

**UNIVERSITI TEKNOLOGI MARA**

**CAMPUS NAVIGATION APPLICATION FOR  
ANDROID USING AUGMENTED REALITY  
(ANDROID NAVIGATION APPLICATION BASED  
ON AUGMENTED REALITY)**

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## **ABSTRACT**

Both students and lecturers from different faculties are having problems of finding their direction to the classes since they are not familiar with the surrounding. They have to spend their time looking for the exact location of the class and this will definitely take up most of their time. This problem can be solved by developing an Android navigation application based on Augmented Reality as users will be directed to the destination using a camera display of the real view of location's environment. This project is carried out by using Eclipse, together with Java programming, to create an Android application. In addition, JAVA programming is used in creating the application. As a result, this application enables users finding their paths to specific locations on the faculty and offers the ability to explore the faculty environment via Augmented Reality.

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# **CHAPTER 1: INTRODUCTION**

## **1.1 BACKGROUND OF STUDY**

Advancing technology and increasingly intelligent humans has sparked many ideas for creating a new technology or upgrade existing technology. The technology that has been developed is Smartphone like Android phones, Iphone and BlackBerry. With this Smartphone, users can use the information including audio, visual, or text-based data about the real objects or places, as a guide for the exact locations which is provided by GPS data. Together with Augmented Reality (AR) technology, users will be having the real scene and will be directed to their destinations.

## **1.2 PROBLEM STATEMENT**

Students from different faculties waste their time, spending looking for their respective classes and this also affects the lecturers as they have to wait up for them to begin the class. Unfortunately, this kind of problem is also experienced by other lecturers as they are not familiar with the surrounding of the other faculties. They may refer to the block information and some of them may ask other students about the specific location. However, they might not get the correct direction without proper instructions. For example, lecturers from the other faculties such as the Academy of Language Studies (APB), who have classes in Faculty of Computer and Mathematical Science (FSKM). Being unfamiliar with the surrounding, they have to spend their time looking for the exact location of the class and this will definitely take up most of their time and the students they are teaching.