

Project 4 Proposal

Idea: Use the Ionic Framework to build a campus map and building directory for GSU. The mobile and website apps will depend on data provided and access role for individual users.

Pages:

Register/Login

- Page for registering for the app with a username, password, and email.
- User selects roles that they wish to have. (Student, Admin, Faculty)
- User selects what data they would like to have access to
- Users either login or set up account or resets password depending on their state

Data Selection/Input

- Users use this page to subscribe to what data they would like to have access to in the main view.
- Some data is available to some roles but not others. (e.g. Student role doesn't have access to map points of faculty break rooms)
- Data subscription results in user interface changes in the Main Map View.

Main Map View

- A default map of either OpenStreetMap or a SVG of GSU facilities
- Users can select a building to see its floor map (only specific buildings will have this due to lack of data)
- Selecting a point on the map or asking a query will give an information card of the point of interest. Card will contain tabs based on the data subscribed to on the Data Subscription/Input page.

Access Provider

- only available to users with Admin role.
- Can control what data gets accessed by all other roles.
- Can edit, add, or delete data that can be subscribed to.

Database Model:

Tables

- Accounts: self explanatory
 - Username, Password, Email, Role, Datasubscriptions
- DataTopics: master list data subscription sources, each individual dataset will be a table that has a foreign key referencing to this table
 - Dataset_ID, Dataset_Name, Dataset_URL
- DataAccess: Controls what role has access to which DataTopics
 - Role, Dataset_Name (Foreign Key)
- Dataset_{Name}: Name is definable like Dataset_Parking. Any dataset provided can be portrayed as points in the map and tabs in the card.
 - Datapoint, Datadescription, Datatitle, Dataid