## **PROJECT REQUIREMENTS**

## **Project Name**

**Recycle Smart** 

## **Functional Requirements**

[This section should list the functional requirements for the project including any features or properties of the project's outcomes.]

**Functional Requirements:** 

- FR01: User can search up waste material.
  - Will display information about certain waste material and where locally they can dispose of the waste material through input of their location.
- FR02: User will be able to scan recycle symbol using their camera.
  - By capturing the recyclable symbol, the user will get information about the material composition.
    This will range from 1 to 7 on the recyclable plastics.
- FR03: The application will be cross platform.
  - o This mobile application will be available for both iOS and Android devices.
- FR04: Programming Language and Development Software:
  - o The mobile application will be developed using Ionic Framework, Angular, and Cordova.
  - APIs that will be used is going to be Waste Wizard.
  - Adobe Aero for augmented reality to bring up information for scanning.

## **Technical/Performance Requirements**

[This section should list the technical requirements for the project (e.g., the required technology infrastructure) and any performance requirements (e.g., the minimum response time).]

Non-functional Requirements:

- NFR01: Security
  - This application will be using the user's location; thus, the information should be not be obtainable from any other user.
- NFR02: Performance
  - o Due to the application being cross platform the performance is hindered but will still be functional.
- NFR03: Usability
  - Users will be able to understand the functions of the application and use them correctly.
    Developers should be able to understand the code with documentation.
- NFR04: Robustness
  - The application should not break from bad input from the user. This would be important for input on the search bar and should output error message for bad inputs.
- NFR05: Correctness
  - Correct information should be outputted based on user's input and or action.
- NFR06: Discoverability
  - User should be able to figure out the possible actions in the application. Affordance and signifiers allow the user to understand the functions of the application.
- NFR07: Extensibility
  - Requirements for the application extensibility in the cases where there is a need to add new functional requirements.