

# Overview

**Product Type:** Mobile App

**Product Owner:** Jason Wu

**Product Description:**

- A UCSC Classroom Locator that helps students at UCSC find their classes, discussion sessions, and lab sessions by pinpointing the exact room location when given its description(e.g. J Baskin Engr 152, Steven Acad 150, S&E 116, etc.)
- Search bar with a parser for users to type in their classroom
- Map interaction after knowing what the users want (with a correct parser)
- Mobile app
- Possible web scraping

**Frontend:** Flutter

**Backend:** Python

**API:** Google Maps

**Database:** Firebase

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## Release Plan

**Sprint 1(week 2 - week 3):**

- **Scrum Master:**
- **Tasks:**
  - Search bar functionality
    - Learn [Flutter](#)
      - **Time Estimate:** unknown
    - Build a functional mobile app without any feature
      - **Time Estimate:** 1-3 hours
    - Implement a map where users can zoom in and zoom out of the map
      - **Time Estimate:** 1-3 hours
- **Roles:**
  - Jason: UI
  - Timothy: Slides
  - Hasan:
  - Caden: Learn tools / help with slides if needed
  - Christian: Map Implementation

**Sprint 2(week 4 - week 5):**

- **Scrum Master:**

- **Tasks:**
- Creating a database
- Create a users page
- Placing markers - TAKE AVERAGE OF COORDINATES AND PLACE MARKER THERE IF SAME NAME
- Storing markers for the users
- ADDING DIRECTIONS TO THE BUILDING FROM CURRENT LOCATION
- **Time Estimate:** 1-3 hours
- **Roles:**
  - **Jason: PO**
  - **Tim: SM**
  - **Hasan: Dev**
  - **Christian: Dev**
  - **Caden: Dev**

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- **Initial task assignments::**
  - Jason: work on setting up a backend
  - Timothy: work on pin dropping and help out with firebase
  - Hasan: work on pin droppings
  - Caden: work on the database
  - Christian: work on either pins/db or backend
- **Time Estimate:**

#### **Sprint 3(week 6 - week 7):**

- **Scrum Master:** Christian Perez
- **Tasks:**
  - Display a user's pin to the public
  - Retrieve user pins from DB
  - Optimize search
- **Time Estimate:**

#### **Sprint 4(week 8 - week 9):**

- **Scrum Master:** Hasan Turkoz
- **Tasks:**
- Additional features (class information)
- Cleaning up the project
- **Time Estimate:**

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## User Stories

1. As a user, I want to be able to zoom in on the map to see the name of specific

- buildings on campus. [2]
2. As a user, I want to be able to zoom out from the map to see the whole campus layout. [2]
  3. As a user, I want a search bar that's easy to find. It should let me type in the name of my destination right next to the map. [5]
  4. As a student, I want to be able to type the name of the classroom and have the app locate it. [8]
  5. As a user, I would like to have the option to set up my account within the application. [5]
  6. As a user, I want to be able to mark a desired location on the map. [8]
  7. As a user, I want to be able to see the markers placed by other users. [8]
  8. As a user, I expect the markers placed by other users to be accurate and reliable. [5]
  9. As a user, I want to be able to click on a classroom and see what times is it likely to be occupied [8]
  10. As a user, I want to be able to click on a classroom and see what classes are being held in it this quarter, as well as what times they are being held [8]
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## Resources

- [How to Make an App in 8 Days \(2024\) - Full Walkthrough](#)
- <https://www.vipinajayakumar.com/parsing-text-with-python/>
- <https://maps.ucsc.edu/>
- <https://leafletjs.com/reference.html>
- <https://developers.google.com/maps>
- <https://capacitorjs.com/> web app → android & ios

