Map CU

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Motivation for Project

- The engineering center is infamous for being difficult to navigate.
- We wanted to provide students with a tool to help them find where they need to go.
- This was to help us gain a deeper understanding of the tools we learned in this class, and will help us on future projects.

  If as a result we created something that would reduce the anxiety of students, then we would consider that a success.

Head to Demo!

Tools Used

- Kanban Board used for assigning each group member their specific task (rating: 1)
- GitHub was used to upload any changes that the group had made to the project, and it was extremely useful as it enabled us to get different versions of the project and make changes based on our requirements (rating: 5)
- PostgreSQL was used to create the database (rating: 5)
- LocalHost was used in the form of deployment (rating: 5)
- Node.Js used for framework (rating: 5)
- Manual testing (rating: 5). Since there weren't many pages to test, and different inputs were easily tested manually, manual testing was sufficient. If the project was to expand, Cypress would be a tool that we would look into
- Atom /VSC was used to write ejs files and HTML (rating: 5)
- Manual documentation through inline code comments, as well as a readme file

Methodologies

- Peer review of code was used to determine the efficiency of a particular part of the coding within the project
- An iterative process was used, as some members of the groups made regular updates to GitHub so everyone else can view the code
- We found that kanban or other billboard type schedules to be more effort than they were worth for a project of this scale.
- However we did have a centralized bot informing team members of commits and pushes so that asynchronous communication was streamlined.

Challenges

- Data layout/structure as a whole: due to the complexity of the engineering center hallways, we figured that written instructions from section to section would be the easiest. However, the instructions from one point to another within the engineering center were difficult to arrange, as there was no real way of knowing the specific distances, hence, “landmarks” were used to overcome this challenge, as instead of telling the user to go this many feet, we inform them the direction using significant landmarks such as the lobby and elevator.
- Communication in quarantine
- Had to come up with own requirements, as the project was pretty open-ended.

What was learned in addition to class content

Understanding of cookies: wanted to have true login authentication so that when user hit a page different than login at the beginning, if that user hadn't gone through login, to redirect them to the login page, middleware concept with this

Exposure to other functionality of jQuery library besides Ajax calls. Used to animate, and saw how much could be done with them with additional plugins installed

Future potential improvements

- Better setup for database and giving user instructions
- Hashing passwords to make user information less vulnerable, more private
- Making it single page/client side rendering with React
- Adding more floors, buildings to it
- Make the design similar to that of other well-known GPS systems