UNIVERSITY OF MALAYA

WIA1002 Data Structure

‘Always On Time’ Delivery (Managerial Report)

Group Name: BEES

Tutorial Group: 4

Lecturer’s Name: Dr. Mohd Hairul Nizam Bin Md Nasir

Members:

No.	Name	Matric Number
1.	Aisyah binti Shaharol Munir	17206198/2
2.	Hanan binti Muhammad Nizam	17206018/2
3.	Nursyazwani Binti Mohammad	17206746/2
4.	Nurul Filzah Binti Abdul Hadi	17205112/2

Formation of Group

All members are project developers and writing details of solutions in the technical report based on assigned work. Managerial report is done by all of us and checked by each of the group members. Each of us is in charge of one type of graph simulation, which is Basic Simulation, Greedy Search, Monte Carlo Tree Search (MCTS) Simulation, and Best First Search (Extra Algorithm Implementation).

Role and Assigned Works

No.	Name	Roles
1.	Aisyah binti Shaharol Munir	● Write a program for Extra Features, Best First Search ● Managerial report and Technical Report
2.	Hanan binti Muhammad Nizam	● Write a program for Greedy Search ● Managerial report and Technical Report
3.	Nursyazwani Binti Mohammad	● Write a program for Basic Simulation ● Managerial report and Technical Report
4.	Nurul Filzah binti Abdul Hadi	● Write a program for Monte Carlo Tree Search with Aisyah ● Managerial report and Technical Report ● Printout sample output

Project Timeline

Date	Task
03/05/2021	Formation of group
08/05/2021	Assigned to ‘Always On Time Delivery’ project
10/05/2021	Discussion on the task needed for basic requirements and extra features
11/05/2021	Assigned specific part to each of the group members
22/05/2021	Having a discussion to give an insight for some of the unclear parts
23/05/2021	Class for reading text file completed
29/05/2021	Basic Simulation and Greedy Simulation completed
05/06/2021	MCTS Simulation Completed
10/06/2021	Best First Search Simulation completed
14/06/2021	Final checking for all parts
14/06/2021	Project Submission

Problems

1. We had difficulties implementing some instances in class.
2. Take a long time to understand Monte Carlo Tree Simulation
3. Take a long time to configure how to find the route cost for each search algorithm, given the capacity restrictions
4. Our team had a few problems when printing the output for the route taken by each vehicle. The output we got was not like what we expected, which is what was portrayed by the sample output given in the GitHub.

Solution/Issue Encountered

1. Our team manages to use instances correctly in class programs.
2. Follow the algorithm provided in NeverOnTimeSdnBhd repository
3. Able to find out the best simulation with lowest cost.
4. Do meetings with groupmates to discuss ideas to apply graph simulation on Google Meet,Whatsapp and Discord.