

UNIVERSITI TEKNOLOGI MARA

**WEB-BASED ACTIVITY COLLEGE COUPON
SYSTEM USING QR CODE**

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ABSTRACT

Knowing that there are several problems in the current system of distributing activity college coupon which are related to student's authorization and also difficulty of recording activity coupon, this paper proposes a new method to acquire activity college coupon which is using QR Code technique. The student will use an existing QR Code scanner app that need to be installed in their smartphone. The student will scan the QR code that has been generated by the staff. The data of the QR Code is the id of the activity which has been converted into URL. The final result of the testing will show that the system is working perfectly and ready to be used. It also discusses how the system verifies student identity to eliminate false attendance during the activity. This technique will prevent the unauthorized user from acquire the college coupon as the students need to generate a unique random number after the event ended and it also can smoothen the process of distributing activity college coupon.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter provides an overview of the research project, which includes the background study and problem statement. The project's objectives, scope and significances are also discovered in this chapter to give a clear, concise and more understanding regarding the development of this project.

1.2 Background Study

Quick Response (QR) code protects stored information because it is a twodimensional bar code consisting of a special geometric pattern of black modules with a white square background that can encode various types of information with high density and robustness, accurate errors and physical damage (Ramalho et al., 2018). The QR code was developed in 1994 when Denso Wave Corporation, a subsidiary of Japanese automobile company Toyota, manufactures automotive components (Gregersen, 2012). To decode the QR Code, we can use a QR Code scanner or an existing QR Code scanning application on a smartphone.

The main purpose of this project is to help the college management in managing every activity in the college by applying QR Code technique for distributing coupon for each college activity. It is also to make sure that the system of distributing coupon is secure.