



# WEB TECHNOLOGIES

## HTML 5 – Geo Location & Web Workers

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- Enables your web application to obtain the geographical position of your website visitors
- The user has to accept to share their location
- Accessed via JavaScript, through the **navigator.geolocation** object

- navigator.geolocation object allows you to access geo location through two primary functions:
  - getCurrentPosition()
    - Returns the location of the visitor as a one-time snapshot
  - watchPosition()
    - returns the location of the visitor every time the location changes
- Both functions take the following parameters:
  - Success callback function
  - Error callback function (optional)
  - Geo location options object (optional)

# HTML5 – Geo Location

## Associated Objects

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- Success callback function receives **position** object with these read only properties
  - double latitude
  - double longitude
  - double accuracy
  - double altitude
  - double altitudeAccuracy
  - double heading (direction)
  - double speed
- Error callback function receives **error** object with these two properties
  - short code
    - 1, meaning PERMISSION\_DENIED
    - 2, meaning POSITION\_UNAVAILABLE
    - 3, meaning TIMEOUT
  - DOMString message
- **Options** object (third parameter to `getCurrentPosition` or `watchPosition`)
  - `enableHighAccuracy` // true or false
  - `timeout` // milliseconds
  - `maximumAge` // milliseconds

# HTML5 – Web Worker

## Introduction

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- A web worker is essentially a thread executing a JavaScript file
- Makes it possible to execute a JavaScript file asynchronously and autonomously
- Helps achieve multi threading in your web applications
- To create a web worker:  

```
var worker = new Worker("myasync.js");
```
- Parameter is the URL of the JavaScript file to execute

- A web worker does not have access to the DOM of the page that creates the web worker.
- Here is a list of what a web worker can do:
  - Listen for messages, using the onmessage event listener function.
  - Send messages via the postMessage() function.
  - Send AJAX requests using the XMLHttpRequest.
  - Create timers using the setTimeout() and setInterval() functions.



# THANK YOU

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