

HTML5





JavaScript APIs HTML5

- > Selectors
- > Drag & Drop
- File reader API
- Canvas
- > Storage
- Offline Apps
- > Workers



Selector APIs

Methods for selecting and testing elements based on match of a given selector.

Two types Selector methods available

- > querySelector(): the first element which matches the specified DOM string
- > querySelectorAll(): returns all the elements which match the specified DOM string



Drag & Drop

- > HTML5 Drag & Drop lets you do basic drag & drop operations with a lot less JavaScript code.
- draggable = true
- events: dragstart, drop,etc
- > event.transferData.



Drag & Drop

> Other events: dragenter, dragover, dragleave, dragend



Canvas

- > Container for graphics
- > Dynamic, scriptable rendering of 2D images
- > Uses JavaScript to draw
- > Resolution-dependent bitmap.



Demo - Canvas

```
<canvas id="example" width="200" height="200">
    This text is displayed if your browser does
    not support HTML5 Canvas.

</canvas>

var example = document.getElementById('example');
var context = example.getContext('2d');
context.fillStyle = "rgb(255,0,0)";
context.fillRect(30, 30, 50, 50);
```





Storage

- > Client Side Storage
 - > Cookies is the method used
 - > They are small
 - > Only 4 kilobytes of storage each
 - > Less for data-rich web apps.



Storage

- > Web Storage
 - > Most stable solution
 - > Stores 5 megabytes of data
 - > Two types of storage methods available
 - > Local storage : stores data with no expiration date
 - > Session storage: stores data for one session.



Offline Applications

> Enable

```
<a href="my.appcache">
```

> my.manifest

CACHE MANIFEST# 2012-02-21 v1.0.0

index.html images/shade.jpg images/bin.jpg style.css



Offline Applications

- > Cache
 - > On load will hit my.manifest
 - > Change manifest: trigger reload
 - > Force through javascript
 function onUpdateReady() {
 alert('found new version!');
 }



Offline Applications

- Updating the Cache
 - > The user clears browser data
 - > The manifest file is modified
 - > The app cache is programmatically updated.



Web Workers

- JavaScript is a single thread process
- > Web worker creates a new thread
- > Runs without interrupting browser processing.



Modernizr

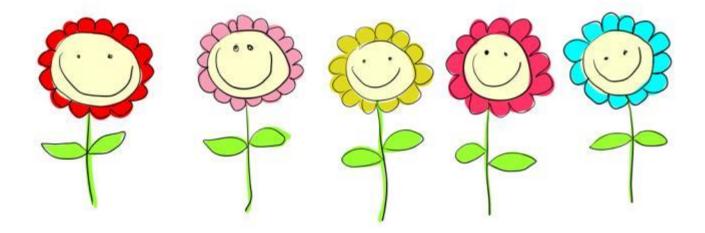
- JS library to detect HTML5 and CSS3 features
- Makes it easy to write conditional JS and CSS
- > Caters to progressive enhancement



HTML5 – Questions







Thank you!