# Project Specification

COMP3097 Mobile App Development II

**Due date:** As specified on BB for milestones, Final submission due is last week of classes

**Submission:** Black Board before the deadlines

This assignment is a team project. Teams can have up to 6 members. The following options are available to the teams:

- Capstone project
- Option 1: A guide using GPS and local storage (e.g. restaurant guide)
- Option 2: A field game using GPS and local storage (e.g. Scavenger Hunt)

**Objective:** To build a prototype of a mobile application based on provided specification or requirements gathered in the capstone project research. Through this application the team will demonstrate ability to design UI application using iOS tools and understanding of mobile device limitations; it will also show understanding of iOS structure and features by implementing selected functionalities of the application

## 1. Option 0: Capstone project

**Overview:** The goal of the project is to design and build a mobile (iOS) application that will be a prototype used for capstone project. Details of the implementation and scope should be discussed with the professor. Application is a standalone application (no back-end server is required, it can be added as an option if required by the capstone). (Bonus points can be earned by adding option to share information through Twitter and/or Facebook) It should run on iOS a single selected device.

## 2. Option 1: A guide

**Overview:** The goal of the project is to design and build a mobile (iOS) application called ”Personal Restaurant Guide” that will help users to keep track of the restaurants they visit, rate them and share using email (Facebook or Twitter). Application is a standalone application (no back-end server is required). It should run on iOS selected device.

### a. Requirements

(1) Application should store (add/edit/remove) the following information about restaurant

- Name – name of the restaurant
- Address – address of the restaurant, your application should help user with proper formatting • Phone(s) – phone number(s)
- Description – description entered by the user
- TAGs – an extensible list of tags like: vegetarian, vegan, organic, Italian, Thai, etc.

(2) Application should allow user to rate the restaurant (add/edit). You can use e.g. 1-5 stars system

(3) Application should allow user to show the location of the restaurant on the map and get direction from the current place using Google API

(4) Application should provide an option to share information about the restaurant using email (5 pts bonus for Facebook sharing, 5 pts bonus for Twitter sharing)

(5) Application should provide search capabilities based on:

- name
- tags

(6) Application should have a list of restaurants

(7) Selecting a restaurant from the list user should be presented with the Details screen

(8) User should have an option to see a full-screen map with the location of the restaurant

(9) User should have an option to get directions from users current location to the restaurant

(10) User should have an option to share information about the restaurant from the Details screen

(11) Application should have About screen with names of all team members

(12) Application should have a Splash screen with application logo

## 3. Option 2: Field game

**Overview:** The goal of the project is to design and build a mobile (iOS) application called ”Scavenger Hunt” (name can be modified by the team) that will be used to play a field game like Scavenger Hunt , provide players with instructions, keep record of their achievements and allow them to be shared using Facebook or Twitter. Application is a standalone application (no back-end server is required, however may be added as an option). It should run on selected iOS device.

### a. Requirements

(1) Application should store (add/edit/remove) the following information about points of interest

- Name – name of point
- Address – address
- Task – instructions for the users to do something (e.g. snap a photo of …) or find something (e.g. some information)
- TAGs – an extensible list of tags like: easy/hard, photo/info etc.

(2) Application should allow user to rate the points. You can use e.g. 1-5 stars system

(3) Application should allow user to show the location of the point on the map and get direction from the current place using Google API

(4) Application should provide an option to share information about the point using email (5 pts bonus for Facebook sharing, 5 pts bonus for Twitter sharing)

(5) Application should provide search capabilities based on:

- name
- tags

(6) Application should have a list of points

(7) Selecting a point from the list user should be presented with the Details screen

(8) User should have an option to see a full-screen map with the location of the point

(9) User should have an option to get directions from users current location to the selected point
(10) User should have an option to share information about the point from the Details screen
(11) User should be able to add/view/edit/contact team members using email/SMS/phone number without leaving the application
(12) Application should have About screen with names of all team members
(13) Application should have a Splash screen with application logo

## 4. Marking scheme

This marking scheme applies to all three options.

Applies to the final submission.

**Programming:** 60 points

- completeness (-10 points for each missing feature)
- design (-10 points for inconsistent design, additional -10 points if you do not use styles)
- reliability (-30 points if your application crashes at any point during testing)

**Oral defence:** 25 points

- Each member of the team will be asked series of questions testing his/her knowledge of the entire system. Before presentation of the project you have to make sure that the exchange of knowledge happened and you possess knowledge of the parts of the system developed by other members. Each member will be marked individually on this part. It is mandatory to receive the mark for the project!

**Peer-evaluation:** 15 points

- Average of marks given by other members of the team assessing your performance in the project.

**Total:** 100 pts

# Milestones:

## 1. Design document

Document should contain the following elements:

- Cover page with the project title, group name (number from BlackBoard) and names and student ids of all team members (as per registration records)
- Project description explaining the target (to whom is the project addressed), problem that it solves and way how it is done
- Design of the application that includes navigation structure and design for screens needed with description for each of them

Note: no grades will be given for mock-ups without description

## 2. Prototype 1 (UI)

- This prototype should contain UI for all screens
- The logic should be implemented for at least two of them
- Short video should be submitted explaining the progress
- Link to the git repository should be submitted

## 3. Prototype 2

- This prototype should contain improved UI (based on feedback from Prototype 1)
- The logic should be implemented for at least 80% of the screens
- Data access layer should be implemented
- Short video should be submitted explaining the progress
- Link to the git repository should be submitted

## 4. Final submission

5. This prototype should contain improved UI (based on feedback from Prototype 2)

- The logic should be implemented for all screens and features
- Short video should be submitted presenting the final stage of the application and it's full functionality
- Link to the git repository should be submitted

**Note 1:** For Prototype 1 and 2, as well as Final Submission incomplete submissions will not be graded. Each submission should consist of link to git repository and a video

**Note 2:** Repository log should show commits from all team members. This repository is a proof that you have been working on the project.

**Note 3:** A team member can be “fired” (removed from the team) if he or she is not performing assigned duties and is not contributing. To fire a team member the following procedure has to be followed:

1. Issue has to be escalated to the professor by email. All team members should be in CC of this email. Message should explain the issue
2. Professor will communicate with the team member and try to resolve conflict
3. If conflict cannot be resolved within one week, team member will be removed from the team and will be required to submit ALL remaining project milestone working ALONE!
4. Fired team member will have a right to use the artifacts produced by the team while he was part of the team unless professor decides otherwise based on provided documentation (that includes but is not limited to emails and git repository logs).