Front-end Mobile CSS construction.

1. Introduction

1.1 Aim

This practicals' aim is to add onto the style sheets for the desktop front-end that you wrote in the first practical, in order to make the web-pages accessible on mobile devices.

1.2 Practical Specification

The following specify the project:

- **Sitemap:** A representation of the page structure.

- **Wireframes:** The layout of features and functionality that should be implemented.

- **Design PNGs:** Images which are used to accurately pre-specify the final design.

- **User Requirements:** A list of features which the user should experience.

Each of the sections described above, follows below in the project specification, except the design PNGs.

2. General Information

2.1 Media Queries

If we want a website to be accessible on a variety of devices of varying resolutions, we can use a feature built into HTML and CSS called media queries.

A media query allows us to apply specific style sheets, or individual style classes, that should be applied at specific resolutions. This means if the user has a mobile device, or is simply resizing their browser window, the CSS to be applied will be recalculated and re-rendered.

More information regarding media queries can be found in chapter 5 of the textbook, exercise 12 in Lab 5, and also at http://www.w3schools.com/css/css_rwd_mediaqueries.asp

2.2 Page Scaling

Add the appropriate viewport meta tags to your pages to set the device scaling to 1. This has the effect that sizes will be identical regardless of the screen density or resolution. For more on the viewport see chapter 5 of the textbook and http://www.w3schools.com/css/css_rwd_viewport.asp

2.3 Mobile Menu

For the main menu, we normally use an unordered list, where each list item has the display property set to inline-block. This makes each menu item appear side-by-side.

The menu toggle icon for the mobile device view is achieved by having a button which is hidden using media queries when the device is larger than a certain width.

When the device is sufficiently narrow, this button appears, and the unordered list of menu items have their display property set to block, making them appear in a vertical stack again.

2.4 Developer tools

Chrome Developer tools and/or the Firebug plugin for Firefox is useful for resolving bugs and seeing the effects of changes in real time.

Both tools let you simulate the resolution of smaller devices.

2.5 Future perspective

Remember that you only need to add media queries, and modify your static pages so that they are accessible on mobile devices for this practical.

JavaScript will be added later, for now everything must be done with CSS.

Functionality to handle page content population will be added later.

3. Project Specifications

3.1 Site-Map

Website
- Home Page.   (home.html)
- View Products.   (products.html)
- View Product.   (product.html)
- View Order.   (order.html)
- Contact Us.   (contact.html)

3.2 Wireframes

Mobile Menu Example:

Logo	
☰ Home Products Order Contact	
Contact **Email:** admin@trinkits.org **Address:** 1 Merryman Avenue Stellenbosch **Phone:** 021 123 1234	
All Rights Reserved Logo 2016 © Trinkets Inc	

3.3 User Requirements

The user requirements have been structured as follows; Any requirement that the system "shall" possess will be a requirement for marks. Any requirement the system "may" possess is bonus.

Website:

1 *General*:

    1.1   All pages for the client website shall be styled for and accessible on mobile devices.

        1.1.1   Styles shall be activated at a relevant widths through media queries to adjust the "experience" for users.

        1.1.2   All pages shall still be accessible on desktop devices.

    1.2   The default font size of 16px shall display the same size regardless of device.

    1.3   At a page width of 360px the main logo shall take up all the available width.

    1.4   The page menu and footer shall be adjusted for mobile display at 500px width.

    1.5   All pages across the website shall possess a common uniform colour theme.

2 *Home Page*:

    2.1   The *Top Products* vertical list shall become a horizontal list at a width of 700px.

3 *View Products*:

    3.1   The view products page shall display 4 by default and then 3, 2, 1 products horizontally across in its listing display at device widths of larger than 700px and then 700px, 500px and 300px respectively.

4 *View Product*:

    4.1   The image gallery shall move below the product description at 600px width.

5 *View Order*:

    5.1   The order user detail form shall move below the order text at 700px width.

    5.2   At 500px width, the input for user details shall take up full page width.

    5.3   At 500px width, the order item description text and quantity adjustment control shall appear in a vertical stack, taking up full page width.

6 *Contact Us*:

    6.1   The contact details shall be centred at 700px width.

    6.2   The contact detail type title shall appear above the detail at a width of 400px.

4. Resources

Make sure that you understand the content of the Pearson labs:

- Lab 1: <u>How the Web Works</u> (Revision)

- Lab 2: <u>Introduction to HTML</u> (Revision)

- Lab 3: <u>Introduction to CSS</u> (Revision)

- Lab 4: <u>HTML Tables and Forms</u>

- Lab 5: <u>Advanced CSS: Layout</u>

- Lab 7: <u>Web Media</u> (Optional)

5. Marking Scheme

For hand in you must supply the completed Home, Products, Product, Order, and Contact client HTML pages and their CSS stylesheets.

The following criteria will be used to assess your final mark.

- **HTML:** Adherence to requirements. (33%)

- **CSS:** Similarity to design PNGs. (33%)

- **General:** Coding to standards, Syntax, Code style, Comments. (33%)