Computer Science Projects - Survey

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Course: CSC-410 (Project Planning)

A. What problem was trying to be solved or what was the goal of the project/internship?

Ans:

The goal of the semester project was to create a mobile encyclopedia app utilizing Flutter and Firebase, called KnowMixer, to provide users with readily accessible information at a moment's notice.

B. Why hasn't it been solved yet or what is wrong with current solutions?

Ans:

The unique aspect of KnowMixer, as compared with other mobile encyclopedia alternatives, is the simple and intuitive UI/UX it provides through front end development in Flutter. In addition, with Firebase Integration, KnowMixer should allow for a seamless transition between online and offline usage. Other encyclopedia apps may have many of the key features that KnowMixer offers but not the UI/UX coupled with multiple category integration as prevalent in encyclopedias.

Another way of thinking of KnowMixer is as a simple and modern encyclopedia application.

C. What ideas/technologies does the project use?

Ans:

The KnowMixer App makes use of Google's Flutter Application Framework and Firebase Cloud Services to allow offline and online usage of mobile applications.

D. How were these new ideas/technologies used (or will be used)?

Ans:

Flutter was utilized to design the front-end minimalistic KnowMixer Application. Firebase will be used to provide user authentication service and cloud storage of categories and definitions of items within a category.

E. Was the project able to be implemented?

Ans:

A prototype of the KnowMixer App was developed, but it is by no means completely finished. Features that still need to implemented are User Authentication and Category/Item storage using Firebase.

F. What was done (or will be done) to eliminate bugs?

Ans:

Bugs when developing with Flutter are relatively easy to detect. This is because every widget/task completed can be visually represented through an Android Virtual Machine (Virtual Phone) when developing (referred to as debug mode when developing). Thus, it is easy to detect bugs as they either result in a visually distinct outcome than what was expected or simply the widget tree/application does not build.

G. What was (or will be) done to make the implementation efficient?

Ans:

Github integration is already implemented with the KnowMixer App. So this means as new changes are included, they are committed and pushed to Github. This functions as an incremental approach towards development by being able to revert to previous versions of the application if any unwanted changes are made to KnowMixer.

H. Was feedback from users provided for the project?

Ans:

No, feedback from users was not provided for this application.

I. Was feedback provided for the technical documentation?

Ans:

Yes, feedback was provided for the technical documentation (project proposal and design document) by my supervising professor, Dr. Ubbo Visser.

J. Was feedback on the user manual provided?

Ans:

As the KnowMixer App is still in a prototype stage, designing a user manual is still too early to determine the final behavior of the application. Thus, a user manual was not provided and as such no feedback was given.