

```
<!DOCTYPE html>
<html>
  <head>
    <!-- Include Google Maps JS API -->
    <script type="text/javascript"
      src="https://maps.googleapis.com/maps/api/js?">
    </script>
    <style type="text/css">
      #mapDiv { width: 800px; height: 500px; }
    </style>
    <!-- Memulai membuat Map -->
    <script type="text/javascript">
      //Mendefinisikan global variabel map
      //dalam mengakses fungsi tertentu
      var map;

      //--- START ADDING LINES ---
      var lineCoordinates = [
        [41.01306,29.14672],[40.8096,29.4818],
        [40.7971,29.9761],[40.7181,30.4980],
        [40.8429,31.0253],[40.7430,31.6241],
        [40.7472,32.1899],[39.9097,32.8216]
      ];

      function addPolyline () {
        //Pertama kita tentukan letak dawi koordinat awal
        // koordinat tersebut mengincludkan objek dari LatLng class.
        var pointCount = lineCoordinates.length;
        var linePath = [];
        for (var i=0; i < pointCount; i++) {
          var tempLatLng = new google.maps.LatLng(lineCoordinates[i][0],
lineCoordinates[i][1]);
          linePath.push(tempLatLng);
        }

        //Mendefenisikan properties polyline
        var lineOptions = {
          path: linePath,
          strokeWeight: 7,
          strokeColor: '#FF0000',
          strokeOpacity: 0.8
        }
        var polyline = new google.maps.Polyline(lineOptions);

        //Menerapkan polyline ke peta
        polyline.setMap(map);
      }
      //--- END ADDING LINES ---

      //--- START ADDING POLYGON ---
      var polygonOptions = {
        paths: linePath,
        strokeColor: '#FF0000',
        strokeOpacity: 0.9,
        strokeWeight: 3,
        fillColor: '#FFFF00',
        fillOpacity: 0.25
      }

      var polygon = new google.maps.Polygon(polygonOptions);

      //Polygon is set to current map.
      polygon.setMap(map);
    }
    //--- END ADDING POLYGON ---

    //--- START ADDING MARKER ---
    //Mendefinisikan langtitude terkecil dan terbesar
    //yang akan diberi marker secara random
    var minLat = 36,
        maxLat = 42,
        minLng = 25,
        maxLng = 44,
        markerId = 1;
    //--- ADDING MARKER ---

    function initMap () {
      //Pemetaan pada peta
      google.maps.visualRefresh = true;

      //Mengatur optional pada map
      var mapOptions = {
        center: new google.maps.LatLng(39.9078, 32.8252),
        zoom: 10,
        mapTypeId: google.maps.MapTypeId.ROADMAP
      };

      //Mengambil elemen DOM pada map
      var mapElement = document.getElementById('mapDiv');

      //Mengaitkan map dengan elemen DOM
      map = new google.maps.Map(mapElement, mapOptions);

      //--- MEMANGGIL FUNGSI addPolygon
      addPolygon();
      //--- MEMANGGIL FUNSI addPolyline ---
      addPolyline();
      //--- MEMANGGIL FUNGSI startButtonEvents ---
      startButtonEvents();
    }

    //--- LANJUTAN ADDING MARKER ---
    //Fungsi ini menginisialisasikan event click pada button
    function startButtonEvents() {
      document.getElementById('addStandardMarker').addEventListener('click',
function(){
      addStandardMarker();
    });

    document.getElementById('addIconMarker').addEventListener('click',
function(){
      addIconMarker();
    });
  }

  function createRandomLatLng() {
    var deltaLat = maxLat - minLat;
    var deltaLng = maxLng - minLng;
    var rndNumLat = Math.random();
    var newLat = minLat + rndNumLat * deltaLat;
    var rndNumLng = Math.random();
    var newLng = minLng + rndNumLng * deltaLng;
    return new google.maps.LatLng(newLat, newLng);
  }

  function addStandardMarker() {
    var coordinate = createRandomLatLng();
    var marker = new google.maps.Marker({
      position: coordinate,
      map: map,
      title: 'Random Marker - ' + markerId
    });
    markerId++;
  }
  //Menambahkan marker icon secara random
  function addIconMarker() {
    var markerIcons = ['coffee', 'restaurant_fish', 'walkingtour', 'postal',
'airport'];
    var rndMarkerId = Math.floor(Math.random() * markerIcons.length);
    var coordinate = createRandomLatLng();
    var marker = new google.maps.Marker({
      position: coordinate,
      map: map,
      icon: 'img/' + markerIcons[rndMarkerId] + '.png',
      title: 'Random Marker - ' + markerId
    });
    markerId++;
  }
  //--- END ADDING MARKER ---
  google.maps.event.addDomListener(window, 'load', initMap);
</script>
</head>
<body>
  <b>Chapter 1 - My First Map </b>
  <div id="mapDiv"></div>
</body>
</html>
```

1.tugas

```
<html><head><title>MAP FKI UMS</title>
  <script type="text/javascript"
src="http://maps.google.com/maps/api/js"></script>
  <script type="text/javascript">
(function() {
  window.onload = function() {
    //google maps GIS by Bangkit Sanyoto //dibuat tanggal 8 Maret 2016// membuat
map berdasarkan div id untuk map
    var mapDiv = document.getElementById('map');
    // penentuan longitude
    var latlng = new google.maps.LatLng(-7.556883, 110.771115);
    // konfigurasi untuk maps api
    var options = {
      center: latlng,
      zoom: 18,
      mapTypeId: google.maps.MapTypeId.ROADMAP
    };
    // membuat imagenya berdasarkan divnya
    var map = new google.maps.Map(mapDiv, options);
  }
})();
</script>
<style type="text/css">
body {
  font-family: Verdana, Geneva, Arial, Helvetica, sans-serif;
  font-size: small;
  background: #fff;
}
#map {
  width: 100%;
  height: 500px;
  border: 1px solid #000;
}
</style>
</head><body>
  <h1>MAP FKI UMS</h1>
  <div id="map"></div>
</body>
</html>
```