

## CHAPTER 3

### API'S AND LIBRARIES

#### 1. Web Speech api

The Web Speech API provides two distinct areas of functionality — speech recognition, and speech synthesis (also known as text to speech, or tts) — which open up interesting new possibilities for accessibility, and control mechanisms. This article provides a simple introduction to both areas, along with demos.

##### Speech recognition

Speech recognition involves receiving speech through a device's microphone, which is then checked by a speech recognition service against a list of grammar (basically, the vocabulary you want to have recognised in a particular app.) When a word or phrase is successfully recognised, it is returned as a result (or list of results) as a text string, and further actions can be initiated as a result.

##### Speech synthesis

Speech synthesis (aka text-to-speech, or tts) involves receiving synthesising text contained within an app to speech, and broadcasting it out of a device's microphone.

#### 2. Leaflet JS

Leaflet is the leading open-source JavaScript library for mobile-friendly interactive maps. Weighing just about 38 KB of JS, it has all the mapping features most developers ever need.

Leaflet is designed with *simplicity*, *performance* and *usability* in mind. It works efficiently across all major desktop and mobile platforms, can be extended with

lots of plugins, has a beautiful, easy to use and well-documented API and a simple, readable source code that is a joy to contribute to.