

Script for Runner++

Andrea:

Hello everyone and welcome to our senior project presentation. My name is Andrea Almanza, and I am accompanied with my team members Ericka Snopko, Adam Nicholas, and Daniel Josep.

Our web application, Runner++, will provide our target audience, CSUB students, with a safe way to travel through campus by providing them with a walking partner to get from one destination on campus to another. We chose this project because of our own experiences walking through campus alone, but after taking a survey of members of the CSUB community, we found that an overwhelming majority felt safer walking through campus with a companion.

Runner++ allows users to create accounts either as students or faculty members. As a student, after logging in, you will be able to connect with an available faculty member who will meet you at a location of your choice and take you to another destination on campus. As a faculty, once logged in, you will be considered 'available' to connect with students and walk them to their desired locations. Once you have been connected to a student, you will no longer be considered available, until the completion of your trip.

Both types of users will have access to a map with their location and the location of the user they are connected to. However, when logging in to Runner++, every user will be asked to share their location for security purposes. Once both users are connected, they will be able to view their profile information, change their passwords, and message each other via a predetermined messaging system. Faculty will also be required to end their walks when they drop students off at their end destination and are able to view reports of all of their previous walks.

In managing this project, we aimed to have weekly meetings along with biweekly meetings with our professor. Additionally, we made a discord chat to update each other on all our progress and schedule any needed meetings. While some specifics of our timeline have changed since last semester, we have completed most of our goals in implementing our database, researching location services, and beginning front end work in the first semester and completing our internal messaging system and location services in the second semester.

Now Ericka and Adam will be showing a demo of Runner++.

Ericka:

Thanks Andrea! Now, to start off our demo, we will go through the main functions and pages of Runner++. First, here is a look at our log in page, where users will have the options of creating accounts, changing their passwords if needed, and logging in with their credentials. So, we will create 2 accounts, Adam will be a faculty member and I will be a student. When creating an account, all users will be asked to give their first name, their last name, a username they would like to be associated with, their email, gender, a password, and then they will have to re-enter their password. Lastly, the user will specify what role they will be registering as, either a student using the application or a faculty member who will act as a walking partner to any student that connects with them.

From here we can both log in with our usernames and passwords. After Adam logs in, he will be brought to a page that waits for him to be connected with a student. This connect page also allows him to view previous walk reports of his or log out whenever he is done. I will now choose to connect to Adam and insert the location I would like to be picked up from and where I would like to be dropped off. Now, when I press this connect button, I will be brought to a student specific home page and then when Adam's page automatically refreshes, he will be shown that he is connected with me and can go to a faculty specific home page.

Adam:

At the home page, both users can view a map of their current location and the location of the person they are connected with. The map autoloads upon login and gives the users the option between the street view and the satellite view of the map. Also, the users can view both of their profiles, as seen, when they click the option in the menu. Students have a yellow profile picture and faculty are designated with a blue profile picture. Within the profile you can also see the name, the username, the email, and the gender of the specified users, as well as a password changing functionality at the bottom.

If we click the icon of the menu at the top right corner, we can select the inbox tab and go ahead and send predetermined messages back and forth to each other. In here you can see we have a demo of the messages being sent back and forth between me and Ericka. The yellow designates the student and the blue designates the faculty just like the profile pictures. Now by clicking the icon in the top left corner, we are both able to navigate back to our respective home pages where Ericka is able to log out and I am able to hit the 'End Walk' button to end the walk between the users. Upon ending the walk, the faculty member is routed back to the connect page where they are able to see any report they have had in their history. In the walk report history, you are able to see the report number, the student's name, the pick-up and drop-off locations, as well as the start and end times for the walk itself. After reviewing any desired report, the faculty member is able to click the back to connect page where they can continue to log out and end the entire session.

For my individual roles and contributions towards the project, I created the overall design of the application. By working with the back-end developers, I was able to style the functional parts of the application. I also used Photoshop to create resources to give the overall project that university styling. Beyond developing the overall aesthetic, I had to brush up on my PHP knowledge to help create a better overall user experience. Next up, Andrea will share her roles and contributions to the project.

Andrea:

Thanks Adam! My name is Andrea Almanza. For our Runner++ application, my main role was working on the functionality and display of the web-based geographical map alongside our team member Daniel. After testing which map API was most suitable for us, we began creating a Geolocation table in our database to hold information. Daniel and I were able to create PHP files that inserted the data into the table and receive the data from the table. This enabled the users to concurrently share locations. For security purposes and for the sake of storage, we also were able to have the locations deleted in the database after a certain amount of time. And now I will pass it on to Ericka to share about her role and contributions.

Ericka:

Thanks Andrea! Like she said, my name is Ericka and my main roles for the creation and implementation of Runner++ have been primarily focused on connecting and updating our database with PHP queries in order to get and maintain full functionality of the web application in all of its pages. I created the logistics of our database and most of the tables, including a PHP call that creates and drops tables to make our internal messaging system functional and use a manageable amount of memory. Additionally, I implemented our internal messaging system through PHP and JavaScript, in connecting information from our database to send and receive messages, allowing functionality between users. And now I will pass it on to Daniel for his roles and contributions.

Daniel:

Thanks Ericka! My name is Daniel and my main role for our project was to create our functionality within our web-based geographical map with Andrea. I have focused mainly on creating the features and display within our geographical map. Andrea and I created a table in our database that will let you store locations. We then created a PHP file which connects to our database that inserts our location while getting our partner's location to and from the database. We then added functionality to delete locations in our database that are greater than a certain number of minutes of being created. I have also created a few custom icons for our markers based on our aesthetic theme using Photoshop. Next, I will be talking about some of the challenges we faced during our senior project.

Some challenges we faced during this project were creating the functionality within the map and our internal messaging system. We had trouble in constantly updating the user positions and getting dual user functionality, such that both users can be seen. Another challenge we faced was getting the internal messaging system to refresh within a certain amount of time without refreshing the entire page. Additionally, we needed to brush up on our PHP language for us to create and connect new pages with each other and our database. Lastly, we worked hard to format the entire web application and internal messaging system to give a CSUB aesthetic theme along with a user-friendly interface.

Next, I will be talking about what we learned throughout our senior project. We learned the hardships of how other developers create their apps. Creating a web-based application has been a huge learning experience, testing all of our front-end and back-end knowledge in real-time. At the beginning stages of the project, we felt uneasy about our skill-levels and what we could actually achieve with our plans. As time progressed, we learned that we could implement what we sought out to create. What we did not know, we were determined to learn. We would not settle with anything less than what we sought out to achieve. Specifically, we developed our skill set in PHP, MySQL, and JavaScript to implement all pages and functionality that Runner++ required. This included map functionality, the internal messaging system, and our role-specific pages.

Some plans for the future we would like to see is that we would love to see the school implement something similar to our project by using it as a framework for a much more detailed version of student and faculty use. The school already has student IDs and emails associated with every student, so implementation with added security would be realistic if the school chose to adopt our application. As far as individual plans go, we are all looking to showcase the project on our own respective websites and resumes, as well as maintaining a public GitHub repository for recruiters and future employers to review.

And that is it for our presentation on our web application, Runner++. Thank you for watching!