**Personal Report**

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| **Name:** | Jnana Gayathri Penumetcha |
| **Project:** | Project 2 – Emergency Vehicle Dispatching System |

**Write down each group member’s contributions in the project, including yourself:**

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| **Team Member** | **Contributions** |
| Jnana Gayathri Penumetcha –  ID :16241948 | 1. Designing of the Idea and workflow for the approach towards the project.  2. Data –Building the distance File that contains the distance between two zip codes.  3. Implementation – Dijkstra’s algorithm to check for shortest path based on the distance file. This shortest path to check on vehicle availability in the nearest zip code. Integrating the algorithm such that it is triggered when there is appropriate availability.  4. Testing – Unit testing on implemented part.  5. Documentation – Assumptions, Time Complexity analysis  6. Integrated Testing |
| Sujitha Puthana –  ID : 16233500 | 1. Designing Idea and workflow for the project  2. Data – The request text file that can accept the requests from user.  3. Implementation - Implemented if vehicle is again available updating the emergency vehicle availability to 1 so that again the vehicle can be allocated.  4. Testing – Unit testing on implemented part.  5. Documentation – Brief idea, Time Complexity analysis  6. Integrated Testing |
| Manvitha Vaduguru - 16239074 | 1. Designing Idea and workflow for the project.  2. Data - Request Complete file to update the vehicle id once the request is processed/completed.  3. Implementation – processing of multiple request handling using threads. Integration of Dijkstra's algorithm for undirected graph.  4. Testing – Unit testing on implemented part.  5. Documentation – Assumptions, Time Complexity analysis  6. Integrated Testing |
| Megha Nagabhushan - 16226858 | 1. Designing Idea and workflow  2. Data – Emergency Vehicle file which contains data about vehicles available in zip code  3. Implementation - Implemented the allocation of requested vehicle if available and make the availability of vehicle to “0”. If available, then allocate and count is decremented. Else use the Dijkstra’s algorithm for nearest zip code and check availability.  4. Testing – Unit testing on implemented part.  5. Documentation - Brief idea, Time Complexity analysis  6. Integrated Testing |

**Write down what you learned:**

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| 1.Understanding different ways of approach to complete the project satisfying the requirements |
| 2. Implementation of the shortest path algorithm. |
| 3. Time complexity of the project. |
| 4. How to use data structures and analyzing the better one. |
| 5.Implementation of a real world scenario. |

**Feedback about the project (comments, suggestions for improvement, etc.)**

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| 1. A Good chance to explore many concepts for the completion of the project. |
| 2. |
| 3. |
| 4. |
| 5. |