Samrat Sahoo

Mr. Speice

Independent Study Mentorship 2A

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Developing an Interface

Assessment 7 - Research Assessment

Date: 29 October 2019

Subject: Developing an Interface

Works Cited:

"Developers - Insight: JavaFX: A Rich Internet Application (RIA) Development Platform."

Open Source FOR You, 1 July 2016. Gale General OneFile,

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6a06. Accessed 30 Oct. 2019.

Assessment:

In the modern age of applications, users are met with a stunning and simple interface
where the technical aspects of the application are completely omitted. This simple and stunning
interface is known as a graphical user interface. Graphical user interface development tools are
abundant with Java; however, the challenges arise when choosing which tools and frameworks to
use. In spite of these challenges, graphical user interface development remains to be a powerful
aspect for non-technical users and is absolutely necessary for the widespread success of an
application.

When creating an application interface, the most challenging step is to decide which tools to use to create it. Tools such as java swing exist; however, choosing the ideal tool for the project rather important. In the world computer vision, graphics processing unit utilization is very important. Tools such as swing do not have efficient graphics processing unit utilization unlike JavaFX does. Additionally, computer vision projects generally require large amounts of data. JavaFX has a much better data management system than most other tools. However, despite the advantages JavaFX offers, one thing that should be considered going forward is the learning curve. The learning curve seems to be much smaller for tools such as java swing because of the simplicity of its functionality. Going forward, this is important to know because the required GPU utilization, data management, and learning curves are factors that may influence my decision in choosing the right graphics user interface development tools, especially when developing something in parallel with computer vision.

As mentioned above, graphical user interfaces have simple and stunning designs. While at the surface, this may not seem significant, interface design is a rather complex topic. One of the most essential components of interface design is the use of markup languages and cascading style sheets. In order to apply these components of application design, it is required to call upon my prior knowledge in web development. Additionally, when considering the actual design portion of these applications, it would be beneficial to draw inspiration from other aesthetically pleasing applications. This, in turn, would help stimulate ideas regarding design and potential features to add to the application. In doing so, my own application would be able to have the same effect on the user as these other applications do.

Reflecting for the future, JavaFX is definitely a viable option for making this facial-recognition based attendance tracker application usable on a larger scale. However, in order to do so, planning to learn these technologies is essential to developing some type of interface. Additionally, further research in the actual aesthetic design would be beneficial to achieve the modernistic feel that applications have now. Based on previous research, porting this application to a mobile platform was something worth looking into. With the use of JavaFX, porting this becomes infinitely easier and so it will be something to consider more heavily going into the future. By implementing all the features of JavaFX into the facial-recognition based attendance tracker application, the application can be taken to the next level.

Annotations:

https://scrible.com/s/0b_i4