CLASS@FSKTM UPM - Augmented Reality Experiences for UPM New Students.

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Abstract

CLASS@FSKTM UPM is an interactive application developed in Augmented Reality technology to assist students especially newcomers and also to assists visitors –to find the Main Hall, lecture rooms and laboratories in the Faculty of Computer Science and Information Technology, Universiti Putra Malaysia.

This mobile application associated with interactive visualizations of maps and videos such as 3D model maps and video displayed in Augmented Reality. The advantage of the proposed mobile application is users are not restricted to must have an internet connection to use this application.

Introduction

CLASS@FSKTM UPM is an Augmented Reality mobile application designed to assist students especially newcomers and also to assists visitors to find the Main Hall, lecture rooms and laboratories in the Faculty of Computer Science and Information Technology, Universiti Putra Malaysia. There are several multimedia elements such as AR maps designed in 3D, AR videos and 2D animations with soundtracks.

Materials & Method

Software involved :

Unity - software used to develop user interface, associated with Vuforia Engine

Vuforia Engine - an Augmented Reality engine embedded with Unity, enabling marker detection in application

Visual Studio 2017 - a software uses C# language for application programming such as button.

Blender - create 3D models generated in .fbx file

Canva - create background images, application logo.

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Muhamad Safizulkamal bin Shuib is currently a final year student in Bachelor of Computer Science Multimedia at Universiti Putra Malaysia. This project was being carried during Augmented Reality development projects.

Results & Discussion

SAMPLE PICTURES OF CLASS@FSKTM APPLICATION TESTING
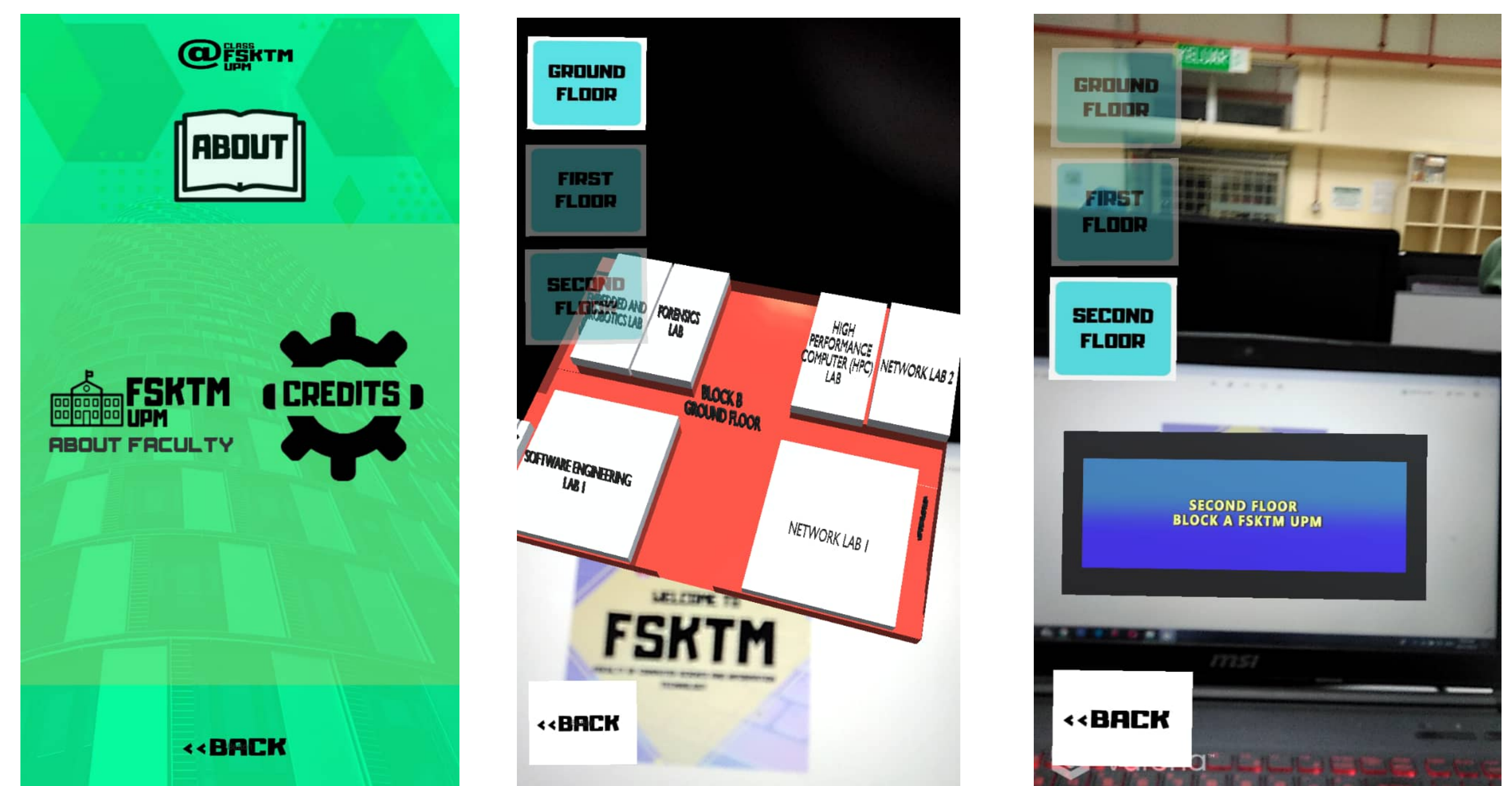
SAMPLE DESIGNS FOR AR MARKER DETECTOR

RESULTS FROM SURVEY

Based on the survey results, most respondents have suggested on applying indicators in virtual faculty maps that may ease their location findings in FSKTM UPM. Besides, respondents agreed that applying Augmented Reality in finding locations brings an added value to this application.

Conclusion

CLASS@FSKTM UPM is an application that students can use to find location using exact faculty map besides gaining experiences on interacting with Augmented Reality applications.

References

- Playful Technology. (2018, February 10). How to create an Augmented Reality App [Video]. YouTube. https://www.youtube.com/watch?v=MtiUx_szKbI
- Boostling. (2016, August 15). Vuforia Unity Android Tutorial, Your First AR App in 20 minutes. YouTube. https://www.youtube.com/watch?v=HnjbTytHH6U

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