

**UNIVERSITI TEKNOLOGI MARA**

**The Development of Melati Printing Service  
Mobile Application for UiTM Shah Alam's Students  
(PrintToGo)**

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## **ABSTRACT**

The project is about the development of a Mobile Application on Melati Printing Service for all the students in UiTM Shah Alam to ease them with the ability to print from virtually anywhere through mobile devices by attaching documents without physically going and waiting for hours at the printing store. This project applies the concept of Order Online Pick Up at Store (OOPS). The main problem for this project is the long waiting time thus the time-consuming process puts a drain on the print facility resources and delays the student time which occurs due to the slow service and the lack of facilities provided in the store such as the computer and printer. The objective of this project is to identify requirements, to design and develop the Melati printing service mobile application. The scope of this project is focusing on the students of UiTM Shah Alam especially for the residence of Melati college and the students who's their faculty does not provide the printing service but nearest to Melati college. Therefore, UiTM Shah Alam's students also are significant for this project instead of the person who owns the Café Melati and the staff who will manage the administrator web-based system. There are two methods of information findings used throughout the development process of this app which is by conducting a survey among the students of UiTM Shah Alam based on their printing habits and experiences at printing store (Refer Appendix A) and by conducting an interview with one of the staff of Café Melati, Nur Saiyidah Malek regarding the current printing service provided in Café Melati, UiTM Shah Alam (Refer Appendix B). The methodology that had been used for this project is Mobile Application Development Life Cycle (MADLC) Model. This project however will be developing up until the testing phase only. The limitation and suggestion for future enhancement of this project had been identified based on the users' feedback from the testing session conducted through Google Form among four students of UiTM Shah Alam and one staff of Café Melati. This project will be using Android Studio and Firebase real-time database for the mobile app development meanwhile for the administrator web-based system will be using Notepad++ and 000WebHost web hosting server which utilizes MySQL as database. The recommendations for future work are to provide a real-time tracking function of printing queue status at Café Melati as it could tell the users the current status of the printing queue and add a push notifications feature which enables the user to get notified when the order is completed within the estimated time. In conclusion, PrintToGo mobile application will benefit the students of UiTM Shah Alam in managing the task of the printing process in an efficient and effective way.

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# **CHAPTER ONE**

## **INTRODUCTION**

### **Chapter Overview**

This chapter clarifies on research background such as the problem statement, aim, objectives, scope, limitations and significance of the project. The background of the project would give an overview to readers on what the project is all about. In addition, the problem statement refers to the current issues identified as adherence to the need of the project. Besides, the aim and objectives of the project stated the target and outcome of the project. Last but not least, the scope is justified, the limitations are identified and the significance of the project is discussed.

### **1.1 Project Background**

Printing is one of those inventions that has revolutionized the world today and is the most important fundamental practice in society, particularly for the vast majority of students at universities. It is a method for reproducing text and pictures, usually using a printing press with ink on paper (Board, 2011). While the world goes paperless, some instances remain where printouts are a must. In a pinch, this may mean having to print directly from an online application from mobile phones (D'Angelo, 2019).

The advent of a retail revolution and the education across the country acts as a fuel for the growth of the printing industry (Board, 2011) while the advent of the internet as a retail medium has made it cost-effective for retailers to offer 'Order online pick-up at-store' (OOPS) service through their websites (Chattarjee, 2010). People should never have to stop their lives to deal with old-fashioned lining up to get for a turn to print ever again.

According to Wilson (2019), society is continually looking for technological solutions to keep up with their fast-paced lifestyles. Printer technology is one of the aspects that they might take for granted in this modern world, yet it's an industry that's hundreds of years old. It has come a long way since the invention of the Gutenberg press. Today's age of mobile applications does not leave any space for superfluous movements in one's life. Nowadays the use of mobile applications allows users to do something without having to leave their couch.

For example, the ability to print from a third-party printing mobile app, liberating users from the need to be physically going to the printing store. There are plenty of reasons why printing