

METCS673 Group 6 - Project Final Proposal:

TerrierMap

Team Members:

- Ryan Christopher
- Misael Gared
- Jasmine Hughes
- Siddhraj Parmar

The Explanation:

During our first group meeting, we discussed the possible topics/themes of our project and landed on a shared difficulty of the first week of the semester – finding the right classrooms for class. This sparked an idea for us to build a web app that Boston University (BU) students could use to quickly and easily find the directions to their classes from the building code and room number provided in MyBU. While a name like KCB-107 might make sense to a student who has been here for multiple semesters, it is a mystery to students unfamiliar with BU's unique and sprawling campus.

Our app, TerrierMap, will offer a solution to BU students who are juggling between their list of classes, the BU building code to building name lists, and their navigation app as a means of getting to the right place at the right time. We also want to include nearby areas of interest to students such as cafes and restaurants to help find coffee or food near a student's classroom. By eliminating the need to juggle two to three sources of information, students unfamiliar with the campus will have a valuable resource to get around, and campus veterans can find new places to visit on their way to class.

The Technologies:

Due to the web-app nature of our project, we plan on using React for the frontend and Firebase for the backend. We want the frontend to be able to pull information from our backend such as the room code to building address conversion, as well as addresses, hours of operations, and noteworthy areas near the user's classroom. We feel that React is an appropriate framework to use because it allows us to efficiently pass user data to a backend and render received information once data is generated. We chose Firebase to store our housed data, since it is a well-established cloud database that can be cleanly integrated with our frontend. For our deployment, we will use either Heroku or Vercel depending on how our project's needs evolve throughout development.

The Roles:

Our team will be split up to accommodate the following roles: Frontend Development, Backend Development, UI/UX Design, Project Management, QA, and Testing. Each team member will have their own primary focus but will likely perform coding for each role to help ensure that the workload is evenly distributed.

| Team Member | Roles | Tasks |
|------------------|---------------------------------|--|
| Misael Gared | Full stack developer | Design and implement the client-facing frontend as well as the backend architecture |
| Siddhraj Parmar | Frontend developer | Manage development for React frontend |
| Jasmine Hughes | QA, Testing, Project Manager | Write tests with Python; manage development of overall application |
| Ryan Christopher | UI/UX Design, Backend Developer | Design and write user interfaces, typography and layouts; manage backend development |