HTML5 JavaScript APIs

We already encountered some HTML5 JavaScript APIs that come with new elements:

- The canvas API,

- The form validation API,

- The audio and video elements API, the getUserMedia API (also related to audio and video elements),

- Etc.

However, HTML5 comes also with several APIs that are not directly related to HTML elements: the Orientation API, the Geolocation API, most APIs related to client-side persistence, the Web Storage API, the Web Workers API, and some other APIs not in the HTML5 specification, but related, such as the GamePad API, the Web Audio API, etc.

This week, we will look at some of the most useful APIs, others will be covered in the HTML5 Part-2 course:

- The HTML5 Cache API for making Web sites and Web applications work offline.

- The "Web Storage" API, sort of "super cookies", for storing pairs of key/values client side. This API is useful for making Web sites able to save/restore their state, or for writing serverless applications. You will see a small contact manager that stores its data locally, without the need for a remote Web server.

- The File API, that makes Web applications capable of working with local files. For example, a picture editor, or a media player that can work with your music and video files, the ones on your phone or on your hard disk! With this API you will also be able to preview image files directly in your page, no need to send them to a remote server.

- The Geolocation API for getting the longitude, latitude, altitude (when

available), speed, heading, etc. You will learn how to write applications altogether with some interactive maps. You will learn also how to guess the surface address of a user, for example for pre-filling a registration form with the city, country, zip code that corresponds to the current location, etc.

Happy learning!