# CS 360 Business Requirements Document

## System Components and Design

### Purpose

*What is the purpose of this project? Who is the client and what do they want their system to be able to do?*

* The purpose of this project is to have a map of the exteriors of buildings on SNHU campus using augmented reality on Android.
* The clients are SNHU students, staff, tourists and visitors.
* The system must be able to display an AR view of campus.

### System Background

*What do we want the system to do? What is the problem they want to fix? What are the different components needed for this system?*

* The system shall display information about campus around campus at designated locations

### Objectives and Goals

*What should this system be able to do when it is completed? What measurable tasks need to be included in the system design to achieve this?*

* The application shall be able to identify different objects (like buildings).
* The application shall be able to use AR and frameworks to broadcast the application to an Android phone.
* The application shall show information of different buildings such as the name, what’s inside, the type of building, etc.

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

*What environments (web-based, application, etc.) does this system need to run in? How fast should the system run? How often should the system be updated?*

* The system shall be an Android application.
* The system shall run fast enough to not notice any stutters or lag when using the.
* The system, once completed, does not need updates, unless the buildings get destroyed or moved or mobile architecture changes significantly.
* The system should be coded in Android Studio.

#### Platform Constraints

*What platforms (Windows, Unix, etc.) should the system run on? Does the back end require any tools, such as a database, to support this application?*

* Android studio.
* No database.
* No off-site server.

### Functional Requirements

*Using the information from the scenario, think about the different functions the system needs to provide. Each of your bullets should start with “The system shall . . .” For example, one functional requirement might be, “The system shall validate user credentials when logging in.”*

* The system shall use augmented reality to identify buildings and show information about the buildings.
* The system shall...

### User Interface

*What are the needs of the interface? Who are the different users for this interface? What will each user need to be able to do through the interface? How will the user interact with the interface (mobile, browser, etc.)?*

* Camera display of the surroundings.
* The user will interact with the app by moving the camera around, allowing the app to register and identify different objects within the surroundings and therefore identify different buildings.

### Assumptions

*What things were not specifically addressed in your design above? What assumptions are you making in your design about the users or the technology they have?*

* The user will be using an android smartphone with android OS version 7.0 or later

### Limitations

*Any system you build will naturally have limitations. What limitations do you see in your system design? What limitations do you have as far as resources, time, budget, or technology?*

* Limited to our knowledge of AR and mobile programming
* Goal: MVP (or more).
* Professor has limited experience with this topic