Geolocation

It's an API used to get the Geographic location of the user.

It's supported by all major browsers.

navigator.geolocation is the object used to get the current position.

navigator.geolocation.getCurrentPosition() method returns the object using which we can get the user's position.

Properties of object returned by getCurrentPosition()

Property	Description
coords.latitude	The latitude as a decimal number
coords.longitude	The longitude as a decimal number
coords.accuracy	The accuracy of position
coords.altitude	The altitude in meters above the mean sea level
coords.altitudeAccuracy	The altitude accuracy of position
coords.heading	The heading as degrees clockwise from North
coords.speed	The speed in meters per second
timestamp	The date/time of the response

https://developers.google.com/maps/documentation/staticmaps/

Example:

```
<!DOCTYPE html>
<html lang="en" xmlns="http://www.w3.org/1999/xhtml">
<head>
  <meta charset="utf-8" />
  <title></title>
  <script>
    var x;
    function getLocation() {
      x = document.getElementById("demo");
      if (navigator.geolocation)
        navigator.geolocation.getCurrentPosition(showPosition, showError);
      else
        x.innerHTML = "Geolocation is not supported by this browser.";
    }
    function showPosition(position) {
```

```
        x.innerHTML = "Latitude: " + position.coords.latitude + "<br>Longitude: " + position.coords.longitude;

        var latlon = position.coords.latitude + "," + position.coords.longitude;


        var img_url =
"http://maps.googleapis.com/maps/api/staticmap?center="+latlon+"&zoom=14&size=400x300&sensor=false";


        document.getElementById("mapholder").innerHTML = "<img src='"+img_url+"'>";
    }
    function showError(error) {
      switch (error.code) {
        case error.PERMISSION_DENIED:
          x.innerHTML = "User denied the request for Geolocation."
          break;
        case error.POSITION_UNAVAILABLE:
          x.innerHTML = "Location information is unavailable."
          break;
        case error.TIMEOUT:
          x.innerHTML = "The request to get user location timed out."
          break;
        case error.UNKNOWN_ERROR:
          x.innerHTML = "An unknown error occurred."
          break;
      }
    }
  </script>
</head>
<body>
  <p id="demo">Click the button to get your co-ordinates:</p>
  <button onclick="getLocation()">Try It</button>
  <div id="mapholder"></div>
</body>
</html>
```

Geolocation object Methods:

- watchPosition() - Returns the current position of the user and continues to return updated position as the user moves (like the GPS in a car).
- clearWatch() - Stops the watchPosition() method.

```html
<!DOCTYPE html>
<html>
<body>
  <p id="demo">Click the button to get your coordinates:</p>
  <button onclick="getLocation()">Try It</button>
  <script>
    var x = document.getElementById("demo");
    function getLocation() {
      if (navigator.geolocation) {
        navigator.geolocation.watchPosition(showPosition);
      }
      else { x.innerHTML = "Geolocation is not supported by this browser."; }
    }
    function showPosition(position) {
      x.innerHTML = "Latitude: " + position.coords.latitude +
      "<br>Longitude: " + position.coords.longitude;
    }
  </script>
</body>
</html>
```