Geo Location

Introduction

❖ The Geo Location API allows the users to share their location with web sites they trust.

❖ HTML 5.0 allows us to write JavaScript code that finds out the latitude and the longitude and send it over to the server side.

The `navigator.geolocation` Property

❖ The `geolocation` new property on the global navigator object provides us with the capability to get the location information.

The `getCurrentPosition` Function

❖ Calling the `getCurrentPositioneolocation` function on the `navigator.geolocation` property we can pass over a callback function.

❖ The callback fucntion will be called in case the Geo Location API is supported and the user approves it to use his geo location data.

```
...
navigator.geolocation.getCurrentPosition(myfunc,myerrorfunc);
...
```

The Location Callback Function

```
...

function myfunc(position)

{

    var latitude = position.coords.latitude;

    var longitude = position.coords.longitude;

    var altitude = position.coords.altitude;

    var accuracy = position.coords.accuracy;  //meters

    var altitudeAccuracy = position.coords.altitudeAccuracy;  //meters

    var heading = position.coords.heading;  //degrees clockwise from north

    var speed = position.coords.speed;  //speed in meters/seconds

}

...
```

usually latitude, longitude and accuracy
are the only ones that get support

The Error Callback Function

```
...

function myerrorfunc(errorobject)

{

    var message = errorobject.message;

    var code = errorobject.code;

    ...

}

...
```

The possible error code values are:

```
PERMISSION_DENIED
POSITION_UNAVAILABLE
TIMEOUT
UNKNOWN_ERROR
```

Geo Location Code Sample

```html
<html>
  <head>
    <title>Just Simple Title</title>
    <script language="javascript">
    function myfunc(ob)
    {
      alert("latitude="+ob.coords.latitude+" longitude="+ob.coords.longitude);
    }
    function errfunc(ob)
    {
      alert(ob.message);
    }
    if(window.navigator.geolocation)
    {
      window.navigator.geolocation.getCurrentPosition(myfunc,errfunc);
    }
    else
    {
      alert("geolocation is not supported");
    }
    </script>
  </head>
  <body>
  </body>
</html>
```

the support for this api doesn't exist on every browser and those that do support this api still don't support it 100%.

Geo Location Code Sample