# Cairo University Faculty of Computers and Information



## **CS251**

# **Software Engineering I**

Project Name: LBSN

## Software Requirements Specifications

### **Team Names**

Abdelrahman Mohammed Ibrahim	
Abdelrahman Maher Ahmed	
Islam Mohammed Arafa	
Ahmed Nasser Ali	





### **Software Requirements Specifications**

### **Contents**

Team	5
Document Purpose and Audience	
Introduction	3
Software Purpose	3
Software Scope	
Definitions, acronyms, and abbreviations	5
Requirements	
Functional Requirements	
·	
Non Functional Requirements	€

CS251: Phase 1 - IAAA

Project: <LBSN>



### **Software Requirements Specifications**

### 1. Team

ID	Name	Email	Mobile
20120230	Abdelrahman Mohammed Ibrahim	abdo_m1994@hotmail.com	01144155775
20120229	Abdelrahman Maher Ahmed	abdo_shaf3i@yahoo.com	01149904639
20120093	Islam Mohammed Arafa	20120093@stud.fci-cu.edu.eg	01004144468
20120068	Ahmed Nasser Ali	ahmednasser2016@gmail.com	01150725919

### 2. Document Purpose and Audience

- This document describes the software requirements for Location-Based social (LBSN) networking It is intended for developer and of this system
- This document is directed towards the teacher assistant of this course -software engineering-to read it .

### 3. Introduction

### 3.1 Software Purpose

 The purpose of this document is to gather every possible detail to know the necessary requirements in order to create location based social network. We aim to reduce the gap between individuals and between social relationship so easy for the users to communicate. Also provide recommended and high rating places for a user by others.

### 3.2 Software Scope

• The software will facilitate the communication process and choose the appropriate and recommended places for the user. There is a messaging system to communicate easily with friends and you can find out the latest updates to their check-in and that's provide for any user. But the premium user only can follow-up the brands that he interested in. Also any user will be notified if there any action from his friends like messaging and notify from the brands whish he will follow. The new users can select their favorite tastes from bunch of choices and once he open the application the user can choose place from list of places recommended according to nearby places and places with high rate from user's friends.





### **Software Requirements Specifications**

### Definitions, acronyms, and abbreviations

Application	Application software is developed for handheld devices like mobile phones or tablets.	
Social Network	is a platform to build social network or social relation among people who share similar interests, activities, backgrounds or real-life connections. A social network service consists of a representation of each user (often a profile)	
GPS	is a space-based navigation system that provides location and time information in all weather conditions, anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellites	
User	The person who will register in app and login in this social network	
Tastes	The food types which the place owner add to the list	

### 4. Requirements

### 4.1 Functional Requirements

### 4.1.1 Introduction:

This subsection contains the requirements for the location based social network. These requirements are organized by the features of each component in the system.

#### 4.1.2 User:

- Should be able to register to the system and log in it
- Should be able to restore his forgotten password
- Should be able to check in the place he is in and be able to write something with his check
   in
- Should be able to add each other as a friends and both of them can see check in of each other in home page place list
- Should be able to rate the places and save specific place into places list to be able to get information about this place at any time
- Should be able to extract directions from their positions to the place position (may be using 3rd party extension like google maps)
- Should be able to send a text message to another user





### **Software Requirements Specifications**

- Should be able to create group conversation like group conversation
- could add tastes to their profiles
- New users are presented with a list of words and phrases describing recognized tastes and they may select the ones that appeal to them.
- Users can change their tastes at any time, and can add and remove items from their profile.
- Should receive a notification
- Should be able to search in the list of place
- User are two types
  - > Normal user: can do all the functions except he can only check in the registered places
  - Premium user: can do all the functions in and can register a new place to the places DB , he can create new brands and can "follow" any company brand and receive special expert tips from them

#### **4.1.3** Places

- should contain a list of popular places in Egypt like hotels and restaurants
- It is characterized by latitude and longitude
- Should have a rate ranged from 1 : 10
- Should have a tips which have a number of likes

### 4.1.4 Messaging system

- Allow users to send messages to each other
- Allow users to create group conversations

### 4.1.5 Brands

- It is only available for premium users
- It allow companies to create pages of tips
- It allow users to follow it to receive special experts tips from them
- Should have list of tips for some places





### **Software Requirements Specifications**

- Should have facebook and twiter links for this company
- It's owner could text users with new available places

#### **4.1.6** Tastes

- Each place in the system has a defined list of "tastes"
- Place owner could add tastes to his place

### 4.1.7 Notifications

Should be send when something meaningful happened in the social network

### 4.1.8 Lists

- List of places will show when the app is opened
- The list will be sorted to one of many strategies like nearby places or places suggested by a friend
- There will be a search list which will be also sorted

### 4.2 Non Functional Requirements

### 4.2.1 Usability:

• Simple to use ,there is no complexity in this LBSN just when opening the system ,the user will find what he/she needs from the word or the symbol of the word to guide the user .

#### 4.2.2 Reliability:

 This LBSN is safe for the users, the system has to save the information from the users and updated daily in the database and the users can edit these information whenever they want to reflect most recent changes.

### 4.2.3 performance:

 Short response time: Time which this LBSN should be loaded must be less than 10 seconds, after all it depends on the speed of the internet the user use.

### 4.2.4 hardware:

This LBSN have to be run within internet connection, the hardware interface should be Ethernet
cross cable or modem or WAN-LAN.

CS251: Phase 1 - IAAA

Project: <LBSN>



### **Software Requirements Specifications**

### 4.2.5 Availability:

 The LBSN should be available at all times, meaning that the user can access the system using a web browser whenever he/she wants.

### 4.2.6 Implementation:

This LBSN must be implemented using Java programming language.

### 4.2.7 **Security:**

• The LBSN must be secure. while logging into the system using another device different from the original device, the LBSN will text the user's email or mobile to give him/her a code to continue the logging operation. There is a question which the user answered during registering, when the user forget the password he/she can reset the password after answering the question to prevent the attackers from stealing the accounts.