## **IST TASK 3: "History of Technology" Website**

Design Process
Research
Analyse
Design
Production
Evaluation

First Stage: Research

## What am I researching? And why have I chosen it?

I will be researching "The Computer Mouse" first designed by Doug Engelbart in 1965. I have chosen this product as it is one of the most significant parts of a computer and I find it is one of the most important technologies that is often thrown aside and not appreciated enough.

## Background Information

The computer mouse, a simple tool that has been included into our everyday lives, without it computers would still be in their primal form, a solid box that can would only take command inputs. A mouse is simple yet integral into creating a computer, it is a tool that younger generations often take for granted.

Doug Engelbart (known as the "Father" of the Mouse") created the first of its kind it in 1965. The idea spawned from the concept of increasing efficiency of computing as command inputs were simply too arduous. The invention of the mouse was straightforward, the mouse would "combined rotations" and track x and y position accordingly. The first prototype was a bulky piece of equipment which "used knife-edge wheels and had space for only one button." The patent was given to Doug Engelbart and his team in 1980 as it was deemed the most efficient of its kind and its formal name was known as an "x, y position indicator for a display system", this piece of revolutionary technology was significant into globalising computers as we know it.

The informal name of this technology came from the similarities of the technological mouse to the real life furry rodents. The similarity as such was the cord attached to the back of the mouse which was resembled the tail of common rodent that had the same name. Since its conception, the mouse has evolved that has increased accuracy, efficiency and speed. Latest models of the mouse have included more features and the appearance has become much more appealing. One of the many new features of the mouse is bluetooth connectivity so no wire is required to move the cursor along. Computer have also become 'optical' instead of using rotators to detect x and y positions. This optical technology basically means using laser technology underneath the mouse for this tracking process. Some specific mice (like the Razer Mice) have made mice

specifically for gaming. This technology includes numbered button the sides as to increase gaming efficiency for fast paced gamers."

## **Second Stage: Analysis**

## What is the design brief?

To create a website with the content being of the technology we have chose to research for term 4 and the history of said technology.

## How will the product be created?

The product may be created in either two different ways:

- A) Using a website creator
- B) Using HTML/CSS/jQuery

I have chosen to use coding to create my website as it gives me more freedom over my website rather than following the the order of a website maker and it allows me to be more creative with the aesthetics of the design. Of course due to some prior difficulties of online website capabilities the website will be strictly **offline**. Some of these difficulties included were **size limitations** and **coding bugs** when using dropbox as a webhoster.

## What are "Good Design Principles" when creating a website?

There are a couple of design principles needed before creating a website. Upon research I have found 5 "Good Design Principles" to help create my website:

### 1. Typography

Typography is simply the font design appeared on the website. This may seem obvious to any web creator but font design is essential to conveying mood, emotion and setting the tone of a website whether it's formal, informal and how the website plays out. This is one the most important principles as it can also determine how aesthetically appealing a website may seem to the user.

#### 2. Colour

Colour is also important as keeping constant with the colour wave will display the vibe of a website. The colour of the website must remain similar and must complement each other so that the website can look appropriate.

## 3. Content

This is plain and simple as many web creators will agree that **Content is key.** Without suitable content then there is essentially no website to create. The other elements will also come into play to reflect the content of the website to all the users. The content should also interest users and be engaging.

#### 4. Spacing

Spacing is generally so that things are placed exactly where they should be instead of being either too close or too far apart. This factors in aesthetics as well.

### 5. Design

The Design of the website is also another obvious principle. Where things are placed and the general appearance of a website is important so that the creator will know where everything is placed.

## How will you ensure the success of your product?

To ensure that my website is successful I will follow the website design principles, work to the best of my abilities and ensure that no time is wasted.

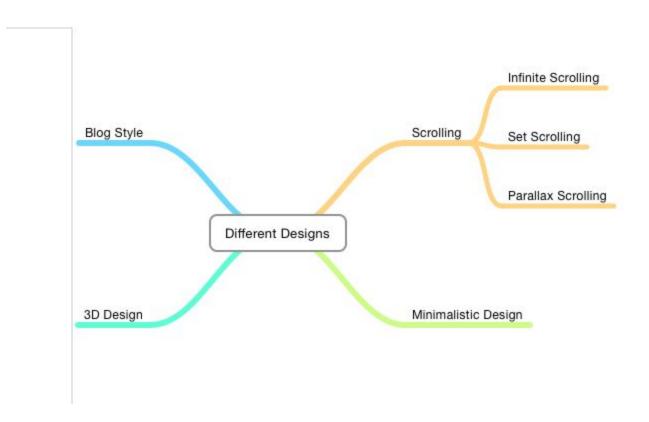
# In what ways can this design brief be met? How will I ensure that the entire project is completed within the timeframe provided by the due date?

To ensure I have met the design brief I will constantly refer back to the criteria when creating my website so that I haven't left out any crucial details and to make the end product successful. To ensure the entire project is completed within the timeframe provided I will set segments to work on each lesson so that the majority of the work won't have to be completed on the last day. I will also manage my time well, ensuring that I work on parts of the website at home as well as in school so that I use the time efficiently.

## Third Stage: Design & Planning

The design of my project is simple and will be achieved by putting together HTML, CSS and a Javascript file to create the website as a whole. HTML will state the DOM elements, CSS will style the DOM elements and Javascript will animate the page. Of course Javascript alone won't suffice on its own to animate the page so using the extensive library provided by the many Javascript users on the internet, I'll integrate jQuery to make animating with Javascript a whole lot easier.

To start off one must ask, what sort of design will this website take up? To begin, I've decided to make a brainstorm of a couple of ideas of what sort of design my website will look like.



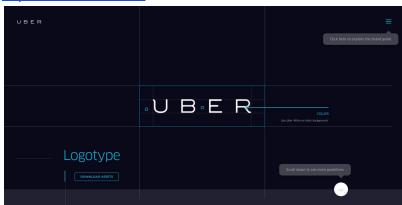
Design	Pros	Cons
Blog Style	<ul><li>Simple, yet elegant</li><li>Easy to code</li><li>Easy to present content</li></ul>	<ul> <li>Plain and typical</li> <li>No room for innovation</li> <li>Topic not suitable to blog</li> </ul>
3D Design	<ul><li>If done correctly, amazing results</li><li>Beautiful and elegant</li><li>Eye-catching</li></ul>	<ul><li>For more experienced programmers</li><li>No knowledge on where to begin</li></ul>
Infinite Scrolling	<ul><li>Creative Idea</li><li>Looks appealing</li></ul>	<ul> <li>Impossible to do with limited content</li> <li>More for social media or News websites</li> </ul>
Set Scrolling	<ul> <li>Fixes common annoyances with free scroll</li> <li>Leads user to where they want</li> <li>Great modern look</li> </ul>	- Possible issues if not done correctly
Parallax Scrolling	<ul><li>Gives off 3D effect</li><li>Popular amongst website fanatics</li></ul>	<ul><li>Quite difficult to achieve</li><li>Requires advanced programming skills</li></ul>
Minimalistic Design	<ul><li>Modern look</li><li>Easy to code</li><li>Elegant and Simple</li></ul>	- N/A

From this brainstorm I decided that taking the "Set Scrolling" and "Minimalistic Design" approach to give it a modern look. A flat, 2D design with controlled scrolling makes the website look much more modern. Recently websites taking up this sort of look has been dominating the market in terms of what people want. Including this design is also much easier to do than a 3D, parallax scrolling website as it requires much more experienced coders and a lot more time. The following websites have inspired my own:

## http://www.joinradio.gr/



## http://brand.uber.com/



## http://theforecaster-interactive.com/tour/



(much better when viewed on actual webpage)

I've also decided the colour scheme of my website will mainly consist of **dark colours** to continue the feeling of the modern look that will be portrayed within my website. My website will also be separated into segments:

- Introduction of my website
- Historical Timeline of the mouse
- Added detail of the mouse into my website
- About Page

A few important questions have also been put into consideration before attempting my project:

## What program will be used to code the website?

Definitely **Sublime Text** will be used to program all of the content on the website as it is the most efficient way of coding since it uses colour coding to display the different parts of coding making it easier to identify my page and it also finishes my code and looks for mistakes. An alternate is **TextEdit** but this is only if there are major problems with Sublime Text (there shouldn't be), as TextEdit is much less efficient. Google Chrome will also be the web browser I will use to view my project because Google Chrome has the "Inspect Element Tool" which will optimise my time because it allows for easy identification of bugs, especially in terms of Javascript/jQuery code.

## Any potential problems that will be faced during the production?

Not necessarily but definitely in terms of programming the jQuery part there may be a lot of bugs that could ruin my work. In terms of CSS I think that positioning and scrolling may tend to be a slight problem but will be easily fixable with enough dedication and resilience to power through the project.

### <u>Is everything prepared to begin the creation process?</u>

I'm certain that everything is ready, the research is done, prior analysis of the project and the design of the website is complete. Perhaps refining a little bit on my coding skills may be necessary but much of that can be done whilst starting.

## Fourth Stage: Producing

Date	Task
Before the 9th	<ul> <li>General research of chosen technology</li> <li>Refinement of coding skills</li> </ul>
9/11/12	<ul> <li>Brainstorming ideas</li> <li>Worked on portfolio</li> <li>Listed Pros and Cons of certains web designs</li> </ul>
11/11/12	<ul> <li>Had gender day, missed IST lesson</li> <li>Worked on project at home, sided with minimalistic design</li> <li>Planned and outline map</li> </ul>
12/11/12	<ul> <li>Using CSS, little bit of trouble with positioning</li> <li>Added cover, my first slide</li> <li>Troubles with scrolling</li> </ul>
14/11/12	<ul><li>Fixed scrolling</li><li>Have set scrolling with jQuery</li><li>Four slides</li></ul>
16/11/12	<ul> <li>IST lesson, worked on second slide (first slide is a cover)</li> <li>Made a timeline, jQuery used to animate circular timeline</li> <li>Added photos to my circular timeline</li> </ul>
18/11/12	<ul> <li>Adding a lot more notes to code, increases efficiency</li> <li>Fixed bugs with circular timeline</li> <li>Double IST a lot done, up to third slide</li> </ul>
19/11/12	<ul> <li>Third slide has all information</li> <li>Clever transparent background</li> <li>Photo from Mum's phone</li> </ul>
21/11/12	Finished third slide, finishing last slide
22/11/12	<ul><li>Got screen shots to finalise website</li><li>Wrote evaluation</li></ul>

## Final Stage: Evaluation

## Some comments about the issues on the website

First things first - the major issues with the website. A crucial mistake has been realised and that the website has only been tested on **my mac** and only the **Google Chrome** web browser, therefore if sir uses both of these things differently then certain consequences may be met with my website design. Secondly, the website as mentioned before is strictly **offline**, I have realised it would be much better if I had my own domain named and decided to integrate dropbox to my website but that has proven much difficulties and issues and requires up to **two months or more** of work if I am to let the website work on all browsers and screens (including phones) and time is not in my favour for this website.

Some minor issues with the website include **sloppy coding**, this is mainly due to laziness where I forget comments or (especially in the case of CSS) the ID's and classes listed aren't in correct order of the DOM elements, making it a little bit annoying to read. Other than that the jQuery and HTML is generally fine and easy to read. For the files, I accidentally put too many unnecessary scripts in the js file but not quite sure which ones are absolutely essential so I have left all of them in there.

# How does the product solve the problem, meet the specifications and satisfies the need from the design statement?

The design statement clearly states "To create a website" this was achieved and has been done thoroughly, "with the content being of the technology" the website is purely based on computer mice and computer mice alone. "...the history of said technology." My website has also included a timeline of the mice and general information relating to the mouse. The website has solved the problem and has met all specifications required in the task and has been completed to the best of my abilities.

## What successful achievements were obtained as a result of the project?

As a result of the project my coding skills have been widened, learning more about set scrolling with jQuery and also my knowledge of the mouse has been increased through the research of my project. The website was completed within 2 weeks, a personal best from my prior websites made. Another especially successful achievement was the comparison of older website done for my year 8 religion project that was a bit of a failure and not at all up to this current standard.

# If you had another opportunity to complete the same project, how would you change or improve the design?

To improve and change the design I'd definitely look into making my website more compatible with other web browsers and other gadgets instead of just my own. I'd also look into using **backend** languages rather than simply using Javascript, all frontend programming. One of the languages I'd look into especially would be **Ruby** as it has peaked my interest before. I might also add more information so that I have more content to put and more creativity to the overall design of my website.

How do you feel about your work ethic and time management throughout the project? Do you feel you have completed a satisfactory project?

I feel as if my work ethic was sub-par, a lot more could have been done to complete this project but when I did work on it I did work to the best of my abilities as I absolutely enjoy programming. For time management I think I did some time with this project but a little bit more devoted time at home could have produced a much better product that would have included:

- More slides
- More functionality
- More content

This would have made my end product much more impressing but all in all I think I did quite alright with this website as I am still a beginner coder.

## What do other people think of your solution?

To the people I have showed they were quite impressed with the website, especially the scrolling which makes the website look more professional. Some have also said the design was quite nice, especially the use of font and colour to match the mood of the website. They also didn't experience any bugs, which was good but said it required a little bit more content as it was quite brief.