Project Specification

Work overview

I will be "exploring the interaction between users and an interface that is made with intentionally bad design", I plan on making a web app that teaches the important aspects of HCI in a hands-on kind of way. User will click through the page and experience the frustration of the design; I would hope that the user gets an idea of how a better user interface would be like. On top of this, to consolidate their understanding, I may have it so they can toggle a view of how a well implemented design principle looks in an interface. The main programming languages will be HTML, CSS and JS.

Technologies and materials

The main programming languages will be HTML, CSS and JS as it will be a web page. Given that the site may eventually get large, I will use SCSS for an easier implementation as you can use "loops, functions, imports, variables, and mathematical operations, thus making CSS writing more powerful" (1). I will be exploring if there is an interesting way I can include sound, having an audio aspect within the UI might enhance the user's experience; p5.sound¹ is a great library that is handy for many things. I will not require any physical materials as this will simply be running on web browsers; I will make it so this is compatible with all/most web browsers. Furthermore, in the prototyping stage of the project I will use Adobe illustrator and XD to design and build mock-ups.

Context and research

In my research I found an interesting blog at Arstechnica by Samuel Axon about "the most (intentionally) poorly designed website ever created" (2). It had a fun take on poorly designed webpages, mainly terrible form inputs and slightly drastic design choices. The page is cleverly called User Inyerface² and includes a very frustrating form to fill in that is meant to lead to a game. Painfully small buttons, confusing instructions and animations that throw you off completely; this playful site is a very big inspiration to what I want the experience from my work to be like.



I also found another fascinating blog post on Elegant Themes which pointed out that the "design of the site itself is funny because of how terrible it is" (3). The examples shown in the blog were indeed humorous and I could see some aspects in the sites that would even make the experience of my web page both fun and a good learning point.

¹ P5.SOUND LIBRARY, HTTPS://P5JS.ORG/REFERENCE/#/LIBRARIES/P5.SOUND (ACCESSED: 4/11/2020)

² User Inverface, a bagaar frustration, https://userinverface (accessed: 02/11/2020)

Existing knowledge

I have gained a good understanding of the web programming language from previous modules, I believe I now have a solid grounding in HTML, CSS and JS. We have worked a lot with p5.js and that has been a big factor in improving JavaScript skills. I also have a good understanding of the back-end and site hosting from previous modules. Should I use the p5.sound library, I also have prior experience working with it.



Furthermore, I will be using Adobe illustrator to create a few designs of the page; I have a good background in this software and use it often when designing.

New knowledge

I will be looking into HCI at a deeper level and learning about the principles of most significance. I will be reading about Ben Shneiderman who is a pioneer within the field, he has a book called 'Designing the User Interface: Strategies for Effective Human-Computer Interaction' (4) which will be a helpful resource; He has also distilled "the vast corpus of user interface design into a few key principles" and has created "The Eight Golden Rules of Interface Design" (5).

I will also be learning how to use Adobe XD, a mock-up/prototyping tool which is new to me; it is used to create mock-ups in a simplified way; however, I may have to watch a few tutorials beforehand. I found an extensive playlist on YouTube by tech youtuber Dansky³ which covers all the bases, basic and advanced⁴.

I also mentioned above that I will be using SCSS, but I do not have any prior experience with it. Although it is much like CSS, I will be learning techniques that help improve my coding ability and efficiency of my code. I saw that w3codemasters (6) has a good page on SCSS basics and syntax that will help me get started.

Timeline and milestones

I have created a Gantt chart that holds all the major milestones and deadlines in a clear, colour-coded manner. I have also started filling up the tasks that I will be doing within those milestones in detail. With certain tasks, I have given myself some contingency allowance so in the event of delays, the rest of my workflow and deadlines will not be as greatly impacted. I have included a link to the Gantt chart as it is too large to be included here, however the table below highlights the main milestones set out. I have also included a link to the project's GitLab repository.

³ Dansky YouTube profile page, https://www.youtube.com/c/ForeverDansky (accessed: 05/11/20)

⁴ Adobe XD tutorials playlist, (last updated: 23/10/20)

https://www.youtube.com/playlist?list=PlkiM1tZke4mivrZRPcqp 80HFxlD8-IP5 (accessed: 05/11/20)

ID	TASK TITLE	START DATE	DUE DATE	DURATION (DAYS)
0	Ideation & Background Research	4/6/20	28/9/20	114
1	Planning & Detailed Research	29/9/20	6/11/20	37
2	Prototyping	9/11/20	10/1/21	61
3	Development, Testing & Draft Write Up	11/1/21	26/3/21	75
4	Final Implementation, Write Up & Eval	27/3/21	14/5/21	47
5	Showcases & Vivas	17/5/21	4/6/21	17

Gantt Chart https://docs.google.com/spreadsheets/d/18p9LDcM-7aAV3-
_W3eSQIITD3LcXJk-rko-qAlb9er8/edit?usp=sharing

GitLab Repository https://gitlab.doc.gold.ac.uk/smiah008/pcc

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- 2. **AXON, SAMUEL.** 'BEHOLD, THE MOST (INTENTIONALLY) POORLY DESIGNED WEBSITE EVER CREATED'. *ARSTECHNICA.* [Online] 07 04 2019. [Cited: 03 11 2020.] https://arstechnica.com/gadgets/2019/07/behold-the-most-intentionally-poorly-designed-website-ever-created/.
- 3. **BARRON, BRENDA.** 'BAD WEBSITE DESIGN'. *ELEGANT THEMES.* [Online] 25 04 2015. [Cited: 04 11 2020.] https://www.elegantthemes.com/blog/resources/bad-web-design-a-look-at-the-most-hilariously-terrible-websites-from-around-the-web.
- 4. **SHNEIDERMAN**, **B.**, **et al.** *Designing the User Interface: Strategies for Effective Human-Computer Interaction: Sixth Edition*. 6. s.l. : Pearson, 2016.
- 5. **SHNEIDERMAN, BEN.** THE EIGHT GOLDEN RULES OF INTERFACE DESIGN. *UNIVERSITY OF MARYLAND.* [Online] [Cited: 04 11 2020.]

https://www.cs.umd.edu/~ben/goldenrules.html.

6. **w3codemasters.** 'WHAT IS SCSS AND HOW TO USE SCSS IN HTML'. *w3codemasters.* [Online] 10 02 2020. [Cited: 02 11 2020.] https://w3codemasters.in/how-to-use-scss-in-html/.