Responsive Web Design and touch devices

From John Tsevdos / @tsevdos

agenda

- adapt to touch devices
- provide solutions
- javascript touch frameworks
- techniques, tips and tools

responsive web design principles

- ## flexible layout/grid
- media queries
- flexible media (images, videos, etc.)

you can get there from here

- interaction
- W UX

this is a "touch" world

- fingers !== mouse pointer
- different mediums
- different use

"traditional" web design might not work

* at least out of the box

- mavigation
- call to action links
- long forms/tables
- :hover and mouseover events
- UI components

keep calm and:

- simplify
- follow the patterns (and the big players)
- try to avoid functionality that doesn't really work on touch devices

adapt to touch: navigation

- do nothing approach (CSS)
- select menu (js)
- toggle menu (js)
- # left/right nav flyout (js)
- \$\text{# footer only (css)}

adapt to touch: navigation

responsive navigation patterns

adapt to touch: navigation

if you are too lazy to build your own custom navigation try
the below links/resources

- select menu:
 - iQuery Responsive Menu Plugin
 - TinyNav.js
- 🕮 toggle menu :
 - **SECTION** SECTION SECT
 - **SECOND RAWER**
- left/right nav flyout:
 - # jPanelMenu

adapt to touch: call to action links

- make larger click areas
- add padding

adapt to touch: call to action links

```
<!-- Good -->
<div>
 <a href="url/path">
   <img src="nice/image.jpg" alt="nice image" />
   This is a very nice image.
 </a>
</div>
< div>
 <div class="image">
   <a href="url/path">
     <img src="nice/image.jpg" alt="nice image" />
   </a>
 </div>
 <a href="url/path">This is a very nice image.</a>
  <a href="url/path">read more</a>
</div>
```

adapt to touch: forms

- minimize form input
- use the appropriate virtual keyboard

adapt to touch: forms

```
<!-- Default Keyboard -->
<input type="text" />
<!-- Numeric Keyboard -->
<input type="number" />
<!-- Number Keyboard -->
<input type="tel" />
<input type="url" />
<input type="email" />
<!-- Pattern Keyboard -->
<input pattern="[0-9]*" type="text" />
```

adapt to touch: tables

- try to avoid them
- overflow:scroll

adapt to touch: tables

native scroll inside elements (source)

```
overflow: scroll;
-webkit-overflow-scrolling: touch; /* native like scroll */
```

adapt to touch: tables

- responsive tables (Zurb.com)
- reflow table mode (jQuery Mobile)
- responsive tables (bootstrap plugin)

adapt to touch: hover and mouseover events

- try to avoid them
- don't use them for displaying/perfoming critical inforation/tasks (for example tooltips and dropdown menus)
- provide alternatives

adapt to touch: hover and mouseover events

- no silver bullet for these
- try to use similar touch events

adapt to touch: Ul components

(like modals, image sliders, carousels, tabs, accordions etc.)

- do they enhance the experience or they just make things worst?
- are they really working on touch devices?
- do they respond to touch events?

use a javascript touch library

- lean touch libraries
- full touch libraries

lean touch libraries fetures

- small footprint
- easier to use
- no UI components, just the touch events
- excellent solutions for small/middle projects

lean libraries

- # Hammer.js
- QUO.js (modular, works like jQuery)

full touch libraries fetures

- large footprint
- more complete solutions (provide UI components and widgets)
- excellent solution for biggers projects/apps

full touch libraries

- # jQuery mobile
- Sencha Touch
- **SECTION**
- iUI

best practice

- start small, but if you really need something more complete, don't hesitate to use it!
- always try to load only what you really need/use

when in doubt, check how the "big" players do it

- Bootstrap
- Foundation
- Pure

follow the guidelines

- Android User Interface Guidelines
- iOS Human Interface Guidelines
- create your own!

touch devices can do more

call or text

```
<a href="tel:+306948123456">+306948123456</a>
<a href="sms:+306948123456">+306948123456</a>
```

touch devices can do more

capture images, video or sound using HTML forms

```
<input type="file" accept="image; capture=camera" />
<input type="file" accept="video; capture=camcorder" />
<input type="file" accept="audio; capture=microphone" />
```

be a pioneer

reward modern browser users
 use HTML5 (elements, attributes etc.)
 use CSS3 (gradients, shadows/text shadows, rgba, transitions, animations, fonts, etc.)
 SVG
 add a feature detection and adaptation strategy (modernizr)

be a pioneer

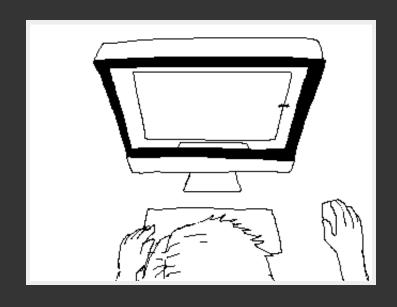
- ## HTML5 geolocation API
- use IndexedDB, Web SQL or Local Storage (or simply use a library like lawnchair)
- graceful degradation

congratulations!

- make it touch-friendly
- enrich the UX on tablets/smartphones

thank you

questions?



I'm social...

- tsevdos.com
- phrappe.com
- @tsevdos
- github.com/tsevdos
- linkedin.com/in/tsevdosjohn