**BMIS2003 Blockchain Application Development**

**Task Description**

Name :Rinisha a/p Naresh Kumar ID :21WMR12543

Programme : RSW2S3 Group : GROUP 2

Instruction: Answer **ALL** the questions.

1. Please briefly describe the module(s)/function(s) you engaged in the assignment.

In this assignment, I am in charge of the distributor module. In this module, the system allows the distributors to update durian information from the farmer by adding the durian ID and the harvest date and time. The distribution centre creation provides a structured approach to organizing and managing the flow of durians, helping distributors efficiently handle inventory and distribution operations. Not only that, I was also in charge of designing the front end for the system and also connecting the front end and back end.

1. What are the strengths of the modules/functions created by you?

A strength of the module is that it allows distributors to create distribution centres. It provides a structured and organized approach to managing the flow of durians, allowing distributors to efficiently control inventory, logistics, and distribution operations. In addition, distributors have the capability to update durian records received from farmers. This feature ensures that the information about the durian's origin is accurately recorded, contributing to traceability and transparency. Besides, distributors are not allowed to update durian which does not belong to it. Recording date received from farmer, and date passed to retailer increased the transparency for the customer as they know how long the transportation is. Besides, only distributors under that particular distribution centre can make updates on the durian belonging to that distribution centre.

1. What are the weaknesses of the modules/functions created by you?

A weakness of the module is that as the distribution network grows, the module may become more complex to manage. Ensuring scalability and ease of use as the number of distributors and distribution centres increases is a challenge. Besides, the distributor could not create distributor only the owner can do the adding. This can be very inconvenient as the business growth.

1. What have you learned in doing this assignment?

After completing the assignment, I have developed more knowledge about blockchain and solidity and the flow of a supply chain management system. Meanwhile, I researched and reviewed a lot of information to get more understanding in blockchain to produce my module more complete. In addition, I also learnt the concept for linking both frontend and backend together to look at interaction using the system. With persistence and continuous learning, I am not only able to complete the assignment but also gain valuable skills and knowledge in the exciting field of blockchain technology. Moreover, Blockchain has provided transparency and traceability to the users due to the immutable nature of blockchain. Every change made will be recorded into the blockchain and everyone with access is able to retrieve it.

1. What are the challenges, if any, faced by you while working on this assignment?

Transitioning into a project involving blockchain and the Solidity programming language can indeed be challenging, especially for me new to these concepts. The world of blockchain technology comes with its unique set of principles and practices that require a deep understanding. However, the dedication to study and learn from available documentation is a commendable approach. Meanwhile, the concepts of linking the frontend and backend are also facing a lot of challenges due to the complexity of modules provided by all of the members in the assignment.

Signature:  Date: 26 SEPTEMBER 2023