## Part 1

To begin the process of designing a web site you should create a paper prototype of five linked web pages.

Paper prototyping is a variation of usability testing where users perform realistic tasks by interacting with a paper version instead of a computer. With this we can obtain feedback from the user and then it be dealt with before creating a web page.

The think-aloud technique is concerned with the behaviour of an individual when performing a task.

We interviewed one user because we felt that if more users were to do the prototype, then information will be discussed. We told the participants at any time they could leave if they felt uncomfortable in the situation. We use the feedback from the think-aloud technique to improve our design in a varie ty of ways. When testing the usability of our prototype with the user, they mention that there was no drop down menu on the checkout section for some of the field such as card type. The user found this very inconvenient due to the fact that they had to fill it out by them self and that most sites they visit has one.

The colour scheme was a major usability issue because there were no colours to attract the individual. By not leaving an impression, it would mean that they would not remember the site. This is very important because users vision a range of sites and if the web site did not get their attention, then they would look elsewhere.

There were three buttons on the second page when buying a DVD. They were abort order, continue shopping and go to che ckout. The users clicked on the 'continue shopping' button as he thought this would go to the checkout page. However, it took the user back to the previous page. This was not meant to happen because he was only asked to choose one film and continue. The u ser finds this very confusing due to the layouts of the buttons and the wording. As a result, they had to start all over again and it irritated the user.

A "submit" button was required at the final page but this was not displayed. The last page had mention that the order was completed. However, the feedback use from the think aloud technique meant that by proceeding onto another page would make the payment more reliable and sufficient.

From using the think aloud technique to get feedback, we improve o ur design to be a much more useful one. We put in drop down menus in appropriates places so the user would find this more convenient. The colour scheme was also changed to differentiate our website from the rest and create a better first impression on the user. We made our buttons clearer so the user can understand it better and also position them in a viewable way. Therefore using this technique has made our design more successful. (466 words)

## Part 2

Discuss briefly the advantages of paper-based prototyping, with particular reference to your own prototype (not to exceed 500 words).

# The Advantages of Paper – Based Prototyping

Paper Prototyping is considered by many to be an easy to use and efficient tool to plot out an interface seen by the user. It has a number of advantages which we experienced while making our prototype as well. Some of these are listed below:

## It is probably the simplest of all Prototyping Techniques

Paper Prototyping can be considered as the simplest of all prototyping techniques because we can create an entire interface using nothing more than office stationery. Any corrections or changes that need to be made after initial testing can be made effortlessly. It can be used to exactly reproduce the image of an interface which is present in the developer's mind. Since there is no coding required, it is also a speedy way to create an initial interface. Our prototype took us just about a week to complete and any of the finer points that needed to be changed were done by just replacing the po st – it notes, etc.

#### It can be easily designed and tested

Thanks to the "Think Aloud" evaluation, we can easily realise what the user's expectations are and what is required to make the interface user friendly. In other words, user feedback is implemented b efore the actual designing of the website starts. To test our prototype, all we had to do was introduce a group member to the completed interface and notice the convenience with which he went about navigating the website and purchasing a DVD.

### **Defining Requirements and Interface Demonstration**

Paper prototypes are used to generate requirements. Every time that a prototype is tested, new requirements are uncovered. This makes the end result very detailed and meticulous. A prototype can also be used to demonstrate the interface in a presentation so that people can understand what

the website / software is going to be like. Over the period of testing, our own prototype generated requirements (like the additions of search boxes, navigation menus, etc.).

## Versatility and Re-usability

A prototype is very versatile and it can be used to test other software / websites by making only a few changes to it. We discovered this when we looked back at our initial rough sketches of the website after the prototype was complete. We found that there were a number of changes implemented in the final product that weren't thought of when the initial blueprints were drawn up.

## **Encourages Teamwork and Creativity**

A paper prototype calls for teamwork. It's a great way to get a team of developers together to co-operate and put down their ideas in a physical form. The team does not need to be specifically trained in any discipline to make a prototype, the team members just need to have basic technological knowledge. Our group consisted of five people, each of whom had to design a separate page and yet had to work closely together since the pages had to be interlinked and had to have continuity. It also requires creativity, not only from the people involved in making the prototype but from the users as well. It is a great way to discover how people would go about making interfaces and expressing themselves. (529 words)

## Part 3

Implement the five pages from your paper prototype using Dreamweaver. The pages must demonstrate that you have considered user-centred design issues. As a minimum your pages should include images, text, and hyperlinks. You may include additional features, e.g. rollover images and popup menus, provided that they function correctly. You may include links to external web pages if relevant. All hyperlinks between the pages must be relative, not absolute, so that the pages will function correctly when copied to another location.

- Please insert the provided CD
- On Ms Windows go to "My Computer"
- Select and double-click your CD-Rom drive
- Open the file "index.htm"
- The site should open in your preferred browser window. Enjoy.

Part 4

Finally you must evaluate your web pages, using any one (and only one) of the following evaluation techniques: Cognitive Walkthrough for StudentDVDs.com

| System Response   | User Action  | Is the goal clear at this stage?  | Is the appropriate action obvious?  | Is it clear that the appropriate action leads to the goal?                       | What problems are there in performing the action?  |
|---|--|---|---|--|--|
| The homepage displays the categories on the left, search bar at the top of the screen, 3 popular films are also displayed in the main area. | The user must locate a DVD called "The Matrix Revolution" using appropriate links. | The user is being asked to find a DVD not on the homepage, but "The Matrix" could appear in several categories or there's the option of using the search bar. | It's obvious to<br>look in a<br>category, but it's<br>not clear as to<br>which one.             | If the "Action" button is pressed then a list of all action movies will come up. | The first action is simple to perform.   |
| The next page displays the action films available for purchase.   | The user<br>must locate<br>the film and<br>purchase it.                            | It is clear to the user that this page is used to buy that specific film.   | The film stands out with graphics and easy-to-read font, also the buy-button is adjacent to it. | Yes, as the "buy" button would lead to the purchasing process.                   | The user has 2 options: - Clicking the title, which leads to a description with a buying option - Just click the "buy" button. |

| The page displays all the pricing details relevant to the film with the option to choose the quantity. They have the options to continue shopping, reject the order or proceed. | The user should check the details (quantity) and proceed with the purchase. | The user needs to check the item and quantity, before continuing.                 | Possible easy confusion when wanting to continue. Press either "continue shopping" or "Accept & Checkout" | It's easy to understand the function of the buttons, but may not be clear if the user glance at it. | If the user clicked "continue shopping", it will still be in the basket, but they would return to the homepage.   |
|---|---|---|---|---|---|
| The following page prompts the user to input their personal details.  | The user must fill out all the necessary details.                           | This page is clearly laid out, so the user knows to enter their personal details. | The required fields are appropriately marked with an red asterisk.  | It is clear, as there are only 2 buttons to click and one of them is to abort the order.            | This is a simple form-filling requirement.  |
| The following page prompts the user to input their payment details.   | The user must fill out all the necessary details.                           | This page is clearly laid out, so the user knows to enter their payment details.  | The required fields are appropriately marked with an red asterisk.  | It is clear, also there's an explanation on how to find the CVC number.                             | This is a simple procedure.   |
| An overview on what has been entered.   | The user should check if the information is correct and confirm the order.  | The page contains the details entered and it's easy for the user to interpret.    | All the user needs to do is confirm the details by clicking the button.                                   | Yes the label of the button is clearly written.   | If there was an error in the details, the only way of rectifying the details is by completely aborting the order. |

(549 words)