#### Assignment: SE\_WEEK12 Simulation Engineering

#### **Code Desgin & Verification**

for code design and verification we follow every functional and no-functional requirement and write the code in following below state diagram.

#### **Requirments:**

- 4 functional min.
- 2 non-functional min.
- Conceptual model
- Informal UML diagram structural or behavioural
- Explain it in the document

### **Functional Requirements:**

```
Add_car //for adding car in queue

Turn_green //for turning lights to green after 30 seconds for time latency.

Turn_red //for turning lights to red after 10 seconds for passage time.

Remove car //for removing car from queue.
```

# **Non-Functional Requirements:**

Total\_time //for each car total time with waiting time should lead to better performance.

Events\_Check //for each, events should be called in correct manner for better consistency and accuracy.

## **Conceptual Model: Behavioural Model: State Diagram**

