Universiti Teknologi MARA

Fulbright Alumni Association of Malaysia (FAAM) Registry System using Blockchain

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ABSTRACT

Blockchain is a decentralized transaction and data management technology developed first for Bitcoin cryptocurrency. The interest in Blockchain technology has been increasing since the idea was coined in 2008. The reason for the interest in Blockchain is its central attributes that provide security, anonymity and data integrity without any third-party organization in control of the transactions, and therefore it creates interesting research areas, especially from the perspective of technical challenges and limitations. The goal of this project is to study the needs and design of mobile-based application registry system on Blockchain technology for the Fulbright Alumni Association of Malaysia (FAAM). This project uses Android Studio, HTML, JavaScript and Firebase to update FAAM members information. The project is done by implement the blockchain technology in the mobile-based registry system. The importance of this project can help the administrator to handle the alumni information more easily. It may also facilitate users to know all the important information such as activities conducted by the organization.

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CHAPTER 1

INTRODUCTION

This chapter provide the background and rationale for the study. In the beginning of this chapter it will explain about the detail of this project such as background of this project, problem statement, project objective, project scope, and the project significance.

1.1 Background of Study

According to Hapsari et al. (2016), registration system is one of the most essential elements in an organization or institution that involves the presence of customers and one by one service. Nowadays, with the development of technology, services process in an organization become more effective and efficient. One of the organizations that require the development of this technology, in the form of registry system, is the Fulbright Alumni Association of Malaysia (FAAM).

Now, Akira Saitou (2004) stated that while a personal computer has commonly been used to access the Web Server, recent trend of using mobile devices has resulted in an increase in users that use websites on the Internet from their mobile phone. Mobile application development has now become a crucial subject for Information Technology related courses since most of the software developed today are app-based. (Mokmin,2019)

According to Donegan (2016), blockchain is an electronic ledger of digital records, events, or transactions and it was controlled through a distributed network of participants using a group consensus protocol. The blockchain is shared among a lot of computers with mechanisms for approving transactions that utilizes an organization consensus protocol.

To sum up, registry system in a mobile application will be used to register users to be part of Fulbright Alumni Association of Malaysia members.