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Senior Design (UC Rainfall Analysis)

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Self-Assessment

My contribution to the UC rainfall analysis was to work in the frontend of our application and the development of the assembling the unit to measure the data of the water levels. The application we wanted to develop is supposed to be mobile and desktop-friendly so we decided we will use a website that would work for both applications. To start on the framework of the application I had to research a lot in my fall semester to choose the right framework for the application to match our user guidelines and intact our requirements for the application to run smoothly. From the fall semester, I was perfecting my coding abilities and learn how to build a functioning interface for data reading or working with big data. The research I did helped me understand what my core would be to make a functioning website from back end to front end. I also looked at my similar applications that were built by users using known tools like python, PHP, AWS and development of the mobile application using CSS.

I used the research from the last semester to build upon this semester by looking at the templates I had drafted and applying the skills I learned in my other CS classes. The sample applications I looked at match many of our application requirements, but the layout was the difference. This was the biggest challenge for me to cover was to make the layout of our application that matches our requirements. To do that I made a python file and used the sample templates to code my front end of the website and I had our sample of the application ready in the first month of the semester. This was my biggest success in achieving the first development of our application. I learned a lot of debugging and troubleshooting in the process of building the sample draft. This was an essential skill I acquired when I tested the waters of the application. Many of the skills I build upon was on research and looking at an example of the templates. The other major obstacle was to implement the readings capturing from the ultrasonic sensor from the raspberry pie via using python. The readings were a little challenging to acquire as I had to connect the layers of the python code at the front end of the application to show the live results. After testing and dubbing, I finally acquired to show them, and the application worked great.

The group accomplished a lot as a team and sticking together because communication and team effort is the main reason, we are close finishing up our project. We divided our tasks as a team equally and were there for each other when we got stuck in the challenging part of the out project. Group work is required for building this big application because of it the group work that gets all the difficult tasks in the project. In the real-world example, many software companies do their projects in groups and that is the reason why they develop such amazing products. I learned about the group is that communication and workflow must be consistent to complete this big project. If there is no communication or consistency the group will fall behind in work and completing the tasks on time. We were successful in teamwork by communicate well and doing the tasks divided on time. There were moments as groups where we all had got stuck on a wall where we had no idea how to solve the problem in completing this project. In the end, we seek our help to other resources and solved the issue as a group. The other aspect of teamwork we were not successful was completing some of the tasks such as assembling the raspberry pie and had the UI installed on time. We did not communicate well, and we pushed things back as a team which we got a little behind on our project.

My efforts compare on the project on the teamwork were always communicative and I always got the tasks given to me were done on the timeframe that was due. I always seek for help when I got stuck at the building of the front end of the application. I always made sure all the team members on the team had no issues with the tasks they were working on. I believe that in a team effort it's better to make sure all the aspects of the project are looking good and functioning. My efforts in the team brought a good positive workflow that helped our project to be done in efficient time with fewer errors. I think everyone on my team should be given special recognition because we all achieved the success of this project together and we all worked hard in the tasks we divided for all. We always faced all the problems in the project as a team and solved them as a team, so no one is left behind in their given tasks. This was great practice and will help me in my future career to build upon my skill to be a better developer.