# **Project Requirements**

**Project:** GGC Maps Revamp

**Semester:** Fall 2025

**Instructor:** Dr. Anca

**Client:** Dr. Gunay

**Team Members:** Karen Armendariz, Justin McCabe, Brendan Morrissey & William Stein

## **Requirements Report**

* Platform & Framework
* Choose among React, Vue, or Next.js
* Reuse existing assets which include SVG/JSON
* Skilles to Learn
* JavaScript
* SVG Maps
* JSON
* Illustrator
* Inkscape

## **Requirements List**

* Functional Requirements
* **ID: FR1**
  + Requirement: Map
  + Description: Program shall display a map of the GGC campus and include such details as: Roads, Parking Lots, Buildings, and Classrooms. Map shall be interactable with the options to zoom in, move around, and enter budlings for room information.
  + Priority: 1
* **ID: FR2**
  + Requirement: Legend
  + Description: Program shall have a legend menu with toggles to display parking, safety, and fire escape details.
  + Priority: 2
* **ID: FR3**
  + Requirement: Search
  + Description: Program shall have a search menu where the user can look up a room and which will locate it on the map.
  + Priority: 3
* **ID: FR4**
  + Requirement: Multi-language Support
  + Description: Program shall allow support for languages besides English, particularly for the map legend
  + Priority: 4
* **ID: FR5**
  + Requirement: Accessibility Overlays
  + Description: Program shall provide a view of the map where elevators, ramps, and entrances are highlighted.
  + Priority: 5
* **ID: FR6**
  + Requirement: GPS
  + Description: Program shall allow GPS tracking of user, allowing them to locate where they are and updating based on their movements.
  + Priority: 6
* Non-Functional Requirements
* **ID: NFR1**
  + Requirement: Maintainability
  + Description: Rebuild app using a framework that enables long-term support.

System shall be extensible and allow plugins or other additions to be added in the future that do not conflict with existing code.

Priority: 1

* **ID: NRF2**
  + Requirement: Modularity
  + Description: Codebase should be separated into functional, independent, and cohesive parts. Modules should allow modification without any conflicts with unrelated modules.
  + Priority: 2
* Domain Requirements
* Map program will be publicly accessible
* Priority
* **Top Priority:** Rebuild existing app using a farmwork such as React, Vue or Next.js
* **Low Priority:** Add additional features such as multi-language support, GPS, and accessibility view
* Justification
* Our top priority to build the existing app using a framework is based on the client's request. Currently, the app is not built on a framework and is therefore difficult to maintain and update.
* New features are a low priority due to having to first rebuild the whole app using a framework and also making it modular and maintainable.