

## [Milestone 2](#)

[Kanban Board](#) - Trello (click link to join)

### Project Features List:

- Account:
  - Save (or import? stretch) class schedule to your account
    - Functional Requirements:
      - New users should be greeted with a registration page where they can sign up with their @colorado email address, and returning users should be directed to a log-in page that takes their previously created credentials.
      - We want to create a view that mirrors a user's class schedule. The user should be able to add or remove classrooms from their schedule, and their respective classrooms should be saved to their account for easy access.
    - Non-Functional Requirements
      - We want to protect our users' information, so we will make sure to encrypt our user accounts and passwords with the standard cybersecurity methods.
- Classroom Locator:
  - Show location of a given classroom
    - Functional Requirements:
      - Users should be able to enter the room number associated with room, and our site should pull up a graphic representation of the Engineering Center map (centered about the requested classroom). A pin or other graphic should be dropped indicating the classroom's specific location.
    - Non-Functional Requirements:
      - Our team will need to construct a database that stores the wing tag (EE Wing, CS wing, etc.), the floor number, the room number, and the room type (classroom, computer lab, restroom, etc.) for every room in the Engineering Center. This database must be searchable and responsive.
      - We will need to create Javascript and HTML elements to pull up and compose on the fly by dropping the pin on the requested images. This is all based on the output from the database query, which is dependent on the input from the user.
- Navigable Map
  - Map that will help you navigate campus
    - Functional Requirements:
      - We need a floor-by-floor construction of the Engineering Center map. This map should be scalable/zoomable, should allow for user panning/movement, and should allow for moving between the floors.

- Non-Functional Requirements
      - We will design a web applet that allows users to navigate through the map, likely using Javascript heavily. We will model this after the Google Map navigator (just in design, not in actual coding or implementation).
- Legend
  - Interactable legend with bathrooms, cafeterias, etc.
    - Functional Requirements
      - Users should be presented with a legend that provides a general classification for each room. The rooms are tagged as restrooms, cafeteria areas, study rooms, computer labs, etc. If selecting a specific room type within the legend, the map should highlight all of that kind of room.
    - Non-Functional Requirements
      - Our database must include a method for “tagging” rooms with a specific label for our legend.
- Taggable locations (stretch):
  - Users can add tags to a specific location
    - Functional Requirements
      - User-provided tags can be added and searched by. Students can mark a specific classroom as relevant to their specific class/degree - often times, many APPM classes take place in the same lecture halls, for example.
      - Tags would expire after a certain time and may need to be policed to an extent to avoid it being abused.
    - Non-Functional Requirements
      - Tags are added to Postgres database and can be retrieved by a simple query. We need to ensure that anyone who adds to the database does not have access to the other regions of our database.
- Classroom routing (stretch goal)
  - Show map from user inputted current room to desired classroom, walk times
    - Functional Requirements
      - Pathing images drawn over the general map
      - Time calculated and displayed to user
    - Non-Functional Requirements
      - Pathing algorithm that factors in staircases and elevators when moving between floors
      - Takes linear distance, staircases climbed, and elevator floors travelled to give a travel time