jQuery Mobile Lab

Rocco Tripodi

Corso di Web Design 2013-14

Outline

- Introduzione alle nuove strategie di web design

- Introduzione a jQuery Mobile

- Struttura delle pagine

- Sistema di navigazione

- Bottoni

- Transizioni

Cos'è jQM?

- A unified, **HTML5**-based user interface system for all popular mobile device platforms

- Built on jQuery and jQuery UI

- jQuery mobile allows you to design a single highly-branded web site or application that will work on all popular smartphone, tablet, and desktop platforms

- jQuery Mobile's emphasis on **semantic markup**, **progressive enhancement** and **responsive web design**

HTML5

- It is a collection of **individual features**

- You *can* detect support for individual features, like <u>form</u>, <u>video</u>, or <u>geolocation</u>.

- For each new tag; there is a corresponding DOM API for objects in the DOM.

- "Upgrading" to HTML5 can be as simple as changing your *doctype*. <!DOCTYPE html>

- <u>Tags short list</u>

Semantic markup

- Semantic elements describe their meaning or purpose clearly to the browser and to the developer.
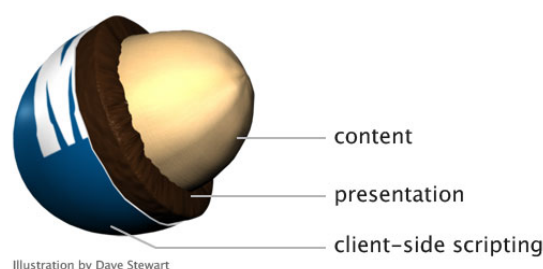
    <div id="header">

    <h2 class="employee-name">

- Structure the content of the site on an ontology.

- Google rich snippets

Progressive enhancement

- Think from the content out.

- Start with your content peanut, marked up in semantic (X)HTML.

- Coat that content with a layer of rich, creamy CSS.

- Finally, add JavaScript as the hard candy shell to make a wonderfully tasty treat

content
presentation
client-side scripting

Illustration by Dave Stewart

Responsive Web Design

- Is a design and technical approach that aims to **adapt** the layout and interaction of a site or app to work optimally across a wide range of device <u>resolutions</u>, <u>screen densities</u> and <u>interaction modes</u> with the same underlying codebase.

- **CSS media queries**, used to target styles to specific device characteristics such as screen width breakpoint or resolution.

- **A fluid grid**, that specifies elements and widgets in flexible units with the goal of making them flow to fill their containers.

- **Flexible images and media**, are also sized in relative units so they re-size to fit within their containers.

Mobile First

- When working with RWD, it's very important to consider **performance** to ensure that you're not simply taking a heavy desktop site and shrinking it down to mobile screens.

- Approach focused on reducing bandwidth, server requests and optimizing source order.

- Write all the core typography and basic style elements outside of a media query to form the styles for the smallest devices.

- Create a style override stylesheet and include it after the jQuery Mobile framework stylesheet.

- Example 1

jQuery Mobile

jQM: Pages

- The page is the primary unit of interaction in jQM and is used to group content into **logical views** that can be animated with **page transitions**

- A HTML document may start with a **single page** and the AJAX navigation system will load additional pages. Example 2

- Alternatively can be built with **multiple pages** inside it and the framework will transition between these local views with no need to request content from the server. Example 3

jQM: navigation and transitions

- When the requested page loads, jQM parses the document for an element with the **data-role="page"** attribute and inserts that code into the DOM of the original page.

- The page is animated into view with a transition. By default, the framework applies a **fade** transition. To set a custom transition effect, add the **data-transition** attribute to the link.

- Example 4

Esercizio 1

Creare più pagine prendendo come modello l'esempio 2 e linkarle tra di loro usando diversi tipi di transizione.

jQM: Content & Widgets

- Inside your content container, you can add any standard HTML elements.

- You can write your own **custom styles** by adding an additional stylesheet to the head after the jQM stylesheet.

- jQuery Mobile includes a wide range of touch-friendly UI widgets: **buttons**, **form elements**, **collapsibles**, **accordions**, **popups**, **dialogs**, **responsive tables**, etc.

jQM: Buttons

- Buttons are core widgets in jQuery Mobile and are used within a wide range of other plugins.

- Use **anchor links** to mark up navigation buttons,

- Use **input** or **button** elements for **form submission**.

- By default, all buttons in the body content are styled as **block-level** elements so they fill the width of the screen.

- Example 5

Esercizio 2

Sostituire i link creati nell'esercizio 1 con bottoni sfruttando diversi temi e tipi di bottoni.

jQM: Listviews

- A listview is coded as a simple unordered list (ul)
  or ordered list (ol) with a data-role="listview".

- Example 6