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MODS App

# Abstract

A quick description of the events that took place during the course we attended at Florida Atlantic University, depicting what we learned and how we used our newfound knowledge to create mobile apps for the Museum of Discovery and Science.

# Background

The majority of our background knowledge before enrolling in this program was minimal. Some of us had experience in programming, and basic photo editing skills but nothing viable enough to create a full-fledged mobile application with. By joining this program we received a big introduction into the field and learned much on the subject thus providing a sufficient amount of information for us to learn about the fields of graphic design, programming, and user interfaces in order to make an app that is viable and could help the museums role in local South Florida museum scene.

# Methods

At FAU an extensive amount of tools have been provided to us. As part of the graphics design team I have learned to edit photos and files, create swatches, create 3D objects, and much more. Some programs provided to us are Maya; a 3D editing software, Photoshop; a powerful photo editing software, and many more among them including Illustrator; a software used to create icons and shapes. We started all of this work by creating a Mockup which provided the baseline and guideline to the rest of our three week course. By having a 4-person group we all played our part that allowed our other team members to do their job as well. Using a program called GitHub, we all posted our work and were able to collaborate and see our work and progress online.

The programming and user interface team learned both the basics of programming, but of java, and the program Android Studio. They had to learn about the logics of programming including objects, methods, strings, and how to apply this knowledge in android studio. Android studio being the main application used to create apps for Android phones. Also using and learning the complexities and challenges of the app, like memory, ram, and other necessary information in the subject of programming for android.

Meanwhile the graphics department studied the keys of basic graphic design learning how to use popular programs like Illustrator and Photoshop. These programs allow for the use of computers to create authentic and beautiful designs to really showcase our apps and make them appealing to the users. We also used a program called Maya in order to create 3d models of sharks and learned how to use Augmented Reality allowing for a more interactive museum experience that shows 3D models inside the museum like in popular apps such as Pokémon Go.

By a joint effort of not only our entire team, but every single group in the program from both this year and last year, the museum, and our resources at Florida Atlantic University we were able to combine both design and science into making a truly innovative and special experience for users of our app.

# Results

The results of us joining this program is our ability to make an application that was seen as impeccable, beating standards, and updating last year’s groups progress and improving upon it. Proving that we can add upon their work, learn how to program and, create a mobile app that actually works.

# Discussion

The visitor benefits greatly from this app. wherever they may be they can access the MODS museum app and see all the exhibits from the comfort of their phone. Making a user experience that is enjoyable and interactive was our goal and we accomplished this. Each individual group made an app and adding their apps to our main app we could make a cohesive experience enjoyable by all who see the museum in person and in the future use the app mobilely and experience the museum from their phone.

# Conclusions

To conclude, the ability to attend this program has been truly incredible and has given us the opportunity to do something amazing for the museum, its attendees and us. The program really allowed us to study and learn about a whole new field that really pertains to daily life in the modern world and teaching us just how important this industry is. Proving that even high schoolers with no experience in the field can learn how to make a mobile app too. All the code and assets are available at Github.com free for use by others.