

Free Skiess

*The sky is not the limit, but your
playground*

Autism Virtual Reality Project

Milestone Evaluation

Members

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Faculty Sponsor

Dr. Keith Gallagher

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Client name

Affiliation: The Scott Center for Autism Treatment

Task Matrix

| Task | Explanation | Completion % | Gavin | Alanah | Jiaqi | What's left |
|---|---|--------------|-------|--------|-------|-------------|
| Create the Web Application | This task involved creating web pages that provided data for the Trainee and Trainer | 70% | 40% | 30% | 0% | Finished |
| Connect the database to all features | This involved writing code that will send user information to the database from both the web app and oculus | 70% | 70% | 0% | 0% | Finished |
| Create Data analysis on performance for trainee | This involved pulling information from the database and placing it on the web app for the Trainee to see | 70% | 70% | 0% | 0% | Finished |
| Create a timer for the Questionnaires | This involved using C# to code a visual timer for the Trainee to see when answering questions in the oculus | 100% | 0% | 0% | 100% | Finished |
| Create poster | This involved making a poster to represent the main goals of our project | 100% | 25% | 50% | 25% | Finished |
| Create Ebook | This involved writing a short summary of our project and plans for how to improve the project | 100% | 25% | 25% | 50% | Finished |
| Create User manual | This involved making an | 100% | 33.3% | 33.3% | 33.3% | Finished |

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|--|--|--|--|--|--|--|
| | instruction manual to aid the user in how to use both the oculus and web app | | | | | |
|--|--|--|--|--|--|--|

Discussion of each Milestone

Create the Web Application

With the oculus meeting the scott center standards we decided to move forward with building the web application . We went about this using bootstrap architecture as most of the components were already built and ready for use. After planning out the user interface for each page we continued to place the firebase components in a new.js file. We connected this to the main file which contained the access token to our specific database that was also connected to the oculus. We got authentication to work and also some push and pull elements.

Connect the database to all features

So now both the oculus and the webapp both are connected to the firebase server. We can now add data from the oculus and see it on the website which was the main goal. We have worked on creating different functions for the websites but not all components are fully functioning.

Create Data analysis on performance for trainee

For the data analysis of the trainer, we decided to use pre-written javascript code for the graphs and some other elements. We did this by using the pull function within our code to get the information required. After that we intend to put in the javascript code which will update when an onclick event is triggered. We plan to implement this feature with the different charts.

Create a timer for the Questionnaires

Since we had finished most of the oculus component there wasn't much left to do but one of our classmates had suggested making a counter so that we can observe the change in time for each question. This was something that we had talked about but not implemented. We placed it in the environment in a fixed location above the question.

Create the Poster and Ebook

There isn't much to be said about this, we completed the required diagrams as a team using what we had before in our design and requirements documents.

Lesson Learned

For the end of the project we learned different lessons not only from a programming point of view, but also from a project management point of view. For the programming aspect we learned how to use javascript, C#, and other programming languages. Also we learned how to build on pre-built foundations. We learned that things are always not readily available for us to learn and sometimes it takes digging to find new information. After working with the Scott Center, we learned that it is difficult to deliver products that the client wants. Most of the time the clients themselves are not 100 percent sure on what they want specifically.

From a project management point of view we learned that the requirements and design stages are the most important stages. This is because they can either make or break how you move forward in the future. This makes research a key factor, as you need to understand why you choose a platform, a language, or a certain format. Establishing the key points in your project will save you a lot of headache in the future.

Going off that we also learned that no matter how much you plan there will always be a lot of things that throw off your plans. As a team you have to be adaptable to the changes because even when disaster strikes deadlines are deadlines, and most times they still need to be

met. This taught us how to communicate efficiently during this time of crisis. This experience taught us that we need to trust our team members and no one is perfect. Neither is code so we have to work with each other while giving one another constructive criticism when needed. A major thing learned was to listen to your mentors, as they know what they are talking about whether it be coding or project management. Working on this project taught us a lot and has prepared us to better when handling future projects. Even if it is on different platforms or with different people.

Discussion for each member contribution

Alanah

Alanah worked on code for the web application for both frontend and backend parts of the application. She did research for parts of different functions when the team needed more understanding. She also contributed to the development of the ebook and the poster.

Jiaqi

Jiaqi was working on finishing the oculus component within the questionnaires and worked on the pointer for the milestone. She ensured that the counter was in the oculus and spearheaded the creation of the ebook page and our other documents.

Gavin

Gavin was responsible for assisting in the creation of the front end part of the web application, and was responsible for the backend. He created functions to push and pull the code for the firebase. He also assisted in the creation of the documents for the final presentation.

Date(s) of meeting(s) with Client

Due to Covid-19 we have not been able to have efficient communication with our client

Date(s) of meeting(s) with Faculty Sponsor during the current milestone:

Due to the Covid-19 we have not had any face to face meeting with our Sponsor

Faculty Sponsor Signature: _____ Date: _____