SA50 INDUSTRIAL ATTACHMENT REPORT

Project Title: DAPP DDL

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR

THE GRADUATE DIPLOMA IN SYSTEMS ANALYSIS February 2021

THE INSTITUTE OF SYSTEMS SCIENCE NATIONAL UNIVERSITY OF SINGAPORE

Project Plan

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Project Plan

# 1.0 Company Background

IslandPeakCloud is a brand new local company in Singapore which provides customers with various IT services such as websites, mobile apps, and systems, block chain decentralized apps (DAPP). The company has 2 more branches in Vietnam and China.

2.0 Project Overview

The current project that the company has been focusing on is a decentralized application(DAPP). DApps run on Ethereum, which is similar to bitcoins. The problem that we always face while working backend is that we do not have enough ethers to deposit in the addresses. The only way we receive ethers is from the test faucet, which only gives 5 ethers maximum per hour.

3.0 Project Objectives

The project’s goal is to finish within a short period of time with low cost savings. In addition, since ethers need to be bought with real money, we have to keep note of which addresses we had put ethers in. The company also wants to make sure we have enough ethers in hand while doing the project, by requesting from test faucet for free. To finish this project, the team also needs to use Jira (kanban board) during working hours and finish tasks quickly, despite working in different countries.

4.0 My Responsibilities

The company has given me a task to handle the backend maintenance of the project. I was added into the DAPP team which includes 8 team members. The team includes members such as server developer, technician lead, and blockchain developer from Vietnam. My position is Java tester, and my job is to generate wallets depending on the number of addresses required for the developer. After creating wallets, I have to compare the addresses inside the wallet created by the company’s wallet generator with the addresses from the Bip39 page. If there are false results, I have to inform the technician leader.

Next, I have to request and deposit ethers using software called Metamask, into the number of addresses required. Sometimes, I need to use the Transaction Broadcast software from the company’s laptop and generate hash with another laptop to check gas fees. Afterwards, I need to make a test case to know whether it is successful or not. Then, I have to create excel stating the 10 addresses and amount of ethers I added, and then share it with the Vietnam team member.

Once the addresses are added into the code, I need to test the referrer addresses and parent addresses of the tree structures using Ganache software. Additionally, I need to deploy contracts using Solidity, which is a programming language similar to Javascript. In the future, I will have to write front end designs for decentralized apps using Vue and Jquery.

5.0 Team Structure

Currently, there are 8 members in the team who are working on the project. Server developer’s task is to maintain the server so that the system is running with high security. Next, we have a blockchain developer who uses code from China vendors and implements the tree structure for the project. Afterwards, we have a product manager, technician leader, bitcoin tester, android developer, and ethereum tester.