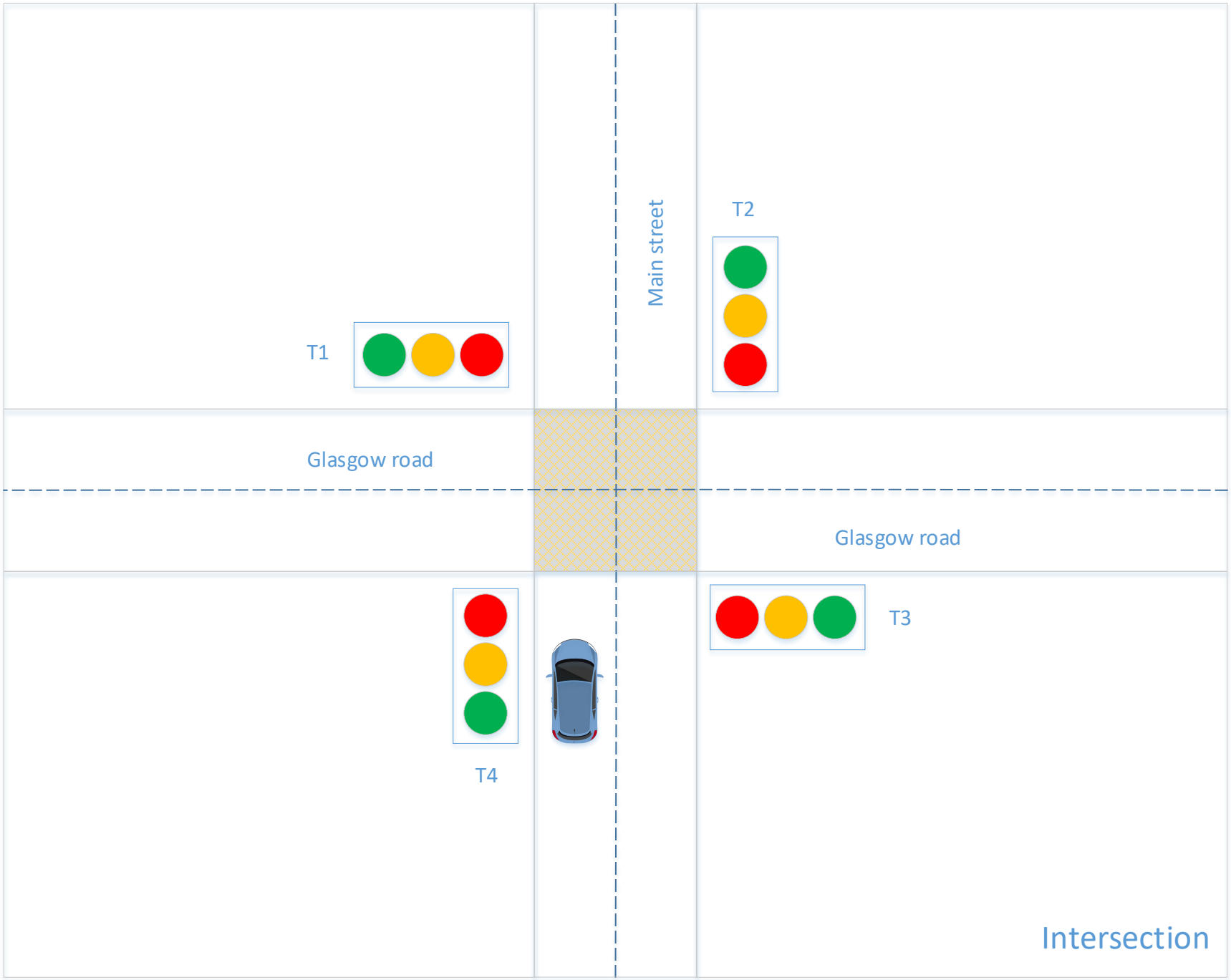
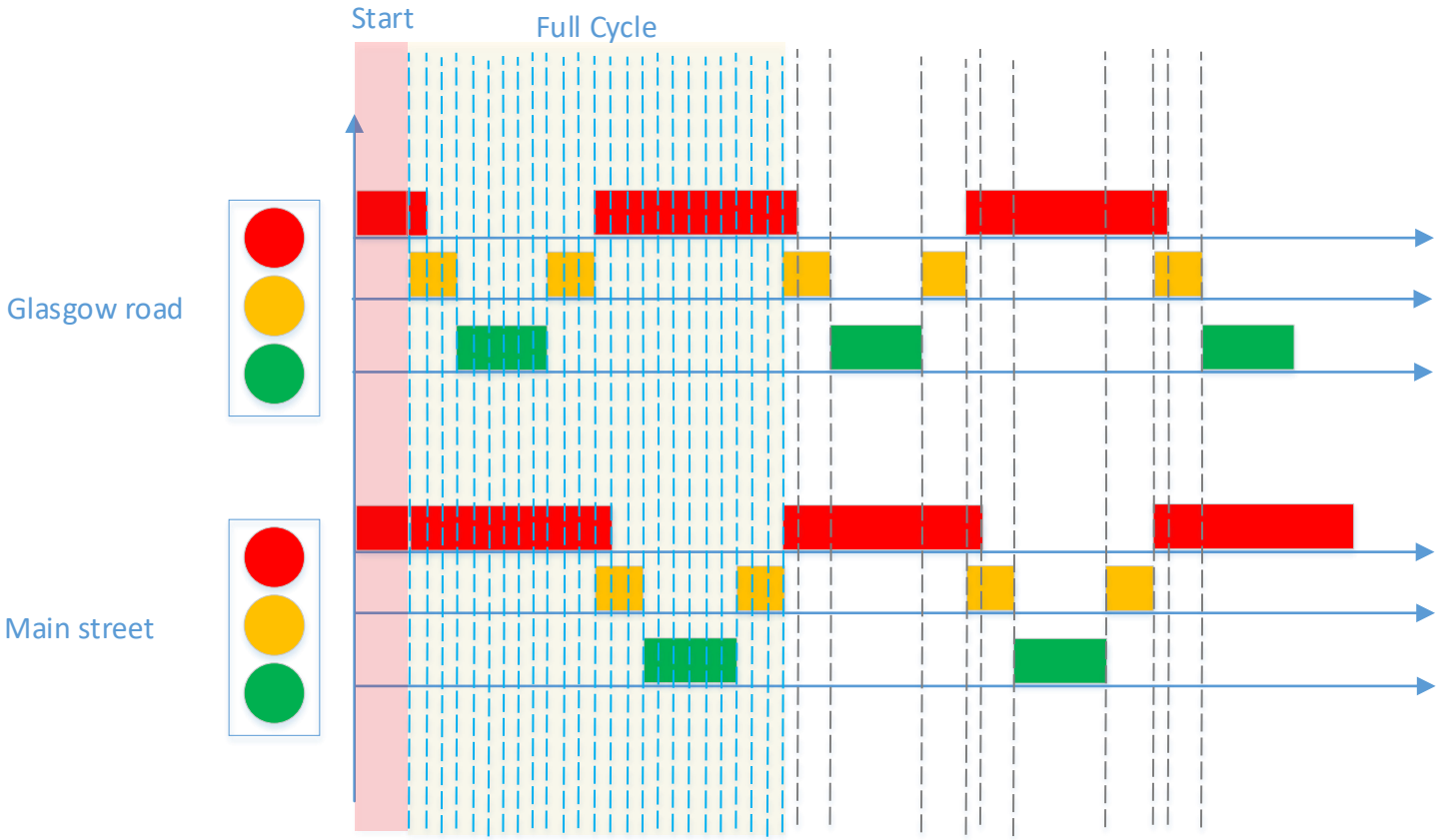
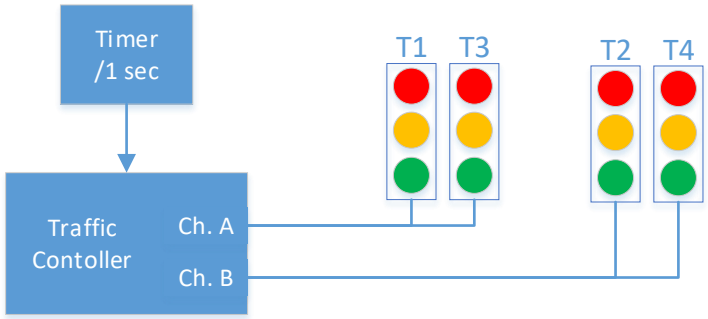
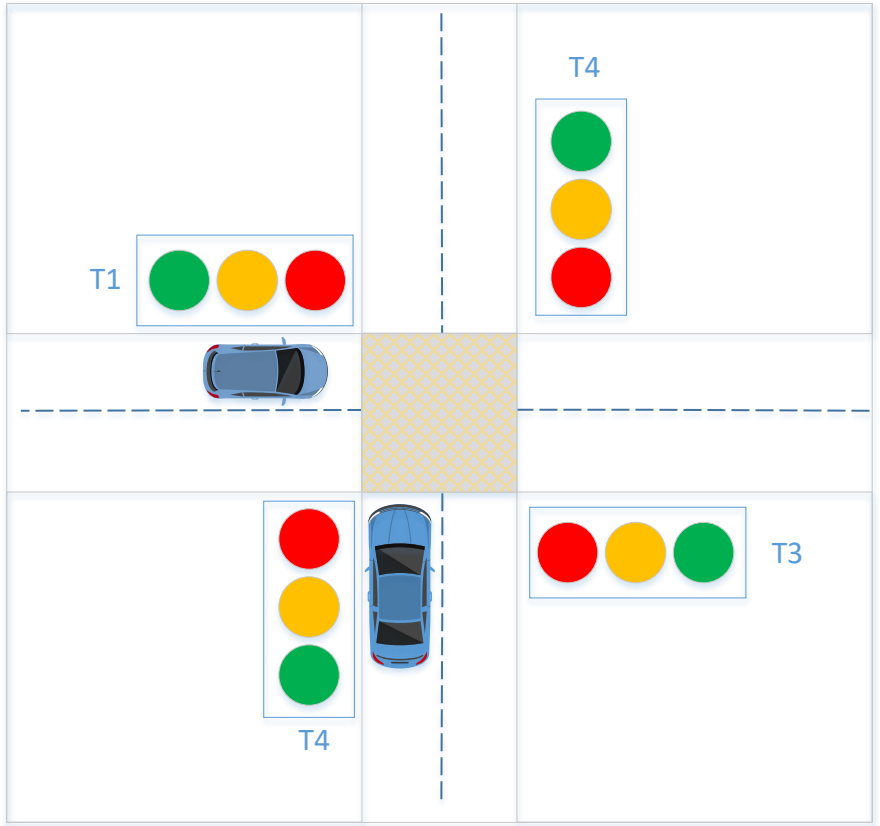
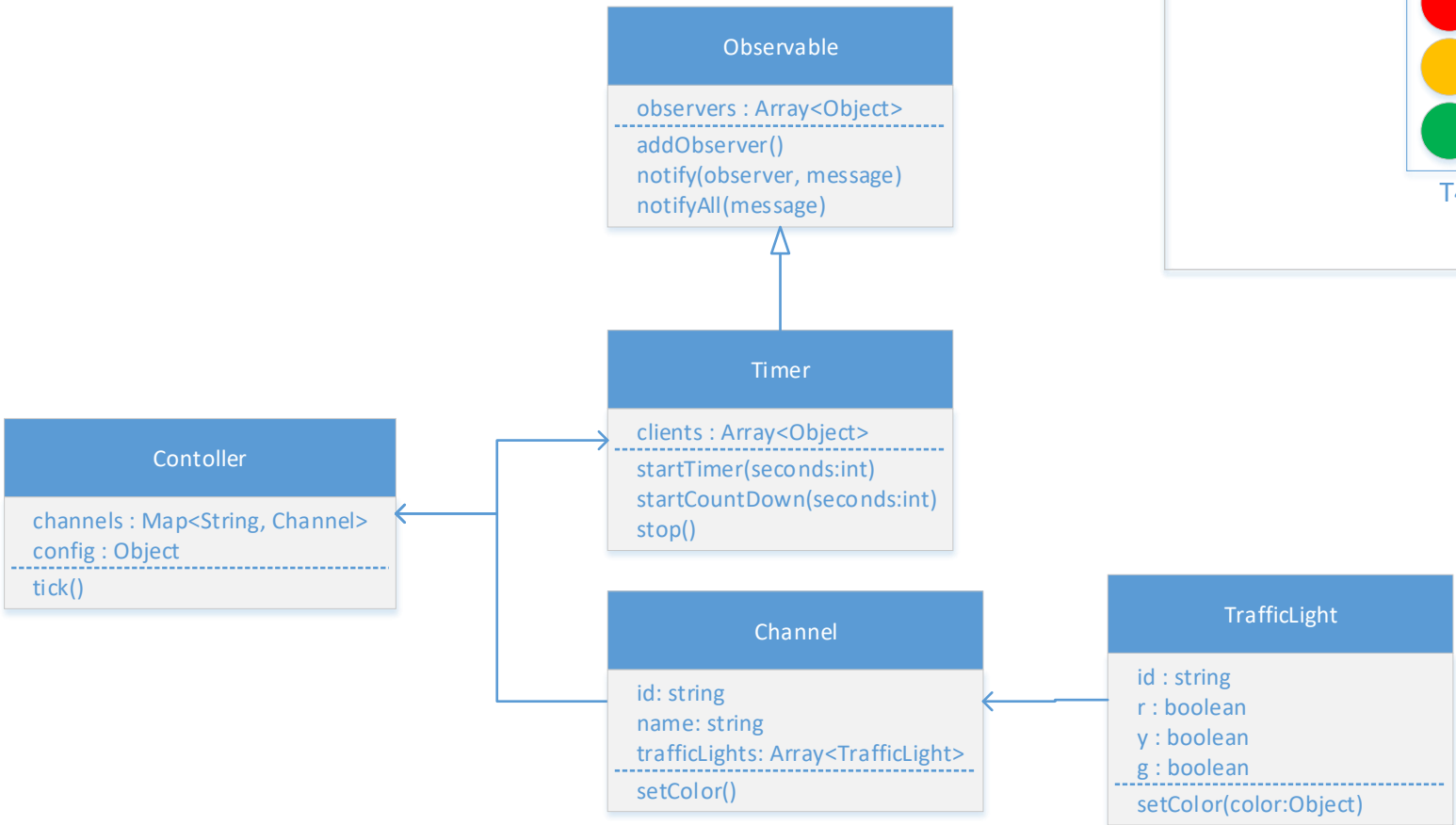

Main street
T2
T1
Glasgow road
Glasgow road
T3
T4
Intersection



Working Diagram


Timer
/1 sec
Traffic
Contoller
Ch. A
Ch. B
T1
T3
T2
T4


T4
T1
T3
T4


Observable
observers : Array<Object>
addObserver()
notify(observer, message)
notifyAll(message)
Timer
clients : Array<Object>
startTimer(seconds:int)
startCountDown(seconds:int)
stop()
Contoller
channels : Map<String, Channel>
config : Object
tick()
Channel
id: string
name: string
trafficLights: Array<TrafficLight>
setColor()
TrafficLight
id : string
r : boolean
y : boolean
g : boolean
setColor(color:Object)

Traffic Lights config.json

```
{
  "channels": [
    {
      "A": {
        "name": "Glasgow Road",
        "trafficLights": ["T1", "T3"]
      },
    },
    {
      "B": {
        "name": "Main Street",
        "trafficLights": ["T2", "T4"]
      }
    }
  ],
  "length": 24,
  "program": {
    "A": {
      "R": [1,],
      "Y": [1,],
      "G": [0,]
    },
    "B": {
      "R": [1,],
      "Y": [0,],
      "G": [0,]
    }
  }
}
```

response from GET /api/traffic-lights

```
{
  "trafficLights": [
    {
      "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},
    }
}
```