Traffic Lights Management System

Prepared for

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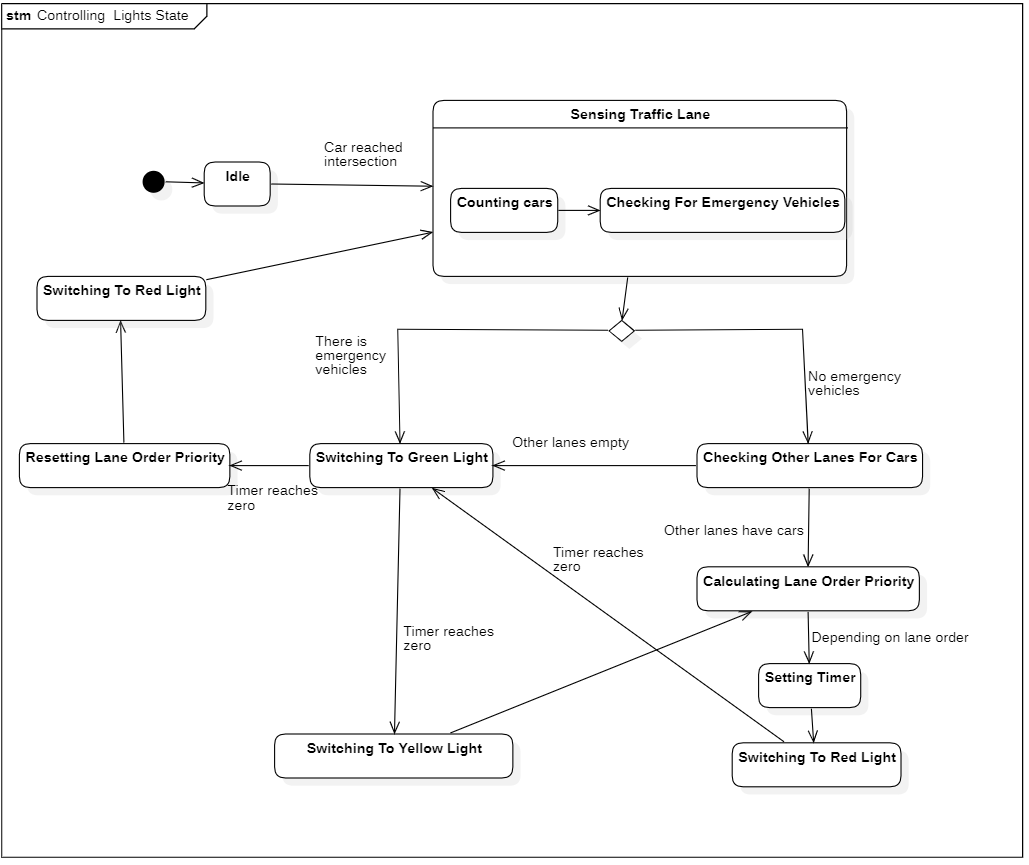
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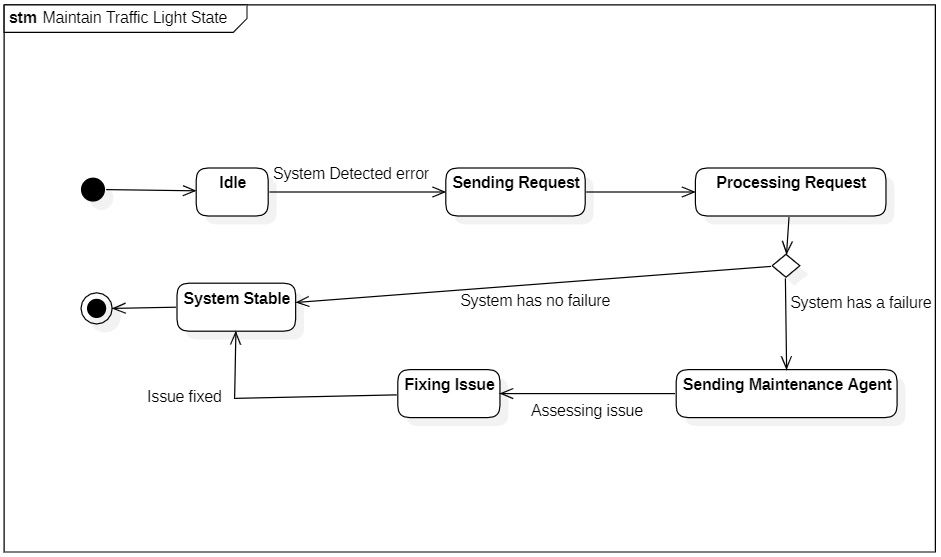
**State Machine Diagram, Control:**

**States:**

* **Idle**
* **Sensing Traffic Lane**
* **Counting Cars**
* **Checking For Emergency Vehicles**
* **Checking Other Lanes For Cars**
* **Switching to Green Light**
* **Switching to Yellow Light**
* **Switching to Red Light**
* **Calculating Lane Order Priority**
* **Setting Timer**
* **Resetting Lane Order Priority**

**Events/Triggers:**

* **Car reached intersection**
* **No emergency vehicles**
* **Other lanes have cars**
* **Depending on lane order**
* **timer reaches zero**
* **There is emergency vehicles**

**State Machine Diagram, Maintain:**

**States:**

* **Idle**
* **Sending Request**
* **Processing Request**
* **Sending Maintenance Agent**
* **Fixing issue**
* **System Stable**

**Events/Triggers:**

* **System detected error**
* **System has a failure**
* **System has no failure**
* **Assessing issue**
* **Issue fixed**