

# PUBLIC TRANSPORT OPTIMIZATION

## HTML code :

```
<!DOCTYPE html>

<html>

<head>

<title>Public Transport Optimization Project</title>

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

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

</head>

<body>

<h1>Public Transport Optimization Project</h1>


<div id="map"></div>


<div id="results">

<h2>Results</h2>

<ul id="routes"></ul>

</div>
```

```
</body>
```

```
</html>
```

CSS code :

```
body {  
    font-family: sans-serif;  
}
```

```
#map {  
    width: 100%;  
    height: 400px;  
}
```

```
#results {  
    margin-top: 20px;  
}
```

```
ul {  
    list-style-type: none;
```

```
padding: 0;  
}
```

```
li {  
    margin-bottom: 10px;  
}
```

### **JAVASCRIPT code :**

```
var map = new  
google.maps.Map(document.getElementById('map'), {  
    zoom: 13,  
    center: {lat: 40.7128, lng: -74.0059}  
});  
  
var directionsService = new google.maps.DirectionsService();  
  
var directionsRenderer = new  
google.maps.DirectionsRenderer({  
    map: map  
});  
  
function calculateRoute(origin, destination) {  
    var request = {
```

```
    origin: origin,  
    destination: destination,  
    travelMode: google.maps.TravelMode.TRANSIT  
};  
directionsService.route(request, function(response, status) {  
    if (status === google.maps.DirectionsStatus.OK) {  
        directionsRenderer.setDirections(response);  
  
        updateResultsList(response);  
    } else {  
  
    }  
});  
}
```

```
function updateResultsList(response) {  
    var routesList = document.getElementById('routes');
```

```
routesList.innerHTML = '';
```

```
for (var i = 0; i < response.routes.length; i++) {
```

```
    var route = response.routes[i];
```

```
    var listItem = document.createElement('li');
```

```
    listItem.innerHTML = '<b>Route ' + (i + 1) + ':</b> ' +  
route.summary;
```

```
    routesList.appendChild(listItem);
```

```
}
```

```
}
```

```
map.addListener('click', function(event) {
```

```
    var clickedLocation = event.latLng;
```

```
    calculateRoute(new google.maps.LatLng(map.getCenter().lat(),  
map.getCenter().lng()), clickedLocation);  
});
```