Geolocation is used for getting info about device's latitude and longitude.

Step 1 - Installing Plugin

We can install this plugin by typing the following code to **command prompt** window.

```
C:\Users\username\Desktop\CordovaProject>cordova plugin add
cordova-plugin-geolocation
```

Step 2 - Add Buttons

In this tutorial we will show you how to get current position and how to watch for changes. We first need to create buttons that will call these functions.

```html
<button id = "getPosition">CURRENT POSITION</button>
<button id = "watchPosition">WATCH POSITION</button>
```

Step 3 - Add Event Listeners

Now we want to add event listeners when the device is ready. We will add the code sample below to **onDeviceReady** function in **index.js**.

```javascript
document.getElementById("getPosition").addEventListener("click",
getPosition);
document.getElementById("watchPosition").addEventListener("click",
watchPosition);
```

Step 3 - Create Functions

Two functions have to be created for two event listeners. One will be used for getting the current position and the other for watching the position.

```javascript
function getPosition() {
    var options = {
        enableHighAccuracy: true,
        maximumAge: 3600000
    }
    var watchID =
navigator.geolocation.getCurrentPosition(onSuccess, onError,
options);

    function onSuccess(position) {
        alert('Latitude: '          + position.coords.latitude
+ '\n' +
            'Longitude: '          + position.coords.longitude
+ '\n' +
            'Altitude: '           + position.coords.altitude
+ '\n' +
            'Accuracy: '           + position.coords.accuracy
+ '\n' +
            'Altitude Accuracy: ' + position.coords.altitudeAccuracy
+ '\n' +
            'Heading: '            + position.coords.heading
+ '\n' +
            'Speed: '              + position.coords.speed
+ '\n' +
            'Timestamp: '          + position.timestamp
+ '\n');
    };

    function onError(error) {
        alert('code: '    + error.code    + '\n' + 'message: ' +
error.message + '\n');
    }
}

function watchPosition() {
    var options = {
        maximumAge: 3600000,
        timeout: 3000,
        enableHighAccuracy: true,
    }
    var watchID = navigator.geolocation.watchPosition(onSuccess,
onError, options);

    function onSuccess(position) {
```

```
    alert('Latitude: '          + position.coords.latitude
+ '\n' +
       'Longitude: '         + position.coords.longitude
+ '\n' +
       'Altitude: '          + position.coords.altitude
+ '\n' +
       'Accuracy: '          + position.coords.accuracy
+ '\n' +
       'Altitude Accuracy: ' + position.coords.altitudeAccuracy
+ '\n' +
       'Heading: '           + position.coords.heading
+ '\n' +
       'Speed: '             + position.coords.speed
+ '\n' +
       'Timestamp: '         + position.timestamp
+ '\n');
    };

    function onError(error) {
      alert('code: '    + error.code    + '\n' +'message: ' +
error.message + '\n');
    }
}
```

In example above we are using two methods – **getCurrentPosition** and **watchPosition**. Both functions are using three parameters. Once we click **CURRENT POSITION** button, the alert will show geolocation values.

If we click **WATCH POSITION** button, the same alert will be triggered every three seconds. This way we can track movement changes of the user's device.

NOTE:-

This plugin is using GPS. Sometimes it can't return the values on time and the request will return timeout error. This is why we specified **enableHighAccuracy: true** and **maximumAge: 3600000.** This means that if a request isn't completed on time, we will use the last known value instead. In our example, we are setting maximumAge to 3600000 milliseconds.

Write index.js file:-

```javascript
function onLoad() {

    document.addEventListener("deviceready", onDeviceReady, false);

}


function onDeviceReady() {

    document.getElementById("getPosition").addEventListener("click", getPosition);

document.getElementById("watchPosition").addEventListener("click", watchPosition);

}



function getPosition() {

  var options = {

    enableHighAccuracy: true,

    maximumAge: 3600000

  }

  var watchID = navigator.geolocation.getCurrentPosition(onSuccess, onError, options);


  function onSuccess(position) {

    alert('Latitude: '        + position.coords.latitude         + '\n' +

      'Longitude: '        + position.coords.longitude       + '\n' +

      'Altitude: '        + position.coords.altitude        + '\n' +

      'Accuracy: '        + position.coords.accuracy         + '\n' +

      'Altitude Accuracy: ' + position.coords.altitudeAccuracy  + '\n' +

      'Heading: '        + position.coords.heading         + '\n' +

      'Speed: '        + position.coords.speed         + '\n' +

      'Timestamp: '        + position.timestamp            + '\n');
```

```javascript
  };

  function onError(error) {
    alert('code: '   + error.code   + '\n' + 'message: ' + error.message + '\n');
  }
}

function watchPosition() {
  var options = {
    maximumAge: 3600000,
    timeout: 3000,
    enableHighAccuracy: true,
  }
  var watchID = navigator.geolocation.watchPosition(onSuccess, onError, options);

  function onSuccess(position) {
    alert('Latitude: '       + position.coords.latitude        + '\n' +
      'Longitude: '       + position.coords.longitude        + '\n' +
      'Altitude: '       + position.coords.altitude        + '\n' +
      'Accuracy: '       + position.coords.accuracy        + '\n' +
      'Altitude Accuracy: ' + position.coords.altitudeAccuracy  + '\n' +
      'Heading: '       + position.coords.heading        + '\n' +
      'Speed: '        + position.coords.speed          + '\n' +
      'Timestamp: '      + position.timestamp           + '\n');
  };

  function onError(error) {
    alert('code: '   + error.code   + '\n' +'message: ' + error.message + '\n');
  }
```

}

Write index.html file:-

```html
<!DOCTYPE html>
<html>
   <head>

      <title>Cordova Device Ready Example</title>

   <script type="text/javascript" charset="utf-8" src="cordova.js"></script>
         <script type="text/javascript" charset="utf-8" src="js/index.js"></script>
   </head>
 <body  onload="onLoad()">
 <button id = "getPosition">CURRENT POSITION</button>
<button id = "watchPosition">WATCH POSITION</button>
</body>
</html>
```