Specification

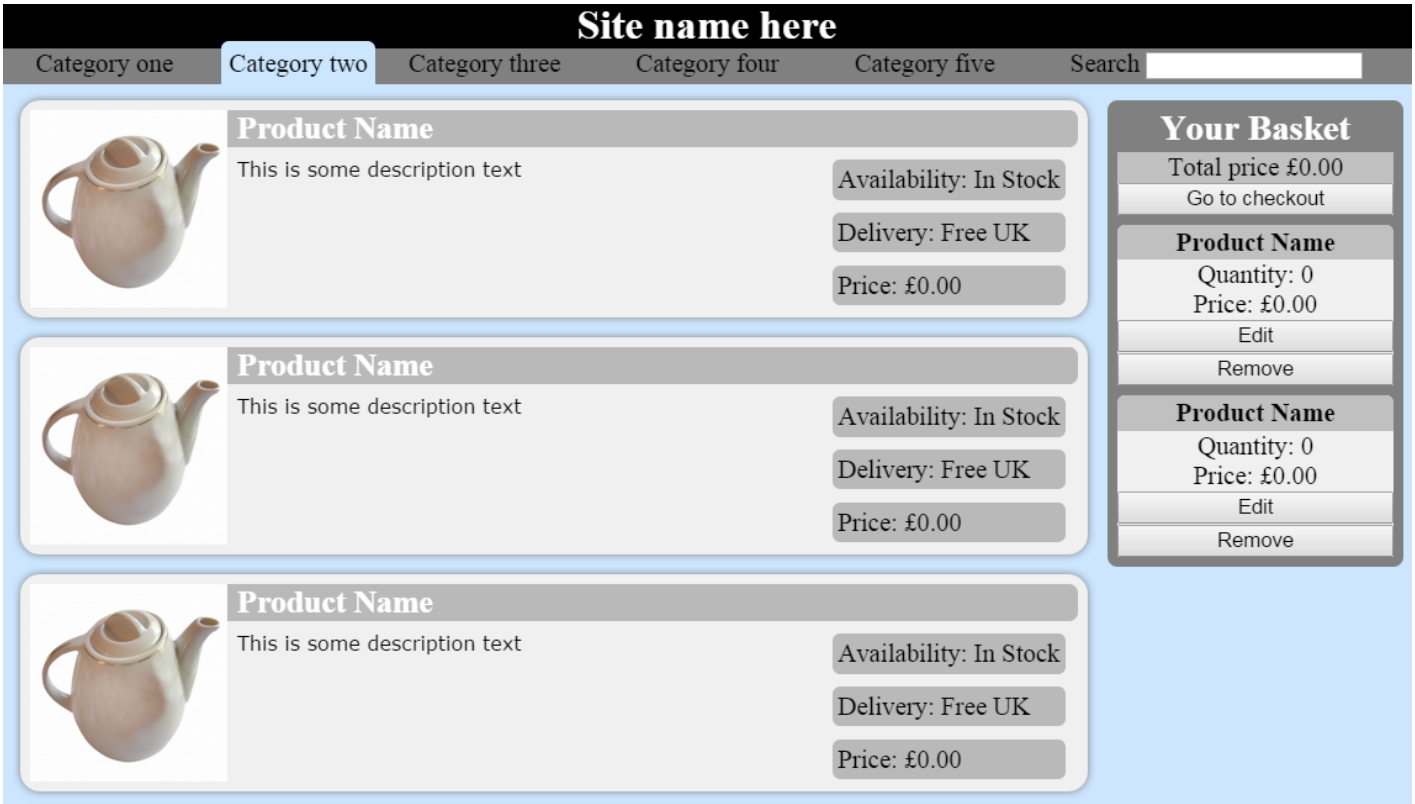
The website will function as a general purpose online sales platform and will support the browsing and purchasing of physical goods by customers.

The customer end of the site will feature a number of categories (specified by the client through the content management system) which when selected will generate a list of products, along with essential product information (such as pricings, availability, delivery information, product description and images of the product) for products in that category. In addition to the category tabs, a search tab will also be present which when selected will list products relevant to the search term entered (in order of relevance). Each product listing will appear in a compact form, showing only a thumbnail image and essential information (listed above), until it is clicked on by the user, when it will dynamically expand (no page reload/redirect) to display the full product information, supporting a longer product description, multiple images and an 'Add to basket' button, in addition to the essential information listed above. Multiple product listings will be able to be expanded at the same time so as to allow customers to more easily compare products.

While customers are browsing the site, on the right hand side of the screen (for ease of use due to it being common convention), will be a visualisation of their basket, which will list the names, quantities and pricings of each item the customer has chosen to purchase and for each item will feature edit (for changing quantities) and remove buttons. A section near the top of the basket will show the total cost of all items in the basket and feature a 'Go to checkout' button, which will redirect the customer to a page for making purchases.

If possible within the time frame of the project, it is intended that adding an item to the basket from a product listing should feature an animation depicting the product listing being compressed into the form it will take in the basket (loosing extra information such as description and images) and then flying into the basket. However this is an extension feature and cannot be guaranteed for release.

The client (purchaser of the software) will be able to add product listings and define product categories through the sites content management system. Separate pages will be available for managing stock and handling orders (listing purchases that need to be dispatched along with other information relating to each order) and as a possible extension (again subject to time), a page for viewing reports detailing the most popular and most profitable products.



Plan

The website will be developed following a spiral lifecycle model. A spiral methodology helps to ensure that critical components and core functionality are properly implemented, tested and developed sufficiently before extensive work begins on less essential features and polish intended for the finished product (such as for example the 'add to basket' animations). The Gantt chart below reflects this with the main planned cycles being represented by each group of tasks, shorter sub-cycles may be necessary for developing more complex individual features however these are difficult to predict accurately and so are not represented in the diagram. Some on-going tasks such as targeted experiments and research are also excluded for readability.

A number of factors could potentially disrupt (or benefit) development and have been considered in the plan set out below. Some unpredictable events such as illness cannot be directly scheduled for and so instead must be represented by allowing slack spread throughout the project to ensure it will not fall too far behind schedule.

Other factors include:

- Other coursework deadlines on Dec 4th, Dec 8th, Feb 5th and one other currently unknown (task not yet set)
- Holidays and holiday periods (Christmas and Easter); will grant more time to work on project and more flexible work schedule, however may present other commitments (visiting family, etc.)
- On-going study of Software Engineering; may provide further insight into planning and design practices.
- On-going study of Web script programming; Will help more accurately determine time required for implementation of planned features (particularly java script and Ajax based components) and may lead to finding better solutions to already implemented content, potentially requiring rewriting of less optimal code.