

# jQuery Mobile

## Lecture 1

For a more comprehensive coverage visit :

<https://www.w3schools.com/Jquery/default.asp>

The lectures on jQuery in this module are based on these tutorials on w3schools.

# jQuery Mobile app-structure

- jQuery Mobile (jQM) is built on top of jQuery
  - Same basis – selectors for DOM items, but adds CSS for styling (also animations/page transitions)
- Much of JQM works automatically
  - Include the libraries (style-sheets *and* Javascript) and a page will automatically style to suit a mobile device.
  - Uses standard tags (e.g. <ul>, <li> etc.) and get styles well suited to a mobile device
- JQM's CSS support includes some very neat tricks
  - A standard HTML page gets re-styled on the fly to appear as a web-app on the device – functions replace existing content with specific styling

```
<!DOCTYPE html>

<html>
  <head> <title></title>
  </head>

  <body>
    <div data-role="page" id="home">

      <div data-role="header">
      </div>
      <div data-role="content">
      </div>
      <div data-role="footer">
      </div>

    </div>
  </body>

</html>
```

## The Template for our Mobile pages

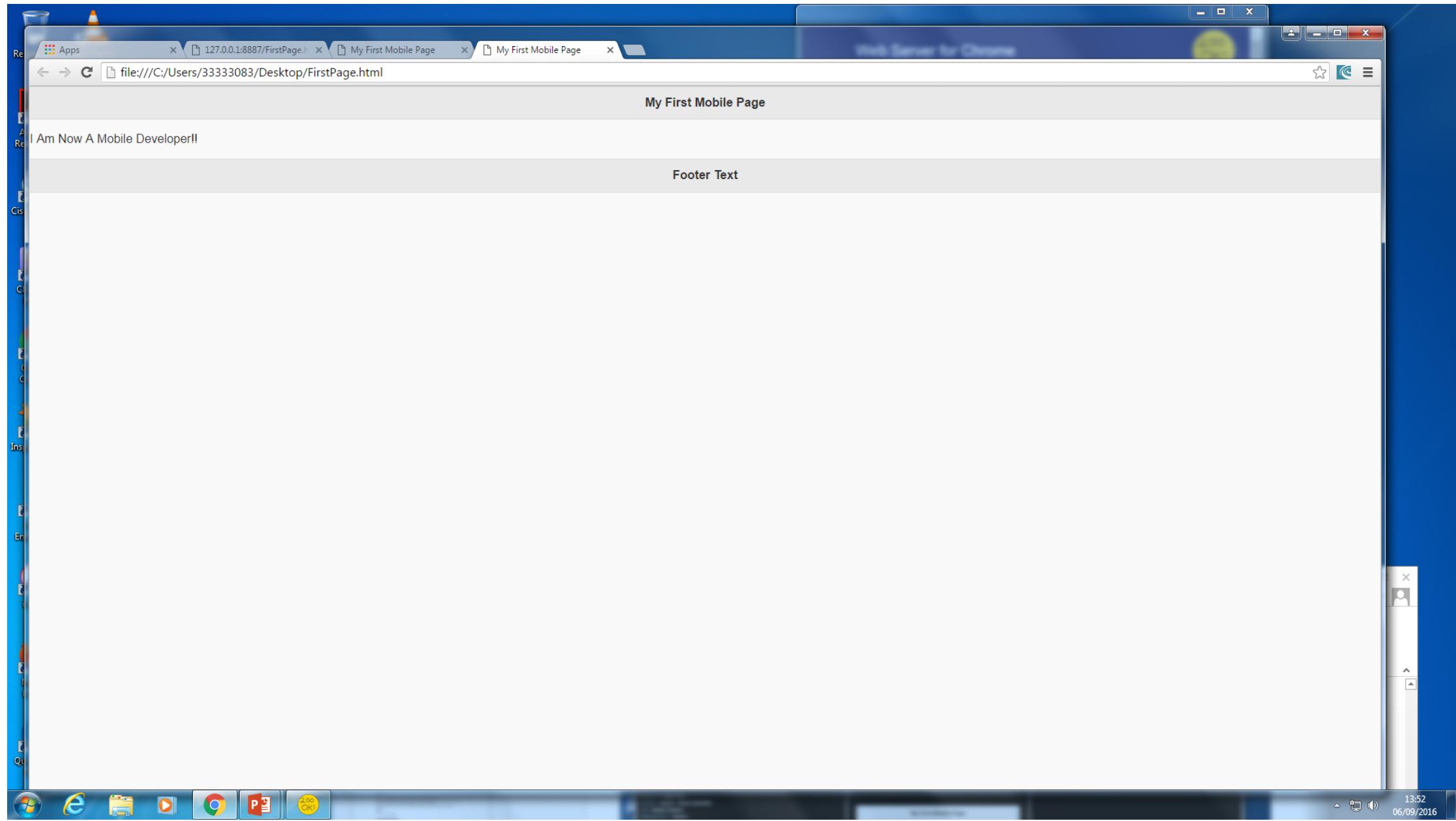
```
<body>
<div data-role="page">

    <div data-role="header">
        <h1>My First Mobile Page</h1>
    </div>

    <div data-role="main">
        <p>I Am Now A Mobile Developer!!</p>
    </div>

    <div data-role="footer">
        <h1>The Footer Text</h1>
    </div>

</div>
</body>
```



# Organization of a simple JQM app

- Each JQM page (in HTML) can contain multiple ‘pages’
  - A `<div>` (block division) element can be used to create a separate page...
  - Separate `<div>` elements can
  - be used to organize the page into header, content and footer sections...

```
<html>
<head>
...
</head>
<body>
    <div data-role="page" id="one">
        <div data-role="header">
            ...
        </div>
        <div data-role="content">
            ...
        </div>
        <div data-role="footer">
            ...
        </div>
    </div>
    <div data-role="page" id="two">
        ... etc ...
    </div>
    <!-- more page definitions -->
</body>
</html>
```

Multi-Page Outline

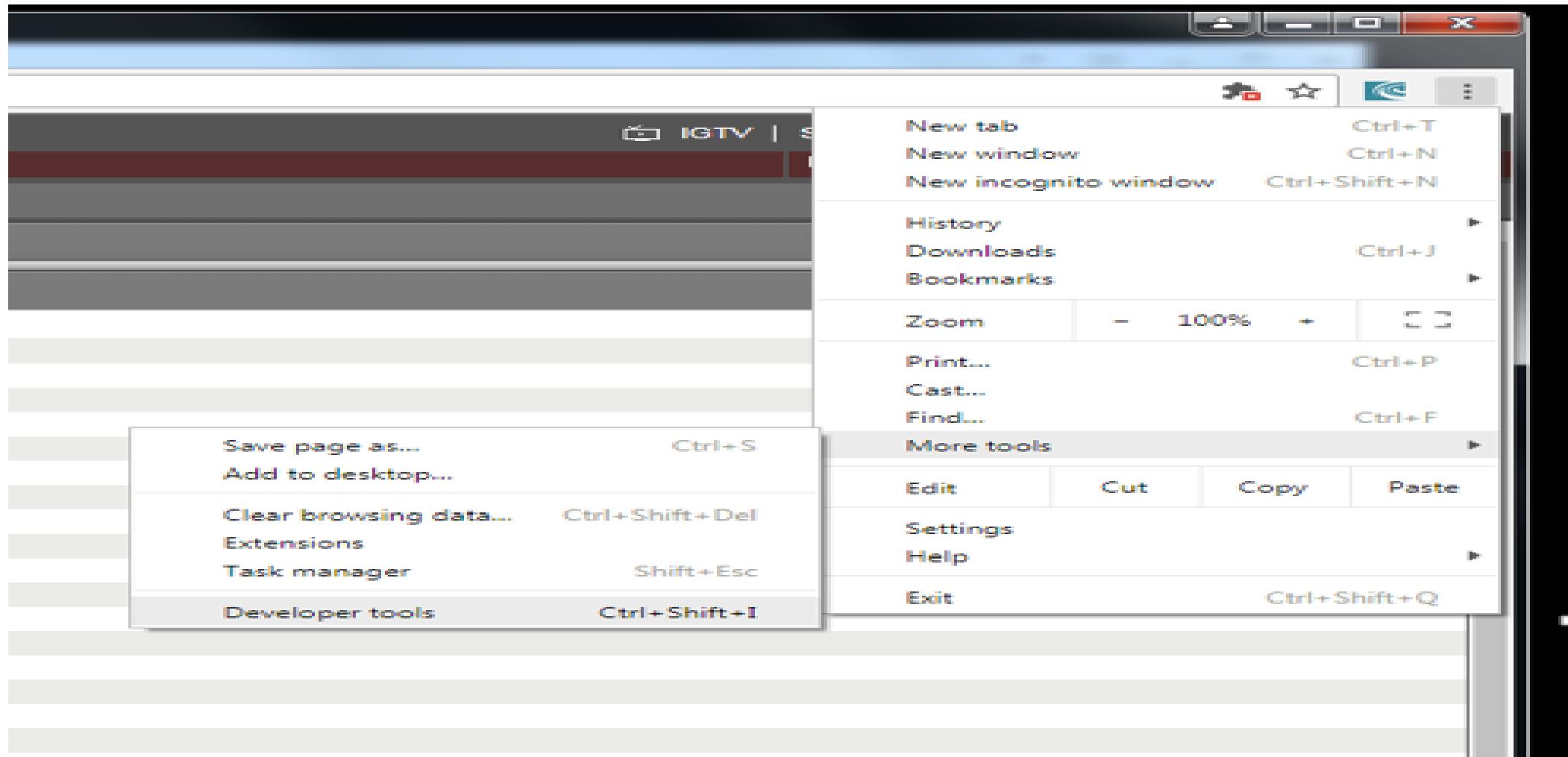
```
<!DOCTYPE html>
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="http://code.jquery.com/mobile/1.4.5/jquery.mobile-
1.4.5.min.css">
<script src="http://code.jquery.com/jquery-1.11.3.min.js"></script>
<script src="http://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.js"></script>
</head>
<body>
<div data-role="page">

    <div data-role="header">
        <h1>My First Mobile Page</h1>
    </div>

    <div data-role="main">
        <p>I Am Now A Mobile Developer!!</p>
    </div>

    <div data-role="footer">
        <h1>Footer Text</h1>
    </div>
</div>
</body>
</html>
```

# viewing the page as on a mobile



Galaxy S5 ▾

360

640

100% ▾



### Responsive

iPad Mini

✓ Galaxy S5

Nexus 5X

Nexus 6P

iPhone 5

iPhone 6

iPhone 6 Plus

iPad

iPad Pro

Edit...



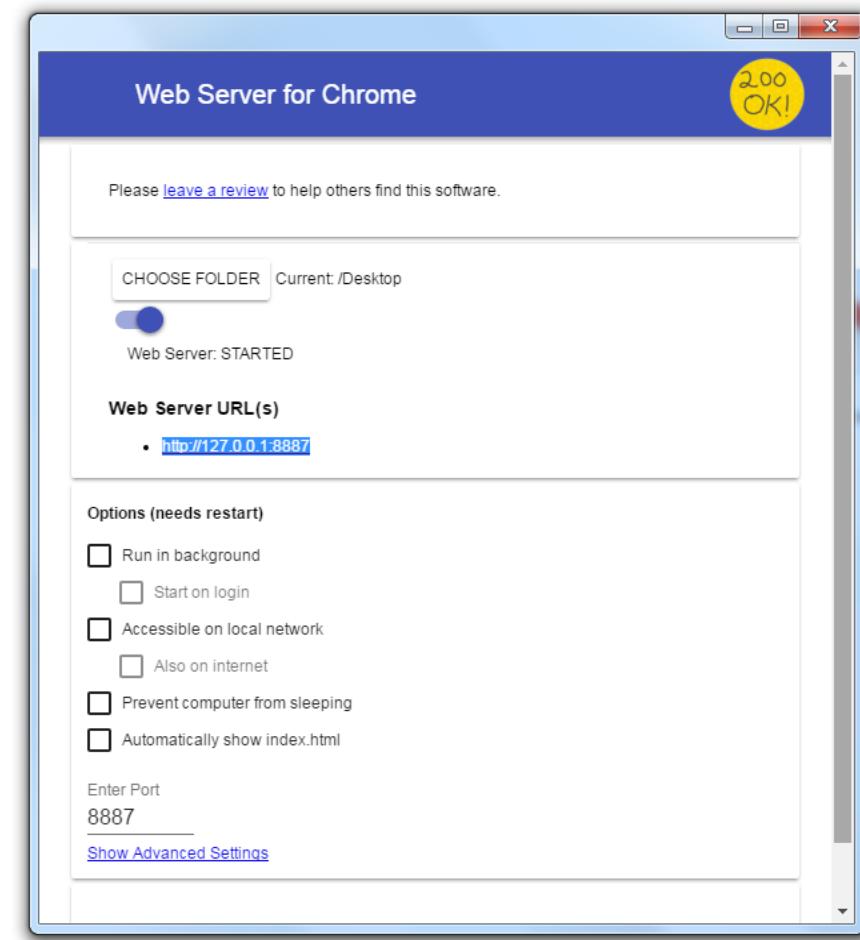
- Install:  
The Ripple  
emulator

The screenshot shows a Google Chrome browser window displaying the Ripple Emulator (Beta) page on the Chrome Web Store. The URL in the address bar is <https://chrome.google.com/webstore/detail/ripple-emulator-beta/geelfphabnejhd>. The page title is "Ripple Emulator (Beta) - Chrome Web Store". A yellow banner at the top right says "You will need Google Chrome to install most apps, extensions and themes." with a "Download Google Chrome" link. On the left, there's a sidebar with categories like Apps, Games, Extensions, Themes, TYPES (Chrome Apps, Websites), CATEGORIES (All), FEATURES (Runs Offline, By Google, Free, Available for, Works with), and RATINGS (★ ★ ★ ★ ★). The main content area shows the Ripple Emulator extension details: "Ripple Emulator (Beta)" by ripple.tinyhippos.com, 619 reviews, 181,139 users, and an "AVAILABLE ON CHROME" button. It features a screenshot of the Ripple interface showing a compass and a map. To the right, there's a description: "A browser based html5 mobile application development and testing tool. Welcome to Ripple, The Mobile Environment Emulator! Ripple is a multi-platform mobile environment emulator that is customized to mobile HTML5 application development and testing. Ripple aims to reduce the challenges being faced by mobile developers caused by today's platform fragmentation in the marketplace. Ripple is targeted towards WebWorks, PhoneGap, and mobile web development and testing!" Below the description are links to "Website" and "Report Abuse". Under "Additional Information", it lists Version: 0.9.15, Updated: March 8, 2013, Size: 4.5MB, and Language: English. At the bottom, there's a "Users of this extension have also used" section with links to "Page Ruler", "Capture Webpage Screenshot Entirely.", "Tag Assistant (by Google)", and "Proxy SwitchyOmega". The bottom of the screen shows the Windows taskbar with icons for File Explorer, Edge, Task View, Google Chrome, Word, Excel, and OneDrive.

# Install: Web server for Chrome

The screenshot shows the Google Chrome Web Store page for the 'Web Server for Chrome' extension. The URL in the address bar is <https://chrome.google.com/webstore/detail/web-server-for-chrome/ofhbbkphhbklf>. A yellow banner at the top states: "You will need Google Chrome to install most apps, extensions and themes." with a link to "Download Google Chrome". The main content area displays the extension's details:

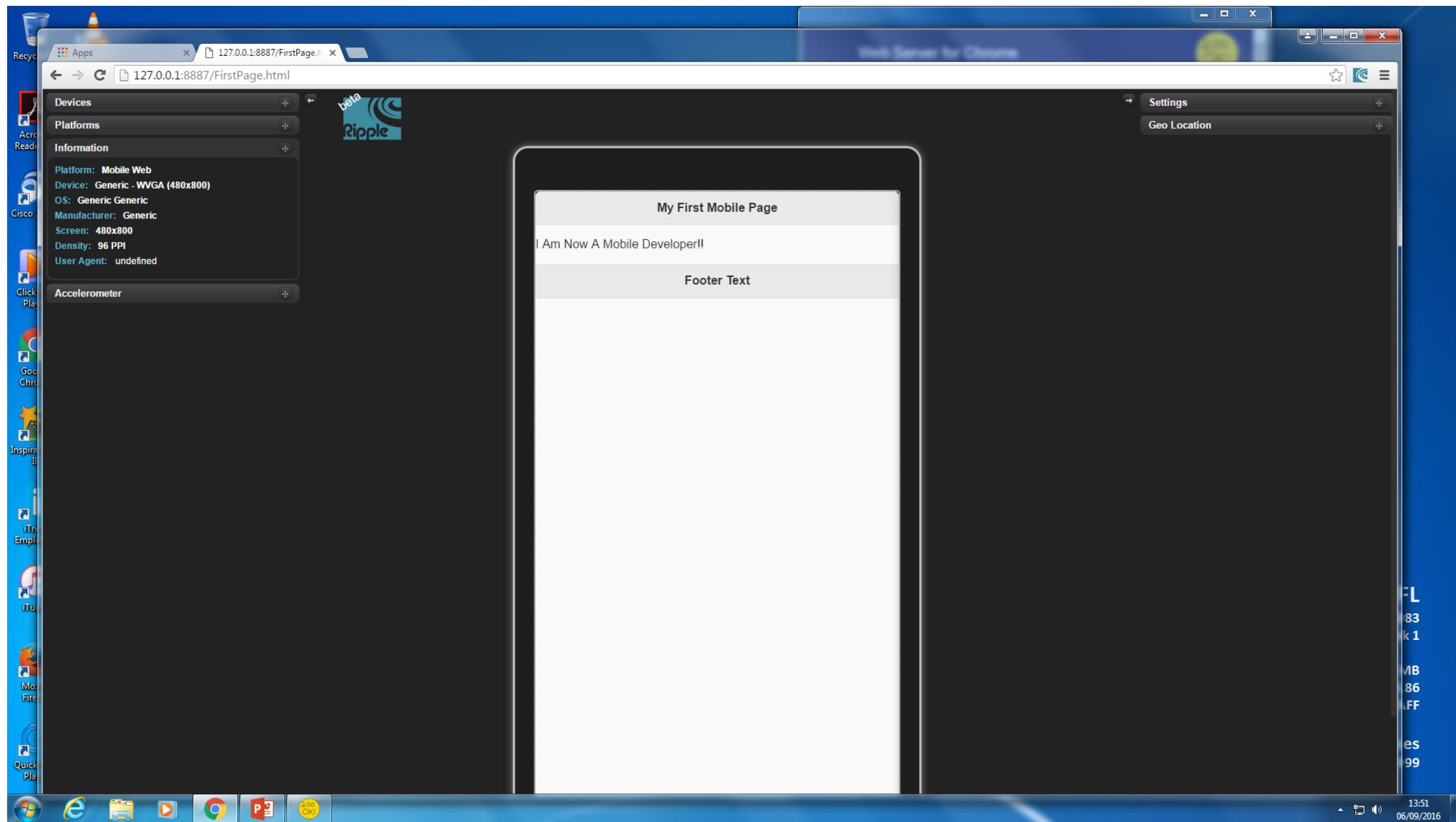
- Web Server for Chrome** (Offered by chromebeat.com)
- ★★★★★ (360) | Developer Tools | 40,343 users
- AVAILABLE ON CHROME**
- OVERVIEW** (selected), **REVIEWS**, **SUPPORT**, **RELATED**
- FEATURES**: Runs Offline
- CATEGORIES**: All
- RATINGS**: ★★★★★ (360)
- OPTIONS**:
  - Web Server: STARTED
  - Web Server URL(s)
    - http://127.0.0.1:8000
    - http://10.33.103.51:8000
  - Run in background
  - Accessible to other computers
- DESCRIPTION**: A Web Server for Chrome, serves web pages from a local folder over the network, using HTTP. Runs offline.
- DETAILS**: Web Server for Chrome is an open source (MIT) HTTP server for Chrome. It runs anywhere that you have Chrome installed, so you can take it anywhere. It even works on ARM chromebooks.
- OPTIONS**:
  - Website
  - Report Abuse
- ADDITIONAL INFORMATION**: Version: 0.4.1, Updated: May 23, 2016, Size: 439KB, Language: English
- USERS OF THIS APP HAVE ALSO USED**: Postman, Vysor, Text, Chrome Apps & Extensions Developer
- EDITOR'S PICKS**: Chrome favorites in apps



Web Store



Web Server



```
<!DOCTYPE html>
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="http://code.jquery.com/mobile/1.4.5/jquery.mobile-
1.4.5.min.css">
<script src="http://code.jquery.com/jquery-1.11.3.min.js"></script>
<script src="http://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.js"></script>
</head>
<body>

<div data-role="page" id="home">
  <div data-role="main" class="ui-content">
    <a href="#personal">Go to Page Two</a>
  </div>
</div>
<div data-role="page" id="personal">
  <div data-role="main" class="ui-content">
    <a href="#home">Go to my home page</a>
  </div>
</div>
</body>
</html>
```

The screenshot shows the Ripple Emulator interface running on a Windows desktop. Two windows of the emulator are visible, each displaying a different page of a multi-page application.

**Top Window (Foreground):**

- Header:** Shows the URL `127.0.0.1:8887/multipage.html`.
- Sidebar:** Includes sections for **Devices**, **Platforms**, **Information** (Platform: Mobile Web, Device: Generic - WVGA (480x800), OS: Generic Generic, Manufacturer: Generic, Screen: 480x800, Density: 96 PPI, User Agent: undefined), and **Accelerometer**.
- Content:** Displays a mobile web page with a button labeled [Go to Page Two](#).

**Bottom Window (Background):**

- Header:** Shows the URL `127.0.0.1:8887/multipage.html`.
- Sidebar:** Includes sections for **Devices**, **Platforms**, **Information** (Platform: Mobile Web, Device: Generic - WVGA (480x800), OS: Generic Generic, Manufacturer: Generic, Screen: 480x800, Density: 96 PPI, User Agent: undefined), and **Accelerometer**.
- Content:** Displays a mobile web page with a button labeled [Go to my home page](#).

**Windows Taskbar:**

- Icons for various Windows applications like File Explorer, Google Chrome, Microsoft Edge, and Microsoft Word.
- System tray icons for battery, signal strength, and volume.
- Date and time: **14:06 06/09/2016**.

# jQM Page Transitions

- JQM provides a set of CSS-based transition effects that can be used to make page changes more visually appealing
  - A new page can appear with any of the following effects:
    - slide (left to right)
    - slide up
    - slide down
    - pop
    - fade
    - flip
    - flow – (shrink → slide → grow)
  - <li><a href="#ipm" **data-transition="flip"**>Intro to Programming </a></li>

# jQuery

Tables, Lists, Grids and Collapsibles

# Table Example

```
<div data-role="main">
  <table data-role="table" >
    <thead>
      <tr>
        <th data-priority="6">CustomerID</th>
        <th>CustomerName</th>
        <th data-priority="1">ContactName</th>
        <th data-priority="2">Address</th>
        <th data-priority="3">City</th>
        <th data-priority="4">PostalCode</th>
        <th data-priority="5">Country</th>
      </tr>
    </thead>
```

```
<tbody>
  <tr>
    <td>1</td>
    <td>Glenn Affleck</td>
    <td>UWS</td>
    <td>Main street</td>
    <td>Paisley</td>
    <td>PA12BE</td>
    <td>United Kingdom</td>
  </tr>
</tbody>
</table>
```

127.0.0.1:8887

127.0.0.1:8887

Devices

Platforms

Information

Platform: Mobile Web

Device: Generic - WVGA (480x800)

OS: Generic Generic

Manufacturer: Generic

Screen: 480x800

Density: 96 PPI

User Agent: undefined

Accelerometer

beta Ripple

Settings

Geo Location

A Table Example

CustomerName ContactName Address

Glenn Affleck UWS Main street

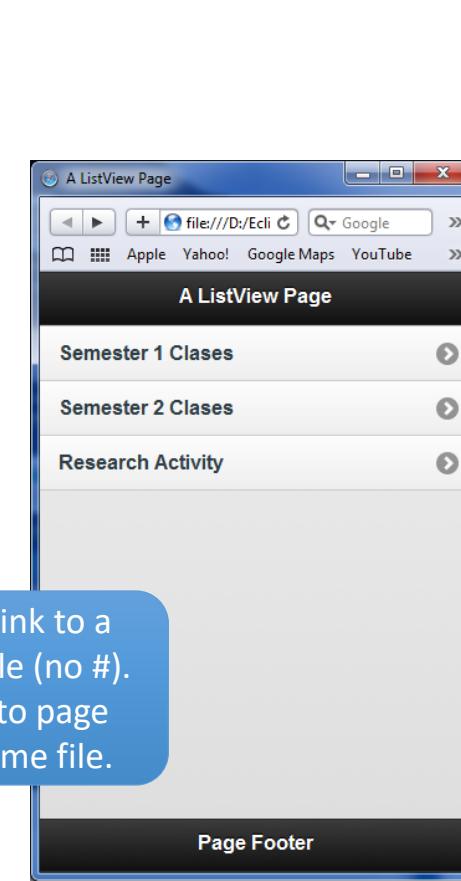
Footer Text

This screenshot shows the Ripple Beta mobile web browser interface. The top navigation bar displays the URLs '127.0.0.1:8887' and '127.0.0.1:8887'. On the left, there's a sidebar with sections for 'Devices', 'Platforms', 'Information', and 'Accelerometer'. Under 'Information', device details are listed: Platform: Mobile Web, Device: Generic - WVGA (480x800), OS: Generic Generic, Manufacturer: Generic, Screen: 480x800, Density: 96 PPI, and User Agent: undefined. Below this is an 'Accelerometer' section. The main content area features the Ripple logo with 'beta' above it. A central modal window titled 'A Table Example' contains a table with three columns: CustomerName, ContactName, and Address. The table has one row with the values 'Glenn Affleck', 'UWS', and 'Main street'. At the bottom of the table is a footer text area containing the word 'Footer Text'. The Ripple interface has a dark theme with light-colored UI elements.

# Listview pages

- Used for either links to multiple pages, or for displaying a list of data-items
  - e.g. mail messages, appointments, photo thumbnails

```
<div data-role="page" data-role="listview" id="main">
    <div data-role="header">
        <h1>A ListView Page</h1>
    </div>
    <div data-role="content">
        <ul data-role="listview">
            <li><a href="#sem1">Semester 1  
Classes</a></li>
            <li><a href="#sem2">Semester 2  
Classes</a></li>
            <li><a href="research-activity.html" data-  
rel="external">  
                Research Activity</a></li>
        </ul>
    </div>
    <div data-role="footer" data-position="fixed">
        <h4>Page Footer</h4>
    </div>
</div>
```



```
<div data-role="main">

    <ul data-role="listview">
        <li data-role="list-divider">Employees</li>
        <li><a href="#">Programmer</a></li>
        <li><a href="#">Analyst</a></li>
    </ul>

    <ul data-role="listview" data-autodividers="true">
        <li><a href="#">Angela</a></li>
        <li><a href="#">Adele</a></li>
        <li><a href="#">Bob</a></li>
        <li><a href="#">Christine</a></li>
    </ul>

</div>
```

A List Example

127.0.0.1:8887

Devices

Platforms

Information

Platform: Mobile Web  
Device: Generic - WVGA (480x800)  
OS: Generic Generic  
Manufacturer: Generic  
Screen: 480x800  
Density: 96 PPI  
User Agent: undefined

Accelerometer

beta Ripple

Settings

Geo Location

A List Example

Employees

- Programmer >
- Analyst >
- A
- Angela >
- Adele >
- B
- Bob >
- C
- Christine >

Footer Text

127.0.0.1:8887/List\_Example.html

10:05  
14/09/2016

```
<ul data-role="listview" data-theme = "b">  
    <li data-role="list-divider">Employees</li>  
    <li><a href="#">Programmer</a></li>  
    <li><a href="#">Analyst</a></li>  
</ul>
```

....

A List Example

127.0.0.1:8887

127.0.0.1:8887

Devices

Platforms

Information

Platform: Mobile Web

Device: Generic - WVGA (480x800)

OS: Generic Generic

Manufacturer: Generic

Screen: 480x800

Density: 96 PPI

User Agent: undefined

Accelerometer

beta Ripple

Settings

Geo Location

A List Example

Employees

Programmer >

Analyst >

A

Angela >

Adele >

B

Bob >

C

Christine >

Footer Text

```
<body>
  <div data-role="page">

    <div data-role="header">
      <h1>MY CV</h1>
    </div>

    <div data-role="main">

      <div data-role="collapsible">
        <h1>Skills Profile</h1>
        <p>I am an enthusiastic and ambitious individual ...p>
      </div>
    
```

```
<div data-role="collapsible" data-collapsed="false">
    <h1>Employment History</h1>
    <p>During my career in the ...p>
</div>
```

```
<div data-role="collapsible">
    <h1>Qualifications</h1>
    <p>too many to put here</p>
    <div data-role="collapsible">
        <h1>Present Studies </h1>
        <p>PhD in Quantum Physics</p>
    </div>
</div>
```

```
</div>
```

```
<div data-role="footer">...
```

Devices

Platforms

Information

Platform: Mobile Web  
Device: Generic - WVGA (480x800)  
OS: Generic Generic  
Manufacturer: Generic  
Screen: 480x800  
Density: 96 PPI  
User Agent: undefined



Settings  
Geo Location

# MY CV

## Skills Profile

I am an enthusiastic and ambitious individual who has gained a wide range of experience through military training and academic study.

## Employment History

During my career in the Royal Navy I gained much experience and visited many parts of the world. I gained many skills and experience doing numerous tasks and jobs. My main job involved both mechanical and electrical work.

## Qualifications

too many to put here

## Present Studies

PhD in Quantum Physics

## Footer Text

```
<div data-role="collapsibleset">
  <div data-role="collapsible">
    <h1>Skills Profile</h1>
    <p>I am an enthusiastic and ambitious individual who has
       gained a wide range of experience through military training
       and academic study.</p>
  </div> ...
  ....
  ....
</div>
```

[Devices](#)[Platforms](#)[Information](#)[Settings](#)[Geo Location](#)

Platform: Mobile Web  
Device: Generic - WVGA (480x800)

OS: Generic Generic

Manufacturer: Generic

Screen: 480x800

Density: 96 PPI

User Agent: undefined

Accelerometer

# MY CV

**Skills Profile**

**Employment History**

During my career in the Royal Navy I gained much experience and visited many parts of the world. I gained many skills and experience doing numerous tasks and jobs. My main job involved both mechanical and electrical work.

**Qualifications**

**Footer Text**

127.0.0.1:8887 x 127.0.0.1:8887 x

Devices Platforms Information Accelerometer

beta Ripple

Settings Geo Location

Platform: Mobile Web  
Device: Generic - WVGA (480x800)  
OS: Generic Generic  
Manufacturer: Generic  
Screen: 480x800  
Density: 96 PPI  
User Agent: undefined

too many to put here

Skills Profile Employment History Qualifications Present Studies

Footer Text

10:32  
14/09/2016

# The NAVBAR

```
<div data-role="header">
  <h1>Glenn Affleck CV</h1>
  <div data-role="navbar">
    <ul>
      <li><a href="#">Personal Details</a></li>
      <li><a href="#">Work history</a></li>
      <li><a href="#">Qualifications</a></li>
    </ul>
  </div>
</div>
```

127.0.0.1:8887 127.0.0.1:8887 127.0.0.1:8887

127.0.0.1:8887

Devices Platforms Information

Platform: Mobile Web  
Device: Generic - WVGA (480x800)  
OS: Generic Generic  
Manufacturer: Generic  
Screen: 480x800  
Density: 96 PPI  
User Agent: undefined

Accelerometer

bel2 Ripple

Settings Geo Location

Glenn Affleck CV

Personal Details Work history Qualifications

My personal Details

My Footer Details

This screenshot shows the Ripple mobile browser developer tools interface. The main window displays a CV page titled "Glenn Affleck CV" with three tabs: "Personal Details", "Work history", and "Qualifications". Below the tabs, there are two sections: "My personal Details" and "My Footer Details". The left sidebar contains device information, platform details, and an accelerometer section. The top navigation bar shows three tabs, each pointing to "127.0.0.1:8887". The bottom taskbar includes icons for various Windows applications like File Explorer, Google Chrome, and Microsoft Word.

# ICONS

```
<div data-role="navbar">  
  <ul>  
    <li><a href="#" data-icon="home">Personal Details</a></li>  
    <li><a href="#" data-icon="arrow-r">Work History</a></li>  
    <li><a href="#" data-icon="search">Qualification</a></li>  
  </ul>  
</div>  
</div>
```

Devices [+]

Platforms [+]

Information [+]

Platform: Mobile Web  
Device: Generic - WVGA (480x800)  
OS: Generic Generic  
Manufacturer: Generic  
Screen: 480x800  
Density: 96 PPI  
User Agent: undefined

Accelerometer [+]

**beta Ripple**

Settings [+]

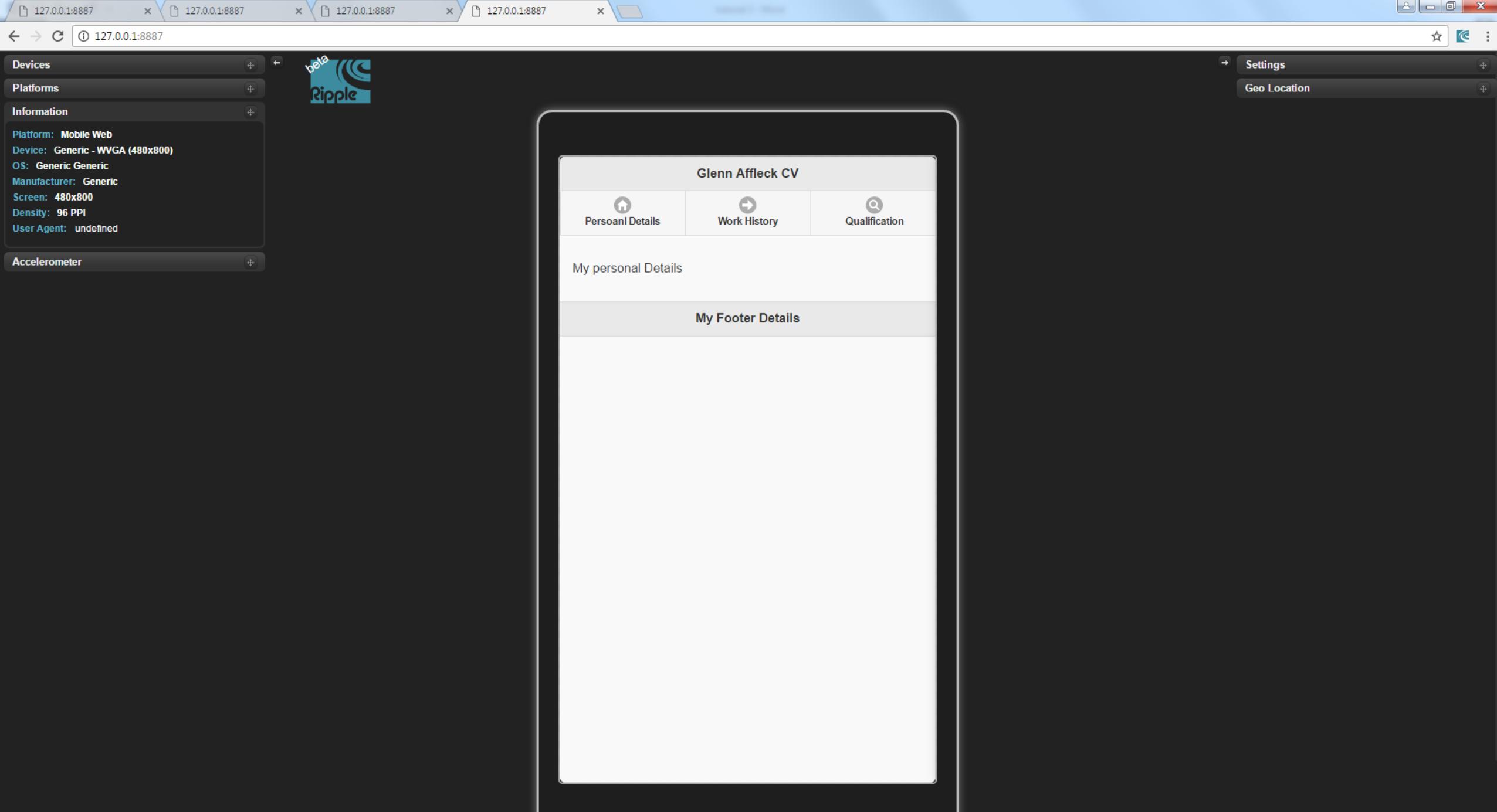
Geo Location [+]

**Glenn Affleck CV**

[House icon] Persoanl Details [Clock icon] Work History [Search icon] Qualification

My personal Details

My Footer Details



# BUTTONS

## Back button

```
<a href="#" class="ui-btn" data-rel="back">Go Back</a>
```

## Grouped buttons

```
<div data-role="controlgroup" data-type="horizontal">
  <a href="#" class="ui-btn">Personal Details</a>
  <a href="#" class="ui-btn">Qualifications</a>
  <a href="#" class="ui-btn">Work History</a>
</div>
```

Classes:

```
<div data-role="controlgroup" data-type="horizontal">
  <a href="#" class=" ui-btn ui-corner-all">Personal Details</a>
  <a href="#" class=" ui-btn ui-corner-all">Qualifications</a>
  <a href="#" class=" ui-btn ui-corner-all">Work History</a>
</div>
```

tutorial 3 - Word

FILE HOME INSERT DE

Cut Copy Format Painter

Paste Clipboard

Calibri (Body)

127.0.0.1:8887 127.0.0.1:8887 127.0.0.1:8887 127.0.0.1:8887 127.0.0.1:8887

beta Ripple

Devices Platforms Information

Platform: Mobile Web  
Device: Generic - WVGA (480x800)  
OS: Generic Generic  
Manufacturer: Generic  
Screen: 480x800  
Density: 96 PPI  
User Agent: undefined

Accelerometer

Settings Geo Location

Glenn Affleck CV

Personal Details Qualifications Work History

My personal Details

< Go Back

PAGE 5 OF 5 244 WORDS

13:28 21/09/2016