Software Requirement Specifications

Project TrAn-SiSS

**Title** : Traffic Analyzers and Signal System Simulator ( TrAn-SiSS )

**Description** :

TrAn-SiSS allows to design and simulate vehicle traffic for a given map design. {The user can design a road network in the form of a graph.} The intersection/junctions of the roads will act as the nodes of the graph network. The roads between each junction(node) of the graph will be the edges of the graph. Each road will be implemented as a queue data structure with a specified length(capacity of vehicles). At each node there will be a traffic signal with a traffic light corresponding to each road directed to that junction(node). The traffic light will operate using an analyser which will determine the switching of the traffic signal light.

**User and Use Cases** :

The user in this software

1. **Administrator** : User who can add/modify/delete map designs and also add/delete users. Also the administrator can change the access criteria of each user.
2. **Standard Users** : These users can simulate the vehicle movement in the map and view the different pattern of vehicle traffic created on the map.