How:

We were asked to:

*“design a proof of concept for an App that could help contact tracers expand their reach and efficiency at your University campus. The App would enable contact tracers to quickly locate and identify students with whom an infected person on campus may have been in close contact. The appropriate University personnel would then notify impacted contacts, advise them to isolate themselves, and maintain social distance from others.”*

What our app does is use the University information on class scheduling to find the other students/teachers/staff members who will have come into close contact with a student/teacher/staff member who tested positive for COVID-19. Our app allows the users to not only have “on-hand” information about how to follow CDC guidelines, but also alerts users when they have possibly come into contact with someone with COVID-19. The backend performs a query on the user database any time a new positive person is found, to find all other users that have shared a class with them. The app then goes on to ask if they have spent time (over 15 minutes) in any “common” room since testing positive (and up to 48 hours before) so that we may alert the general public of those times. In the future, the location tracking would allow us to do this automatically.

The work was divided into specific topics, followed by roles assigned to the topics required. We decided on the following roles for the POC creation. To track our work, we also used GitHub, Email, Zoom, and Google Drive.

Zach: Project Management and Backend Development

Grayson: UI/UX

Emma: Database Design and Backend Development

Why:

We decided on a mobile application as it allows for constant location tracking which is marked as a long-term goal. The versatility is also larger when using a mobile application, it might require more up-front work to establish the system, but unlike a web-based application, we can gather more information at a faster rate. We also find it to be unique as it can provide information about where to get tested for COVID, what you need to do to stay safe, and you can also log information as to where-abouts and concerns you have with other active COVID patients. Another positive aspect of the mobile application is the speed in-which we can get information out and in; using notifications, we can announce important information to specific groups of individuals. The average college student has their phone on them at all times, and thus provided a clear solution as to how the project should move forward.