

HTML & CSS Front-end construction.

1. Introduction

1.1 Aim

The aim of this practical, and those that follow, is to equip you with the skills necessary for basic front-end and back-end web development.

The theme is to build a web application for an imaginary company, Trinkets Inc.

1.2 Practical Specification

In the first phase you need to build the static HTML and CSS pages of your web application front-end.

The following specify the project:

- **Sitemap:** A tree 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 Less

LESS is a dynamic style sheet language that can be statically compiled into CSS. It lets you write short-hand CSS and create minified CSS. It is not compulsory to make use of LESS, but it is an option you might want to consider.

To install the LESS static pre-compiler on ubuntu, type in the terminal:

```
sudo apt-get install node-less
```

and after changing into the project directory, redirect the applications output to a file as follows:

```
lessc -x client.less > client.css,
```

where the the `-x` option gives you a minified CSS file.

More information about LESS can be found at <http://lesscss.org/>.

2.2 Developer tools

Remember to make use of the Chrome Developer tools and/or the Firebug plugin for Firefox.

2.3 Lorem Ipsum

Lorem ipsum is Latin verse often used as filler text in design since the 1500s. It has the same ratio of consonants to vowels with a similar average word length to English, but is unreadable by the average person and thus prevents the designer from being distracted by the content. You can find generators online. (<http://www.lipsum.com/>)

2.4 Future perspective

Remember that you only need to implement static pages in this practical.

In later practicals you will be required to add media queries to make your pages accessible on mobile devices.

JavaScript will also be added later, for example on the Home page Javascript will be used to make the Top Products scrollable, on Products the pagination will bring new products into view, and on the Product page it will be possible to add an item to a given order. Also, on the Order page various additional functionality will be added.

Functionality to handle page content population will be added later.

You must produce the static Home, Products, Product, Order, and Contact HTML pages, with their respective style sheets.

2.5 Cross Browser Testing

You should develop and test for Chromium and Firefox. The web-pages should be almost identical on these two desktop browsers.

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

Home Page:

	<div>Logo</div>	
	Home Products Order Contact	
	<div><div><h3><u>Heading</u></h3><p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Mauris egestas lacinia arcu non tempus. Morbi finibus dictum iaculis. Nullam nec facilisis leo. Nam interdum elit id orci venenatis vehicula. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.</p><p>Vivamus feugiat sit amet lacus molestie lobortis. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Interdum et malesuada fames ac ante ipsum primis in faucibus. Duis sagittis fringilla tellus.</p><p>Etiam consequat erat nisl, a efficitur velit mattis fringilla. Cras mi velit, scelerisque nec neque eget, fringilla fringilla nisi. Nullam rhoncus est in lorem congue, in eleifend dolor elementum.</p><p>Aenean pellentesque dolor id diam tincidunt, nec gravida tortor dictum. Duis sodales, nulla in auctor consectetur, ante purus porttitor nulla, ac commodo velit diam id purus.</p></div><div><h3>Top Products</h3><div></div><div></div><div></div><div></div><div></div></div></div>	

View Products:

	<div>Logo</div>	
	Home Products Order Contact	
	<div><h3><u>Products</u></h3><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div> Lorem ipsum. </div><div> Folor sit amet. </div><div> Consectetur adipis. </div><div> Mauris egestas </div><div> Lorem ipsum. </div><div> Folor sit amet. </div><div> Consectetur adipis. </div><div> Mauris egestas </div></div><div><div>◀</div><div>Page 1 of 5</div><div>▶</div></div></div>	
	<div>All Rights Reserved<div>Logo</div>2016 © Trinkets Inc</div>	

View Product:

	<div>Logo</div>	
	Home Products Order Contact	
	<div><div><div>Product Name</div><div><div> Lorem ipsum dolor sit amet, consectetur adipiscing elit. Mauris egestas lacinia arcu non tempus.</div><div><div> Aenean pellentesque dolor id diam tincidunt, nec gravida tortor dictum. Duis sodales, nulla in auctor consectetur, ante purus porttitor nulla, ac commodo velit diam id purus.</div></div></div><div><div>Add to Order</div></div></div><div><div>Gallery</div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div></div><div><div>Recommended Products</div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div></div></div></div>	
	<div>All Rights Reserved<div>Logo</div>2016 © Trinkets Inc</div>	

View Order:

	<div>Logo</div>	
	Home Products <u>Order</u> Contact	
	<div><div><div><div>Order</div><div><div>Firstname: <div></div></div><div>Lastname: <div></div></div><div>Email: <div></div></div><div>Phone Number: <div></div></div></div><div><div> Lorem ipsum dolor sit amet, consectetur adipiscing elit. Mauris egestas lacinia arcu non tempus.</div><div> Aenean pellentesque dolor id diam.</div></div></div><div><div><div>Item</div><div>Quantity</div></div><div><div></div><div></div></div></div><div><div>Place Order</div></div></div></div>	
	<div>All Rights Reserved<div>Logo</div>2016 © Trinkets Inc</div>	

Contact Us:

	<div>Logo</div>	
	Home Products Order <u>Contact</u>	
	<u>Contact</u> Email: admin@trinkits.org Address: 1 Merryman Avenue Stellenbosch Phone: 021 123 1234	
	All Rights Reserved <div>Logo</div> 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 for bonus marks.

Website:

1 General:

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

2 Home Page:

2.1 The home page shall have an area for a company description text.

2.2 The home page shall list in a display the top ordered products.

3 View Products:

The view products page shall display all the products available for order.

4 View Product:

The page shall list in a display recommended products.

5 View Order:

- 5.1 The page shall contain a form for customer information.
- 5.2 The page shall display products added to the order.
- 5.3 The page shall provide a means to remove products from the order.
- 5.4 The page shall provide a means to submit the order.

6 *Contact Us*:

- 6.1 This page shall display the contact details.
- 6.2 The contact page may have a contact request form, with customer query fields.

4. Resources

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

- Lab 1: How the Web Works (Revision)
- Lab 2: Introduction to HTML (Revision)
- Lab 3: Introduction to CSS (Revision)
- Lab 4: HTML Tables and Forms
- Lab 5: Advanced CSS: Layout
- Lab 7: Web Media (Optional)

5. Marking Scheme

You must supply the completed Home, Products, Product, Order, and Contact client HTML pages and their LESS style sheets.

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

- **HTML:** Adherence to requirements. (33%)
- **CSS:** Similarity to provided design. (33%)
- **General:** Coding to standards, Syntax, Code style, Comments. (33%)