1.1. PROBLEM STATEMENT

We are attempting to make parking easier. Currently, the process of finding a spot is inefficient and frustrating – driving around a parking lot can be a long and unpleasant experience. A scalable system of parking monitoring will allow users to quickly find an empty spot, and reserve a spot if applicable. We will create a mobile app with a hardware prototype to monitor the status of parking lots.

1.2. INTENDED USERS

- **Admin** - set up parking lots. They need to manage their parking lot and make sure parking is going smoothly. This product will help manage this process.
- **Parker** - trying to park, uses an app. They want to be able to find a spot in a busy parking lot. This app will help them locate the spot. May need to report errors.
    - **Rushed parker -** trying to quickly find a spot. Needs to be able to locate a spot when emotional and frustrated. This app will be easy to use and alleviates the frustration of not finding a spot
    - **Elderly and Disabled parker** - trying to find a close and potentially handicapped spot. Uses this app to find where the handicap parking is located and the available spots.
    - **Patient parker** - trying to find the “best” spot, willing to spend a lot of time on the app. Our app can allow users to pinpoint specific parking spots and secure the best spot possible.
    - **Directionally challenged parker** - needs to find their spot upon arrival and their car upon departure. Our app will have a feature that users can upload their license plate or car description and our system will find their car for them.
    - **Planning parker** - wants to reserve a spot for an upcoming date. Would benefit from confirmation that their spot is reserved.