

# **Find A Room**

## Sprint 1 Planning Document

### CS 307

Team 13(Snoxy)

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# 1 Sprint Overview

Start the framework of the app, implement map class and qrcode class so that user can located themselves.

## 1.1 Scrum master

- Saranyu Phusit, who has experience in developing mobile app using tools similar to Phonegap.

## 1.2 Meeting Schedule

During the class time.

## 1.3 Challenge

- Three of our team members have one of the hardest project at Purdue(shell) for the first two weeks.
- It's the first time for most of us to develop a mobile application.

# 2 Current Sprint Detail

## 2.1 User story for this sprint

As a user...

- I would like to open the application
- I would like to have a solid database which stores all the map data
- I would like to have a qr-code scanner on the app
- I would like to have easy-to-find qr code on the wall at every corner,crossroad and entrance
- I would like to use the qr-code scanner to get information to determine the location from the map data

## 2.2 Task details

### 2.2.1 By User stories

**I would like to open the application**

- Be familiar with phoneGap operation (6hrs\*5people=30hrs)
- Be familiar with Github (2 hrs)

- Be familiar with Mobile Application creation. (4hrs\*5people=20hrs)
- Designing and Developing the UI for the QR code reader screen (9hrs)
- Designing and Developing the UI for the Main Application screen. (15hrs)

#### **I would like to have a qr-code scanner on the app**

- Apply platform BarcodeScanner for phoneGap, implement that part to allow QR code scan (6 hrs)
- Open cellphone camera to enable taking photos by using methods in Camera package (5 hrs)
- Make sure each QR code has a corresponding unique location on the map(3 hrs)
- Resize input QR code image to allow QR code recognition(Estimate time: 6 hrs)
- Finish QR code class, let each QR code have a unique string, so we can use string to distinguish them(Estimate time: 4 hrs)

#### **I would like to have easy-to-find qr code on the wall at every corner,crossroad and entrance**

- Put printed QRcode on the wall(1hr)

#### **I would like to have a solid database which stores all the map data**

- Getting the building floor plan maps (3hrs)
- Implementing the map class(20hrs)
- Unit testing the map class(10hrs)

#### **I would like to use the qr-code scanner to get information to determine the location from the map data**

- Get everything work together(10hrs)

### **2.2.2 By People**

#### **Nathan Chang**

- Be familiar with phoneGap operation (6hrs)
- Be familiar with GitHUB (2hrs)
- Be familiar with Mobile Application creation. (4hrs)
- Understand how to use a camera on a phone and other details. (7hrs)
- Have a working QR code class (8hrs)

- Have a QRcode scanner working (3hrs)

## **Xiaojing Ji**

- More details for completing User Story: getting my current location(QR code part)
  - 1. Open the Camera to photo QR code and let app recognize QR code
    - \* Task 1 description: Be familiar with phoneGap operation (Estimate time: 6 hrs)
    - \* Task 2 description: (HTML) Apply platform BarcodeScanner for phoneGap, implement that part to allow QR code scan (Estimate time: 6 hrs)
    - \* Task 3 description: (HTML) Open cellphone camera to enable taking photos by using methods in Camera package (Estimate time: 5 hrs)
  - 2. Have a QRcode application enable for recognition
    - \* Task 1 description: (JavaScript) Resize input QR code image to allow QR code recognition(Estimate time: 6 hrs)
    - \* Task 2 description: (JavaScript + Java) Finish QR code class, let each QR code have a unique string, so we can use string to distinguish them(Estimate time: 4 hrs)
    - \* Task 3 description: make sure each QR code has a corresponding unique location on the map(Estimate time: 3 hrs)

## **Owen Mak**

- Be familiar with phoneGap operation (6hrs)
  - How this works
  - How to implement our app
- Grabbing the map image (3hrs)
  - Selecting building
  - Getting the building floor plan maps
- Implementing the map class (11 hrs)
  - Focusing on MapID and building
- Testing map class(10 hrs)

## **Gott Phusit(Scrum Master)**

- Learn HTML design for phonegap mobile app development (6hrs)
- Designing and Developing the UI for the QR code reader screen (9hrs)
- Designing and Developing the UI for the Main Application screen. (15hrs)

## **Yao Xiao**

- Be familiar with phoneGap operation (6hrs)
- Be familiar with Mobile Application creation. (4hrs)
- Creating the map class
  - Creating an easy approach to connect map img to the map class (7 hrs)
  - Creating edges and nodes (8 hrs)
- Testing the map class (5 hrs)

## **3 Backlog**

- User can locate themselves
- User can select the precise destination(e.g. Room name)
- User can select facilities, the app can decide the closest one(e.g. restrooms)
- User have a visual guide with photos for navigating to destination.