

Traffic Management System

Index.html:

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Traffic Management</title>

  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css" rel="stylesheet">

  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.bundle.min.js"></script>

  <link rel="stylesheet" href="./style.css">

  <script src="./script.js"></script>

</head>

<body>

  <div class="container-fluid text-center bg-danger" style="min-height:15vh;">

    <h2 class="text-white py-4 px-5 ">TRAFFIC MANAGEMENT SYSTEM</h2>

  </div>

  <div class="container">

    <h2 class="text-center mt-5">Traffic Light Simulation</h2><br><br>

    <div class="row mt-3">

      <div class="col-md-3"><h4>Lane 1</h4>

      <h5>Vehicle Count = <span id="ph-level">12</span></h5>

      <div id="traffic-light">

        <input type="radio" name="traffic-light-color" id="color1" value="color1" />

        <input type="radio" name="traffic-light-color" id="color2" value="color2" />

        <input type="radio" name="traffic-light-color" id="color3" value="color3" />

      </div>

    </div>

  </div>

</body>

</html>
```

</div>

<div class="col-md-3"><h4> Lane 2</h4>

<h5>Vehicle Count =42</h5>

<div id="traffic-light">

<input type="radio" name="traffic-light-color" id="color1" value="color1" />

<input type="radio" name="traffic-light-color" id="color2" value="color2"/>

<input type="radio" name="traffic-light-color" id="color3" value="colo3" />

</div>

</div>

<div class="col-md-3"><h4>Lane 3</h4>

<h5>Vehicle Count = 18</h5>

<div id="traffic-light">

<input type="radio" name="traffic-light-color" id="color1" value="color1" />

<input type="radio" name="traffic-light-color" id="color2" value="color2"/>

<input type="radio" name="traffic-light-color" id="color3" value="colo3" />

</div>

</div>

<div class="col-md-3"><h4>Lane 4</h4>

<h5>Vehicle Count = 1</h5>

<div id="traffic-light">

<input type="radio" name="traffic-light-color" id="color1" value="color1" />

Hi <input type="radio" name="traffic-light-color" id="color2" value="color2"/>

<input type="radio" name="traffic-light-color" id="color3" value="colo3" />

</div>

</div>

</div>

```
</div>
</body>
</html>
```

Style.css:

```
#traffic-light {
  Margin-left: 20px;
  Margin-top: 40px;
  Background-color:#333;
  Width:120px;
  Height:320px;
  Border-radius:30px;
}

Input {
  Appearance: none;
  Position: relative;
  Left: 50%;
  Width:80px;
  Height:80px;
  Margin-top: 30px;
  Margin-left:-40px;
  Background-color: grey;
  Border-radius: 100%;
  Display: block;
  &#color1 {
    Background-color: darken( #FF0000,15%);
    &:hover {
      Animation: blink1 1.1s step-end infinite;
    }
  }
}
```

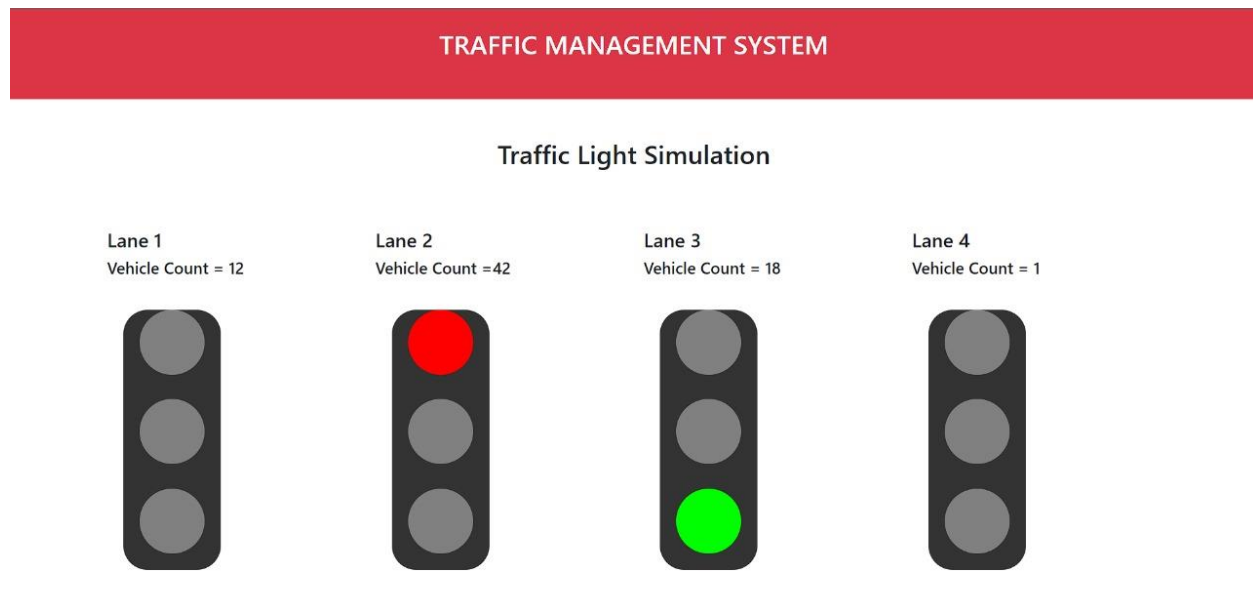
```
&:checked {  
    Background-color: #FF0000;  
    Box-shadow: 0 0 6em lighten( #FF0000,10%);  
}  
}  
&#color2 {  
    Background-color: darken(#FFFF00,15%);  
    &:hover {  
        Animation: blink2 1s step-end infinite;  
    }  
    &:checked {  
        Background-color: #FFFF00;  
        Box-shadow: 0 0 6em lighten(#FFFF00,10%);  
    }  
}  
&#color3 {  
    Background-color: darken(#00FF00,15%);  
    &:hover {  
        Animation: blink3 1s step-end infinite;  
    }  
    &:checked {  
        Background-color:#00FF00;  
        Box-shadow: 0 0 6em lighten(#00FF00,10%);  
    }  
}  
}  
@keyframes blink1 {  
    0% {  
        Background-color:#FF0000;
```

```
    Box-shadow: 0 0 6em lighten(#FF0000,10%);
}
50% {
    Background-color: darken(#FF0000,15%);
    Box-shadow: 0 0 0em transparent;
}
}
@keyframes blink2 {
    0% {
        Background-color: #FFFF00;
        Box-shadow: 0 0 6em lighten(#FFFF00,10%);
    }
    50% {
        Background-color: darken(#FFFF00,15%);
        Box-shadow: 0 0 0em transparent;
    }
}
@keyframes blink3 {
    0% {
        Background-color: #00FF00;
        Box-shadow: 0 0 6em lighten(#00FF00,10%);
    }
    50% {
        Background-color: darken(#00FF00,15%);
        Box-shadow: 0 0 0em transparent;
    }
}
```

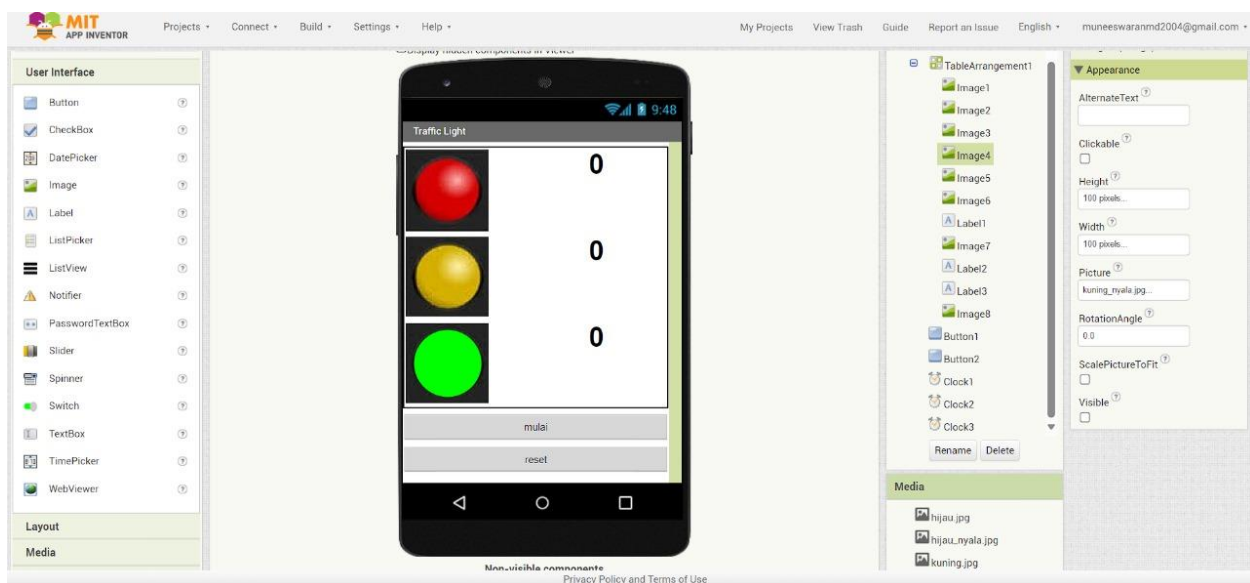
Script.js:

```
Function updateData() {  
  // Simulated data (replace with actual data retrieval logic)  
  
  Const pHValue = (Math.random() * 14).toFixed(2);  
  Const conductivityValue = (Math.random() * 50).toFixed(2);  
  Const temperatureValue = (Math.random() * 30).toFixed(2);  
  Const temperature1Value = (Math.random() * 30).toFixed(2);  
  
  // Update the HTML elements with the new data  
  
  Document.getElementById("pH-level").textContent = pHValue;  
  Document.getElementById("conductivity").textContent = conductivityValue;  
  Document.getElementById("temperature1").textContent = temperature1Value;  
  Document.getElementById("temperature").textContent = temperature1Value;  
}  
  
// Poll for updates every 5 seconds (adjust as needed)  
setInterval(updateData, 11000);
```

Output:



Mobile Application:



when Screen1 -> Initialize

do

set global start to false

set global merah to 10

set global kuning to 5

set global hijau to 10

when Button1 -> Click

do

set Clock1 -> TimerEnabled to false

set Clock2 -> TimerEnabled to false

set Clock3 -> TimerEnabled to false

set Label1 -> Visible to true

set global start to true

call lampu_merah

to lampu_merah

do

set global merah to 10

set Label1 -> Text to get global merah

set Image1 -> Visible to false

set Image2 -> Visible to true

set Image7 -> Visible to true

set Clock1 -> TimerEnabled to true

to lampu_kuning

do

set global kuning to 5

set Image3 -> Visible to false

set Image4 -> Visible to true

set Label2 -> Text to get global kuning

set Clock2 -> TimerEnabled to true

to hijau

do

set global hijau to 10

set Image5 -> Visible to false

set Image6 -> Visible to true

set Image8 -> Visible to true

set Label3 -> Text to get global hijau

set Clock3 -> TimerEnabled to true

initialize global m1 to 0

initialize global k1 to 0

initialize global h1 to 0

initialize global merah1 to 10

initialize global start to false

initialize global hijau1 to 10

Show Warnings

Viewer

when Clock1 -> Timer

do

if get global start = true and get global merah > 0

then

set global merah to get global merah - 1

if get global merah > 0

then

set Label1 -> Text to get global merah

set Image1 -> Visible to true

set Image2 -> Visible to false

set Image7 -> Visible to false

if get global k1 = 1

then

call lampu_kuning

set global k1 to 0

set Label1 -> Visible to false

set Label2 -> Visible to true

else

call lampu_kuning

set Label1 -> Visible to false

set Label2 -> Visible to true

when Clock2 -> Timer

do

if get global start = true and get global kuning > 0

then

set global kuning to get global kuning - 1

if get global kuning > 0

then

set Label2 -> Text to get global kuning

set Image3 -> Visible to true

set Image4 -> Visible to false

if get global h1 = 1

then

call lampu_merah

set global h1 to 0

set Label2 -> Visible to true

set Label3 -> Visible to false

else

call lampu_merah

set Label2 -> Visible to false

set Label3 -> Visible to true

when Button2 -> Click

do

set global merah to 10

set global start to false

set Image1 -> Visible to true

set Image2 -> Visible to false

set Image3 -> Visible to true

set Image4 -> Visible to false

set Image5 -> Visible to true

set Image6 -> Visible to false

set Image7 -> Visible to false

set Image8 -> Visible to true

set Label1 -> Text to 0

set Label2 -> Text to 0

set Label3 -> Text to 0

set Label1 -> Visible to true

set Label2 -> Visible to true

set Label3 -> Visible to true

Show Warnings