# PUBLIC TRANSPORTOPTIMAIZATION

**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);

});