### **SYSTEM REQUIREMENTS**

P-XX: UNI-BUBBLE

#### <TEAM MEMBER NAMES & IDS>

STUDENT ID	Name
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#### 1.Introduction

The project is aimed at universities and colleges. Through this web application users will be able to search for locations inside of their college such as classrooms, offices and eateries among others. Users will be able to access their location within the college and get directions to their desired location.

Furthermore the application will provide an interface for students to connect with their instructors by viewing instructor profiles, and to check if a certain instructor is currently available. Instructors will in turn be able to share their current status on the app along with other details.

The application will allow users to rate eateries/ restaurants within the college and share their reviews on a university blog. This blog will be visible to all the student who have been registered with the university in the application.

It will allow visitors to the university campus to find their way around and search for locations as well.

The potential users of the application are enrolled university students, instructors, vendors, campus visitors such as families, friends, delegates from other universities etc.

# 2. System Actors

Actor Name	Description
Student	Students currently enrolled in the college in question
Instructor	Verified Instructors in the college
Administrator	College specific administrator who can add and verify instructors to the system
Validator	Verifies and validates locations that are uploaded on the system
Vendor	Vendors which sell foods and other items on campus
Visiting user	Users who are visiting campus

# 3. Functional Requirements

Requirements		
Sr#	Requirement	
1	As a student, I want to register with the system	
2	As a student I want to have my login credentials stored so I can sign in at any time	
3	As a student i want to search for locations on campus	
4	As a student i want to see my current locations on campus	
6	As a student i want to save my favourite locations so I can access them easily	
7	As a student i want to get directions to a certain location	
8	As a student i want to search for instructors in the university	
9	As a student i want to see instructor profiles	
10	As a student i want to give restaurants a rating/review	
11	As a student i want to view reviews of restaurants	
12	As a student i want to see the university blog	
13	As a student i want to upload text, images and reviews to the university blog	
14	As an instructor I want to upload my office location to the system	
15	As an instructor i want to create my profile	
16	As an instructor i want to specify whether I am on campus, off campus, busy or available	
17	As an instructor i want the system to automatically show I am available during the timings set by me, unless I explicitly state otherwise	
18	As a validator I want to remove a location	
19	As a validator i want to add a location to the system	
20	As a validator i want to receive addition/ removal requests	
21	As an administrator I want to add my college to the system	
22	As an administrator i want to accept or reject requests for instructors to be added to the system	
23	As a restaurant I want to upload pictures/ menu items to my profile	

As a restaurant i want to view profile/ reviews/ complaints

# 4. Non-functional Requirements / Quality Attributes

Sr#	Requirements
1	The system shall have a planned downtime of no more than 1 hour per month for maintenance.
2	The system should be able to support 100 concurrent users without significant performance degradation
3	The system's user interface shall be easy to navigate, with an average user satisfaction score of at least 8 out of 10 in usability testing.
4	The system shall respond to user actions within 2 seconds under normal load conditions.
5	The system shall provide meaningful error messages to users when unexpected situations occur.
6	Code changes and enhancements shall be completed within a maximum of 3 days after receiving the requirements.
7	It should be compatible with web browsers on desktop and mobile

# **5.**Security Requirements

Sr#	Security Risks	Potential Losses	Controls
1	Broken access control	Losses in trust and business as unauthorised users may be able to alter data	Deny by default
2	Injection attacks	Tampering of sensitive data	Input validation
3	Identification and authentication failure	Business loss as users accounts are compromised	Multifactor authentication

Sr#	Security Tool Name	Brief description (why the tool is suitable for your project)
1	Checkmarx	This tool supports technologies to be used in this project, react and java script,
2	hcl appscan	Supports react projects

### 6. Who Did What?

Name of the Team Member	Tasks done
Tayyab ali	Intro, system actors, functional requirements, non functional requirements, security requirements

#### 7. Review checklist

Before submission of this deliverable, the team must perform an internal review. Each team member will review one or more sections of the deliverable.

Section Title	Reviewer Name(s)
Introduction	Tayyab Ali
Actors	Tayyab Ali
Functional Requirements	Tayyab Ali
Non-functional requirements	Tayyab ali
Security Requirements	Tayyab Ali