

HTML5 APIs

1. Media API

- a. It enables interaction with the audio and video elements as well as the creation of custom controls.
- b. Example:

```
<video controls>
  <source src="rabbit320.mp4" type="video/mp4">
  <source src="rabbit320.webm" type="video/webm">
  <p>Your browser doesn't support HTML5 video. Here is a <a
href="rabbit320.mp4">link to the video</a> instead.</p>
</video>
```

- c. You may make a video player with controls this way.

2. Geolocation API

- a. It is used to determine the user's geographical location.
- b. Example:

```
<button onclick="getLocation()">Try It</button>
<p id="location"></p>

<script>
var x = document.getElementById("location");

function getLocation() {
  navigator.geolocation.getCurrentPosition(showPosition);
}

function showPosition(position) {
  x.innerHTML = "Latitude: " + position.coords.latitude +
    "<br>Longitude: " + position.coords.longitude;
}
</script>
```

- c. To get the current location, we use the **navigator object**.
- d. This object has a **getCurrentPosition()** method that accepts a callback (in this case the callback is the **showPosition()** function).
- e. The **parameter** for the callback is **an object**. The user's coordinates, or latitude and longitude, are included in this object.

3. Web Storage API

- a. It can be used to store data in the browser.
- b. The storage limit is at least 5MB.
- c. There are two objects that can be used to store data in the browser:

- i. **window.sessionStorage**

- 1. The data is only retained for one session and is lost when the browser is closed.
 - 2. To set and get data from the sessionStorage:

```
sessionStorage.setItem("name", "Smith");  
sessionStorage.getItem("name");
```

- ii. **window.localStorage**

- 1. The data stored does not expire.
 - 2. To set and get data from the localStorage:

```
localStorage.setItem("name", "Smith");  
localStorage.getItem("name");
```