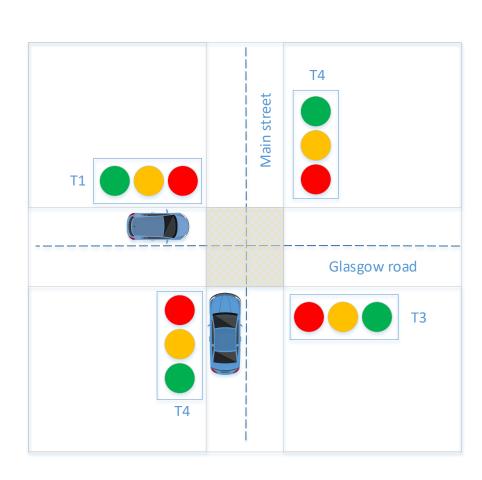
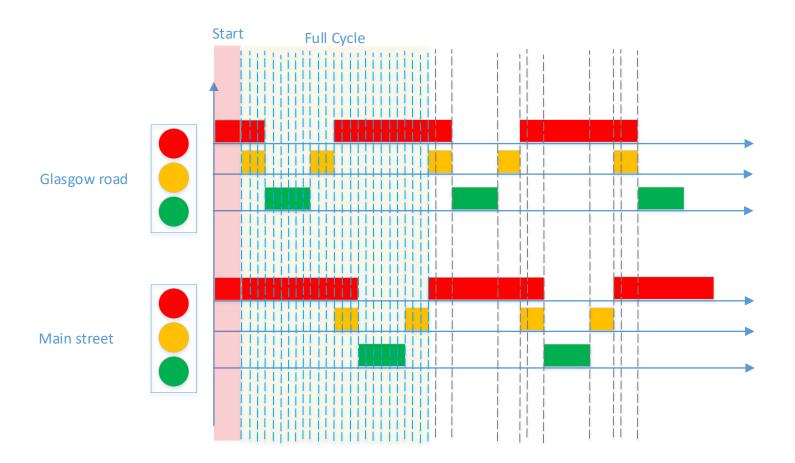


Logical Diagram

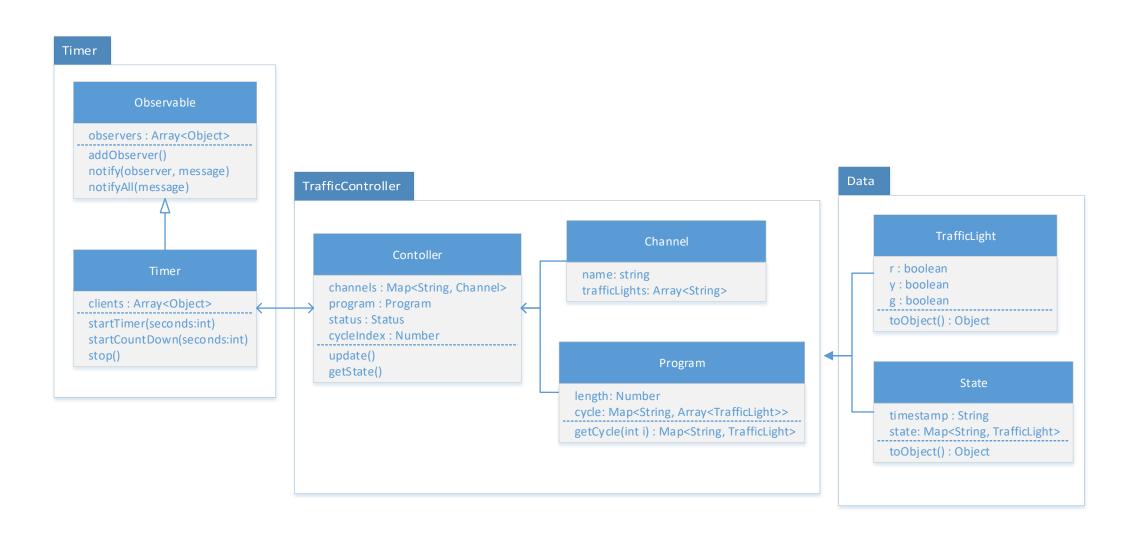




Working Diagram



Working Diagram (Excel Formatted)

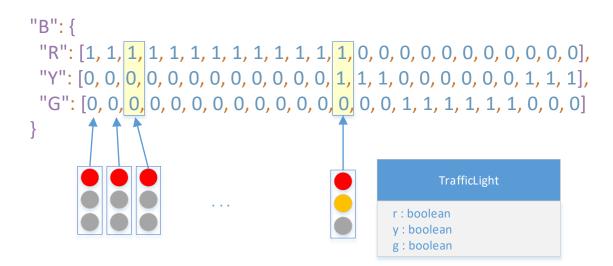


UML Class Diagram

Program

length: Number

cycle: Map<String, Array<TrafficLight>>



Traffic Lights config.json

```
"channels": [
      "name": "Glasgow Road",
      "trafficLights": ["T1", "T3"]
  },
{
      "name": "Main Street",
      "trafficLights": ["T2", "T4"]
"program": {
  "length": 1,
  "cycle": {
    "A": {
      "R": [1],
      "Y": [1],
      "G": [0]
    },
    "B": {
      "R": [1],
      "Y": [0],
      "G": [0]
```

Response example from GET /api/traffic-lights

```
"timestamp": "2022-02-15 11:10:55",
"state": {
 "T1": {
  "R": 1,
  "Y": 0,
  "G": 0
 "T2": {
  "R": 1,
  "Y": 0,
  "G": 0
 "T3": {
  "R": 1,
  "Y": 0,
  "G": 0
"T4": {
  "R": 1,
  "Y": 0,
  "G": 0
```