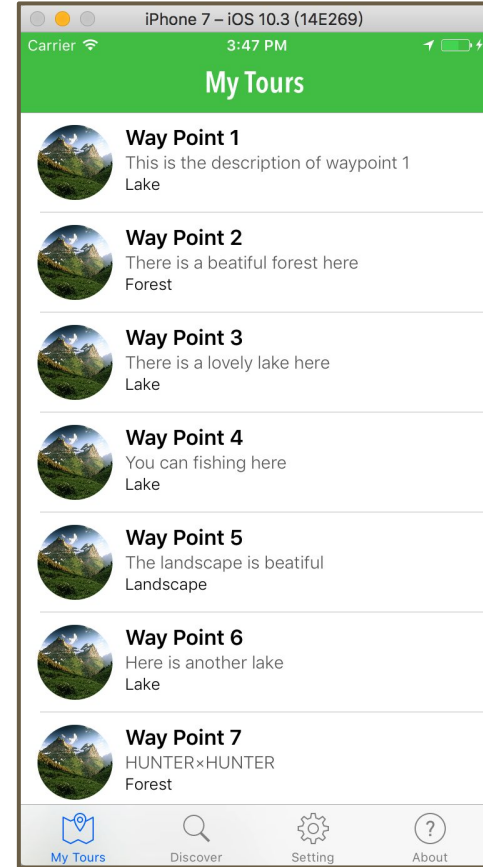
Current Process

- Finished All of Functionalities
- Tab Bar Style App
 - My Tours
 - Discover
 - Setting
 - About



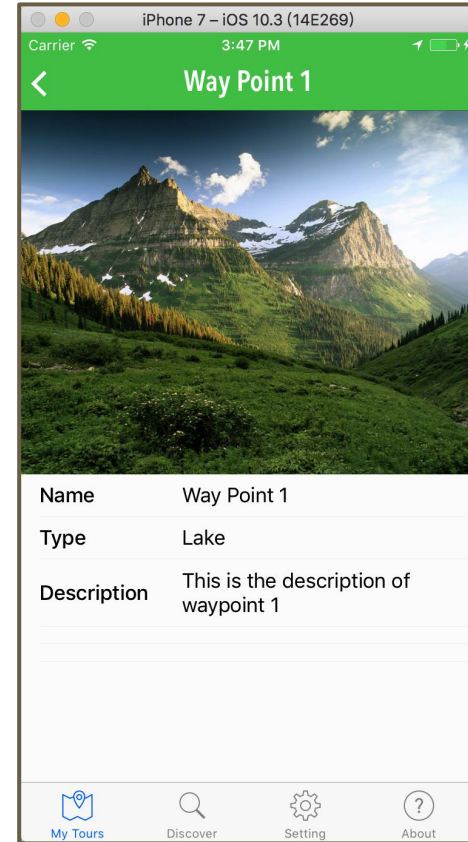
iOS app

- Home Page -- "My Tours"
- Waypoint List
 - Title
 - Short Description
 - Picture



iOS app

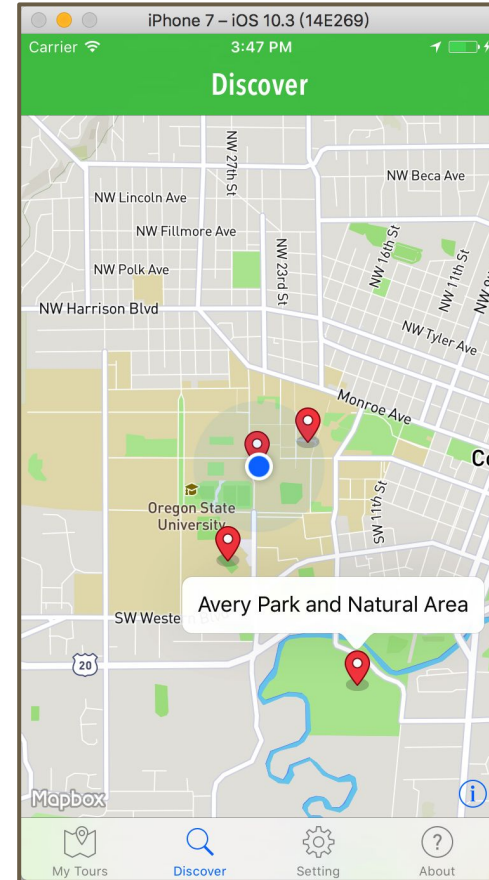
- Waypoint Details Page
 - Picture
 - Name
 - Type
 - Full Description



iOS app

Discover Page:

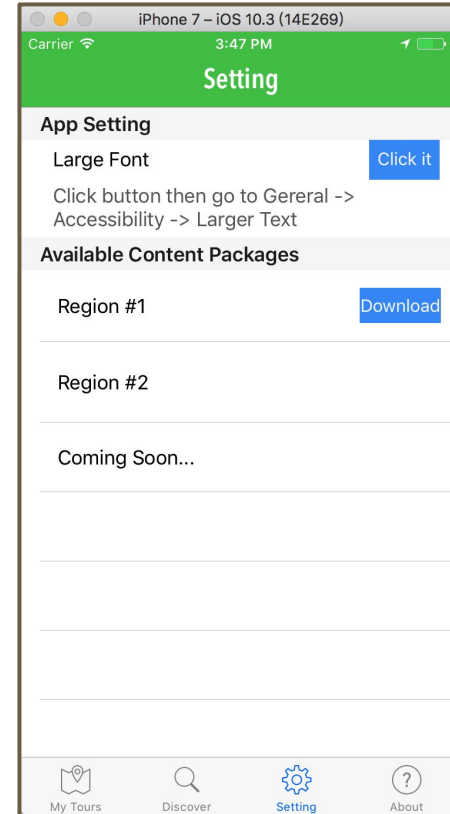
- Display map via Mapbox
- User's location
- Available Waypoints
- Waypoint name



iOS app

Setting Page:

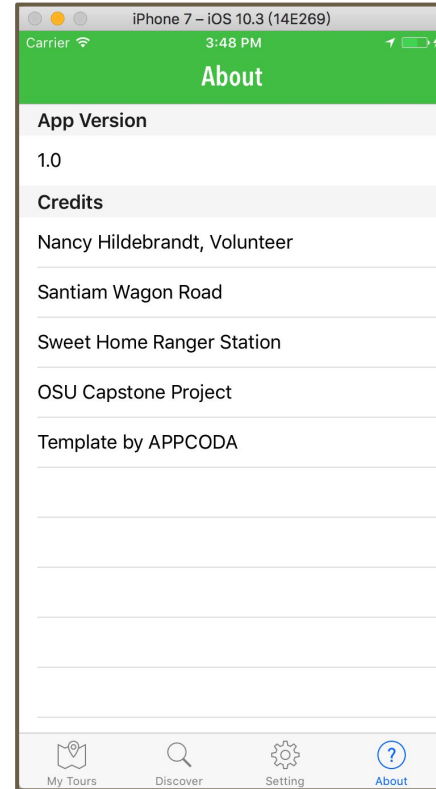
- App Setting
 - Large Font
- Available Content Packages
 - More regions
 - More tours



iOS app

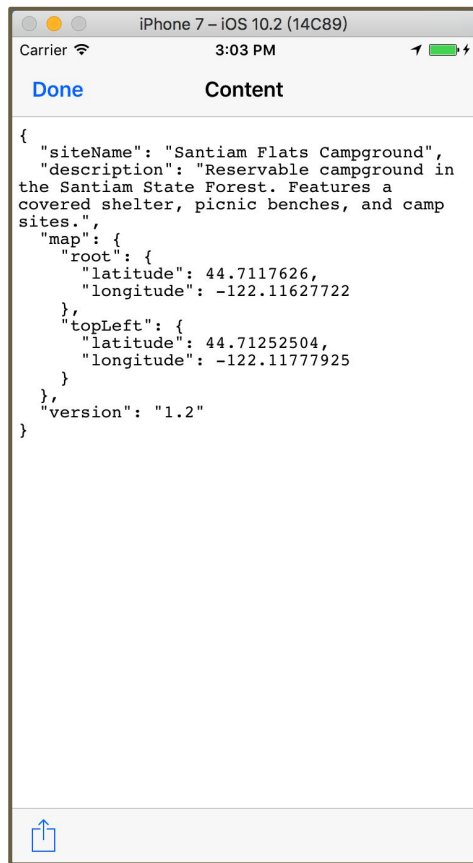
About Page:

- App Version
- Credits Info



Things left to do

- Synchronization
 - Now app read waypoint locally
 - Next step is read from the server



Problems

- Nobody familiar with iOS development
- OSU doesn't teach iOS and Swift
- Cannot have Map and List in same page
- Popular map-provider charge for offline map

Solutions

- Study iOS and swift by myself
- Find tutorials on Google and YouTube
- Re-designed iOS app by using Tab Bar Style
- Using Mapbox as the map-provider

iOS Code and Demo

Duncan

**Due to the illness, Duncan cannot work for that.
Our group talked with Kevin and Kristen, they
allow Duncan submit his part when he is healthy.
Sorry for the inconvenience.**

Conclusion

Overall Status

Reassuring developments on mobile applications

Proof of concepts completed for:

- MapBox usage
- Dynamically fetching maps
- Offline map storage
- Using server to provide MapBox coordinates
- Basic 'tour' functionality
- A functional web control panel