**Semester Project Documentation** (DSA – CS – 221)

*(You are required to follow the mentioned font size and style for the documentation. In this document heading are of 14 font size while regular text is of 12 font size, while the font style is “Times New Roman”)*

**Semester Project Title**: Vehicle Traffic Management System

**Student Details**

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|  | **Student Name** | **Student Reg #** | **Student Degree** |
| **Student-1** | Zain Wajid | 2023775 | BSDS |

1. **Main Features**
   1. Simulating Vehicle movement through a city
   2. Ability to control and direct traffic through Junctions
   3. Two modes of operation
2. **Types of Users & Requirements**
3. Admin/User
   1. Will be able to generate road maps
   2. Will be able to direct traffic flow
   3. Will be able to control traffic lights
   4. Will be able to load and save created maps
4. **Requirements Breakdown**
5. Admin Login
   1. Showing front screen to user and asking to login previous account or create a new one
   2. Load data saved for that account
6. **Features to Codding Matrix**

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| **Sr**  **#** | **Feature Name** | **DSA Concept Used** | **Operation Performed** | **Complexity**  **Analysis (Approximate)** | **No. of Variables & Objects Created** | **Functions Created** | **Line of Code Written** |
| 1 | Vehicle | Hashmap +  Class | Operator Overloading+ |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
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1. **Project Screenshots**