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CS461
Progress Report
Winter Term 2017

Progress Report

This project was distributed by our client, Arts Witkowski, from the Oregon State of Education department. The goal of the project is to deliver a completed website and mobile application that allows students, parents, teachers, and counselors to explore current pathways and health science careers. In our previous term, we have written the technology review and design document which identifies the underlying problem and how our project intends to offer a solution. We have met with our client many times to discuss about the plan of implementation of the desktop site and mobile application. The implementation strategies were mainly specified for the needs of our team in project development. We have informed Mr.Witkowski about the required software tools and timeline of the project through E-mail and video conferences. Before starting our development state, I and my teammates spent the rest of the winter break learning the required software tools and skill set for completing this project.

We began this term with the mindset of developing the website and mobile application. In week one and two, we have set up appointment with our client to review the plan of developing the project. We have strictly informed Mr.Witkowski about the stages of completing the project with a given timeline. Throughout the winter term, we have set small deadlines in every two weeks. This way, we would be able to notify Mr.Witkowski about the current workflow along with keeping the project on track. After the agreement, we would start to design and develop the project in week three.

During week three, we have decided to start on the website before working on the mobile application. The reason why we started on the desktop site first is because the mobile application corresponds to the website. In addition, the mobile application would be a client-server software application in which the user interface runs in a web browser. Simply, it is a web application corresponding to the website. In the course of designing the website, we have decided to use a free website template as our starting point of development. This way, we would save time and start to work on the more significant components of the website. Although the website's layout was useable, we had to change its Cascade Styling Sheet into an appropriate framework that would works with our user interface. Most importantly, the framework must be appropriate for our client and audiences. In the provided template, we have changed the navigation bar and graphic layout to correspond to our main focus. After improving the template, we would work on the database which is most important aspect of the project.

Heading into week four, we have setup a website and prepared for implementing its database. Since the website will contain a large amount of information, its database will be significantly large. Before any implementation, we designed and analyzed the requirement specification. We drew out a data requirement document which contain a concise and non-technical summary of what data items will be stored in the database. Also, we analyzed the important aspects and its interaction with the data. This step is very crucial based on the idea of relation and constraints of the database. Additionally we turned the requirements document into a basic data set which can be converted into a conceptual model. The conceptual model shows us a diagram of how the database system will eventually be implemented. It is simply a high-level overview of the database system. During this week, we have informed our client about our progress and asked for further instruction about the website and database.

During week four and five, we have moved to the implementation design phase. The conceptual data model helps us translate the information into a logical representation of the database system. Using the conceptual model and an uncompleted Excel sheet provided by our client, we were able to create different tables and schema into the database. For us to start implementing data, we needed a reliable database server from the engineering department to work with. In order to use the university's database server, we needed a permission from the engineering department. Fortunately we were able to create one and get access inside a database server using our engineering account. This way, we did not have to pay for unnecessary fees. .

Because we did not have a complete document on every data item for the database, we were implementing table which soon contain the details of all the data items, their attributes, and relationship between the data items, and the Keys and Data Integrity Rules. The biggest problem we had was the issue of not having enough information provided by our client. We were not able to fully complete the tables and its relational schema. During the weeks of implementation phase, we have talked to Mr.Witkowski about providing all the necessary data for the database. In addition, we would be having video conference with Arts in the upcoming weeks to present the website in Alpha state. Hopefully, we will have all the provided information for the database before heading into week six.

Before heading into week six, we wanted to have functional website that can be presented to Dr.Kevin McGrath and Dr.Kirsten Winter. The Alpha state of the first part of our project will be presented during midterm days. The implementation of the second part of our project, mobile application, will be postpone to later weeks. We are not able to demonstrate the mobile application due to the incompletion of the database. Although we do not have the mobile application, we do have the framework and softwares prepared for later usage. As the term goes on, we are slightly off track of our GANT chart, but we will be on track once we have all the necessary information provided by our client.