#### **Topic Submission**

## **Description of the Topic:**

Mobile application development is basically a computer-generated program that is designed to run on smartphones, tablets and other mobile devices. Mobile application development started in the early 90s when IBM Simon introduced the world with the first smartphone with applications, such as a calendar, calculator, notepad and address book. After that, Nokia came up with simple gaming applications like Snake and Pong. However, all these applications were limited to inhouse only, which means developers were not able to design their own applications and get benefits out of them. Smartphone users as well were not completely satisfied until 2007-2008 when Apple launched the first iPhone and App Store (Shahid, 2014).

The Apple Store revolutionized the world of mobile applications development because it offered all apps that are available in the market and installing them was very easy. The establishment of Apple Store gave the opportunity to all app developers across the world to design their apps and benefit from them (Shahid, 2014).

For my capstone project, I would like to design an iPhone game using Xcode. I chose web applications to be my capstone project because I can see the importance of web applications nowadays. In our daily use, we always use video calling, email, and games apps and that defines the importance of mobile application development.

### **Testable Hypothesis:**

I think designing an app is not that simple and requires a lot of work and time. I expect that I will face many difficulties issues when developing the game, but luckily there are so many tutorials out there on how to design iOS apps and specifically games. Therefore, I think it would be much easier for me to find good solutions when I face some issues. After launching my app, I will be able to find out if my customers are happy with the new app by looking at the comment section on the App Store. Since I am new at this field, I will take every criticism very seriously and read them carefully, so the app becomes better and therefore, I can become a good developer.

# **Faculty Mentor:**

I met doctor Xiang Liu on January 29, 2016 and asked her to be my faculty mentor for my capstone project. She fortunately agreed to do so and told me to ask her whenever I face some issues and difficulties. I chose Dr. Liu to be my faculty mentor because her research interests broadly center on the areas of design, enterprise architecture. Moreover, She received her doctoral degree in Information Systems from Boston University where her thesis topic was "Design Architecture, Developer Networks and Performance of Open Source Software Projects" (Marymount.edu).

#### **Timeline for my Project:**

For my project, I will spend most of the semester developing the app itself because it is the most difficult component of my project. However, I have spent a

decent amount of time watching tutorials about Objective-C and Swift to learn the codes that I need to use to design my app. I expect that I will continue watching tutorials and reading articles until the end of February. After that, I will start developing the app itself for probably a month or so. Then, I will download the app on my phone and tell my classmates and friends to use it and get feedbacks and suggestions. Thereafter, I will try to fix as many issues as I can for a couple weeks. Therefore, I expect the app to be ready around April 15<sup>th</sup>.

# **Types of Data and References I Need:**

My initial strategy is to collect data from YouTube free tutorials and find some articles that talks about Objective-C and Swift. I think this strategy would be successful because I have been using it for a couple weeks now and it has been successful and found a large amount of valuable information out there.

#### References

Shahid. (2014). Mobile Application Development - An Insight. Retrieved January 27, 2016, from https://www.devsaran.com/blog/mobile-application-development-insight