NIC CA2 Group Project Minutes

Group: Group M

Members: Hugo Hewitt, King Lok Lam, Yifeng Wang, Daji Liang, Usama Sajjad Ahmed, Priyanka Naithani

Minutes:

Date	Discussion	Attendees
26/11/2023 Online meeting at 11:30	-Introductions, getting to know each other -Discuss the problem -Understand what is needed -Create GitHub and setup basic workspace -Next meetings decided: -Online meeting 28/11/2023 at 18:00 -In person meeting Innovation Café starting at 15:30 to 16:00	Hugo Hewitt, King Lok Lam, Yifeng Wang, Daji Liang, Usama Ahmed, Priyanka Naithani
28/11/2023 Online meeting at 18:00	-Discussed how to progress -Research into different algorithms -Algorithm suggestions	Hugo Hewitt, King Lok Lam, Yifeng Wang, Daji Liang, Usama Ahmed, Priyanka Naithani
30/11/2023 In person meeting in the Innovation centre at 16:00	-Discussed the possible options for algorithms -Discussed what we have done, including some coding by Lam and some research into methods by Usama	Hugo Hewitt, King Lok Lam, Yifeng Wang, Daji Liang, Usama Ahmed
05/12/2023 In person meeting in the Washington Singer building at 13:30	-Different approaches discussed -Discussion about the Implement NSGA-II -Compare algorithms, research at least 3 others -Write background of TTP(Travelling Thief Problem) -Discussion about experiments to improve algorithm Task Delegation: Ahmed -> Intro and Traveling Thief problem description. Daji, Priyanka, Yifeng, Usama -> Comparison of other techniques (NSGA-II, ACO, greedy, particle swarm, MOEA/D) Hugo, Lucas -> Writing NSGA-II implementation (Hugo: Knapsack, Lucas: TSP) Next meetings decided:	Hugo Hewitt, King Lok Lam, Yifeng Wang, Daji Liang, Usama Ahmed, Priyanka Naithani

	-Online meeting 07/12/2023 at 15:00 -Sunday to finish the coursework off.	
07/12/2023 Online meeting at 15:00	-Questions about the delegation of the task. And assigning the experiments: -Priyanka, Daji and Usama -> Experimentation on the algorithm, finding a local heuristic algorithm -Usama finished Abstract and Introduction and TTP description. -Lam brought up that for the TSP part of the algorithm, on the largest dataset creating a distance matrix was computationally impossible. Suggested a heuristic algorithm to use instead; 3-opt. -Hugo showed the code for the KNP part of the system, even works on the largest dataset due to the different computational complexity to TSP. -Discussion to make sure all were doing different algorithms. Next meeting decided when and what time to meet on Sunday, 13:00 by the library.	Hugo Hewitt, King Lok Lam, Yifeng Wang, Daji Liang, Usama Ahmed, Priyanka Naithani
10/12/2023 In person meeting in a study room From 13:00	-Group work to continue progress on the project. -Time complexity of the big dataset discussed, takes too long to run with the code. -> Lucas -Discussion of group and individual report submission contents and format. -Discussion of the marking criteria and specification. -Working more on the nsga and 3-opt algorithm (Hugo, Lam) -Collaborating research on the overleaf document (Daji, Priyanka, Yifeng) -Writing problem task breakdown (Hugo)	Hugo Hewitt, King Lok Lam, Yifeng Wang, Daji Liang, Usama Ahmed, Priyanka Naithani

Signed:

Hugo Hewitt,

Usama Sajjad Ahmed,

Priyanka Naithani,

Daji Liang,

Yifeng Wang,

King Lok Lam