

Web User Interface Design Group Project

User-Centered Design and Usability

Executive Summary (Nathan)

We analysed W3Schools and blogs uoregon then we implement what we they got right and tried to not make mistakes they might have.

We won't overly simplify the content as are users will have some background in comp sci, we wanted to provide the user with an overview of many subjects and many aspects of design strategy.

We are going to use a yellow, blue, and black colour scheme.

Dark grey: #181818

Yellow: #dfcb5f

Blue: #b3d5ff

For the heading we used 'Source Sans Pro', sans-serif

For text we used 'Verdana', sans-serif

Introduction (Nathan)

User-Centred design and usability is what we want to teach through our website, we will have a page for the 10 usability heuristics, user experience, user centred design, wireframing (making easy to navigate pages with wireframing), we will also have a home and contact page. In this planning document we will plan out sitemap and site structure, colour schemes, fonts and the type of media we will be using. We will also look at other educational website and see how they deliver their content and look at the audience that might use our website. We will also be wireframing to find a layout that looks good at is easily navigable.

Competitive Analysis (Nathan)

We looked at W3Schools which is widely used by students, their way of explaining concept with simple examples and interactive code makes it quite easy to learn any information/concepts a user may be looking for something we will try to implement. Their homepage is also quite playful with its colours and design but not overly so. I think a brighter less serious tone could help students of all ages to take in the pages information.

Another website I looked at is the university of Oregon's website

(<https://blogs.uoregon.edu/uxuo/2013/09/20/ucd-ux-usability-so-whats-the-difference/>)

their website has a serious tone but that makes sense because of its audience however the content is layout in an exceedingly boring way with simply basic html and a small amount of CSS and the font makes the text daunting to read. This website is not primarily about coding so I can give it some slack but we will try to avoid their mistakes.

<https://www.learn-html.org/> is another website I looked at, which is similar to W3s but focuses on teaching less things which can make it easier to find the things you want to. I like this website overall, but the homepage could be better. It is nice that it gets straight to the point but the number of links is a bit overwhelming for the first page you are greeted with.

Content Strategy (Micheal)

When you are coming up with a content strategy, there are a number of different elements that must be considered. Below is what our team reviewed and the decisions taken.

Who is reading your content?

It is important to think about who may be accessing this information. Are they tech savvy individuals or is there a possibility they are unfamiliar with technology, a virtual dinosaur? Might they have any visual impairments that need to be taken into consideration?

In our case, the audience we were aiming for would already have some degree of familiarity with technology. This meant that we didn't have to simplify the content dramatically as the audience would likely be coming from a computer science background of some sort. We also chose colours that should not create any difficulties for colourblind readers.

What problem are you solving?

Aside from trying to build your audience, most companies/groups will be trying to accomplish something else. It may be to make a bigger profit over previous years; to lower costs expended by the company or to improve customer knowledge of their product or service.

In our situation, we were trying to educate our audience about different aspects of website design. Unlike other sites that focus in on a specific element of web design, we wanted to provide the user with an overview of many subjects and many aspects of design strategy. Should they wish to delve more deeply into any of the aspects we have presented to them, they still have the opportunity to review the more specific, in-depth websites.

Content Creation and Publication

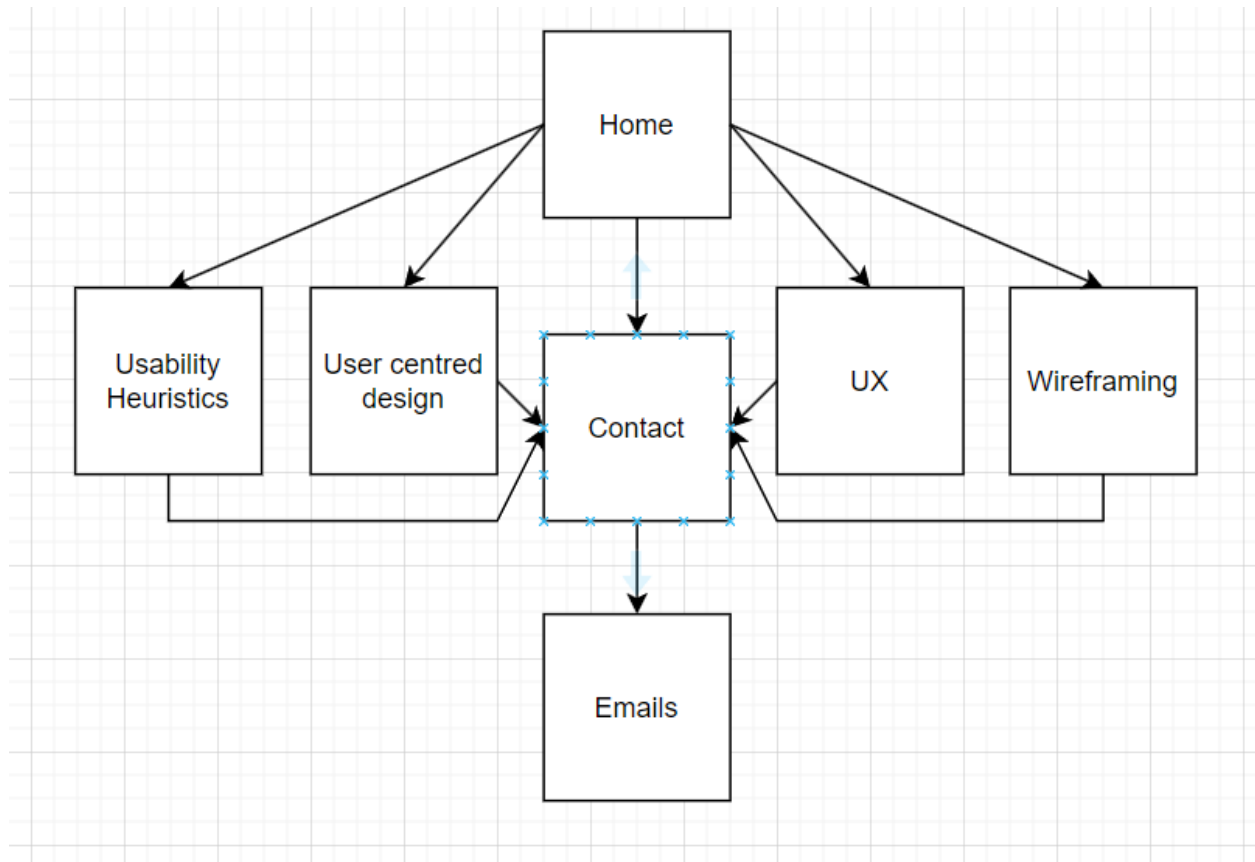
Once we had determined that our purpose was to provide an overview on web design, it helped us to decide on what elements would be discussed on our site. To us, the most logical pieces to include were good and bad examples of the 10 Heuristics; the phases of user centred design and its' benefits; what is user experience and its' importance; and information about wireframing.

Site Mapping (Micheal)

A site map is a blueprint used by search engines to better visualise a websites information to the user. It will also help identify to a search engine which are the most crucial pages to the site.

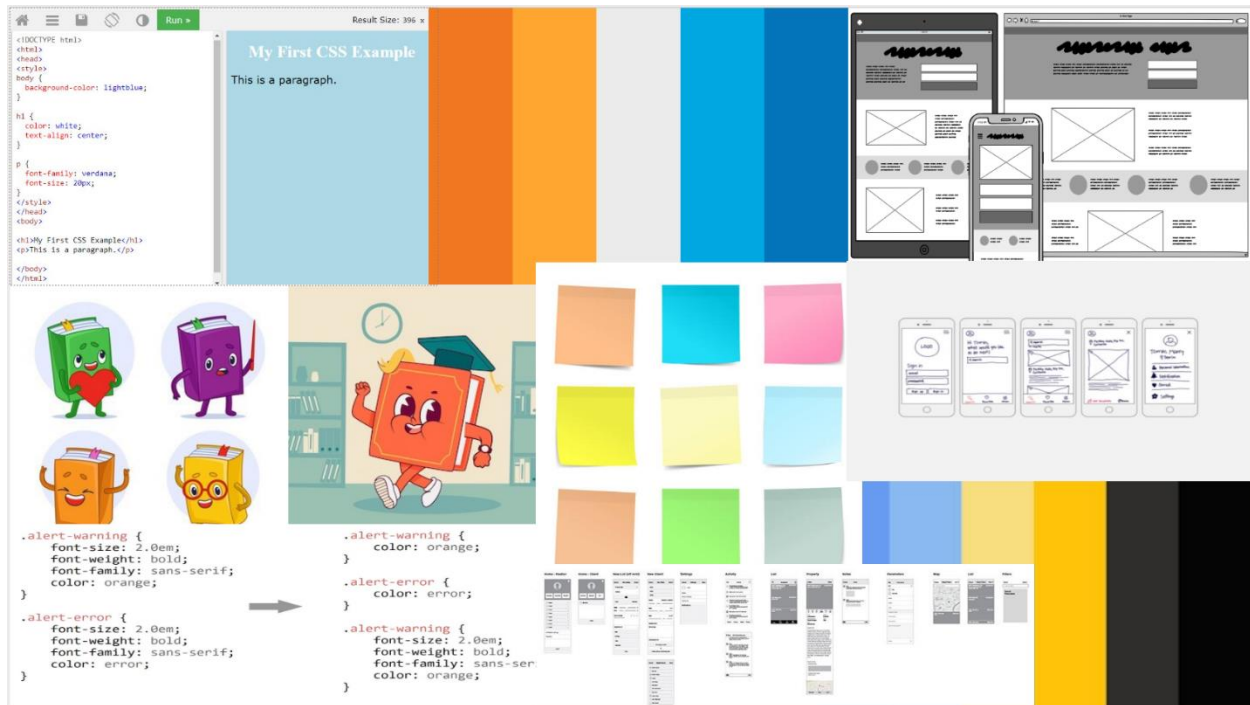
Web browsers use site maps to find the different pages on a website. Although it isn't mandatory to have a site map for a website, it is certainly a good idea as it helps ensure that search engines find the links associated with your site. Some site maps can also act as a planning tool that presents the list of webpages in a hierarchical order for users and shows how they relate to and interconnect one to the other.

In our case, we decided that a site map would be beneficial in determining what would be included in the site and how it would interconnect. During the design process, we knew we wanted to have links to the other pages in the footer and in the navigation bar. We did this because we wanted to ensure the user did not have to scroll back to the top of the page when they finished reading a section in order to proceed to a new page. We also included a button at the bottom of each web page that would directly link to the "contact us" page should they have any questions. On the heuristics page, there are links at the beginning that will allow the user to jump to a specific section they wish to read.



Design Elements (Alan)

Mood board:



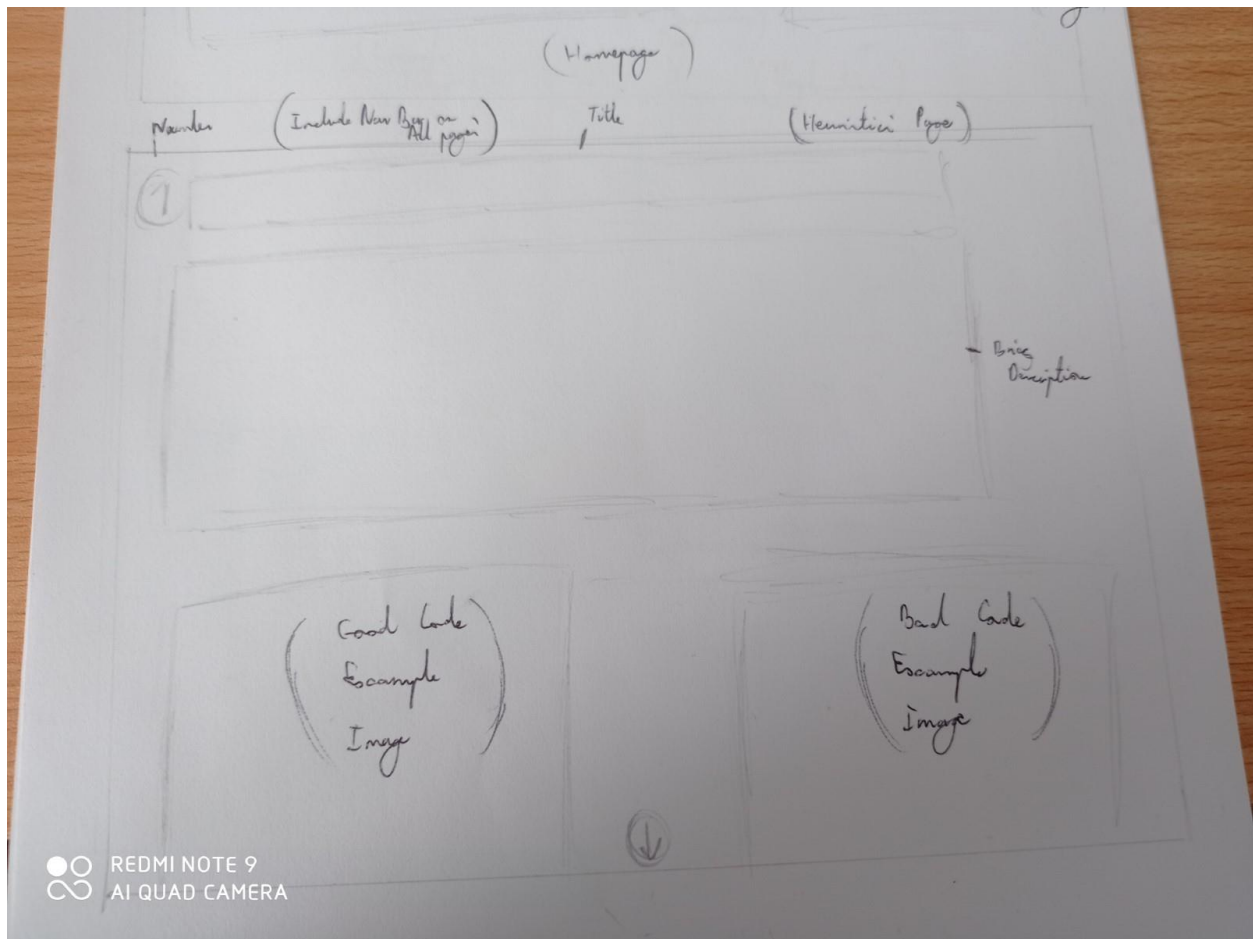
Colour Schemes:



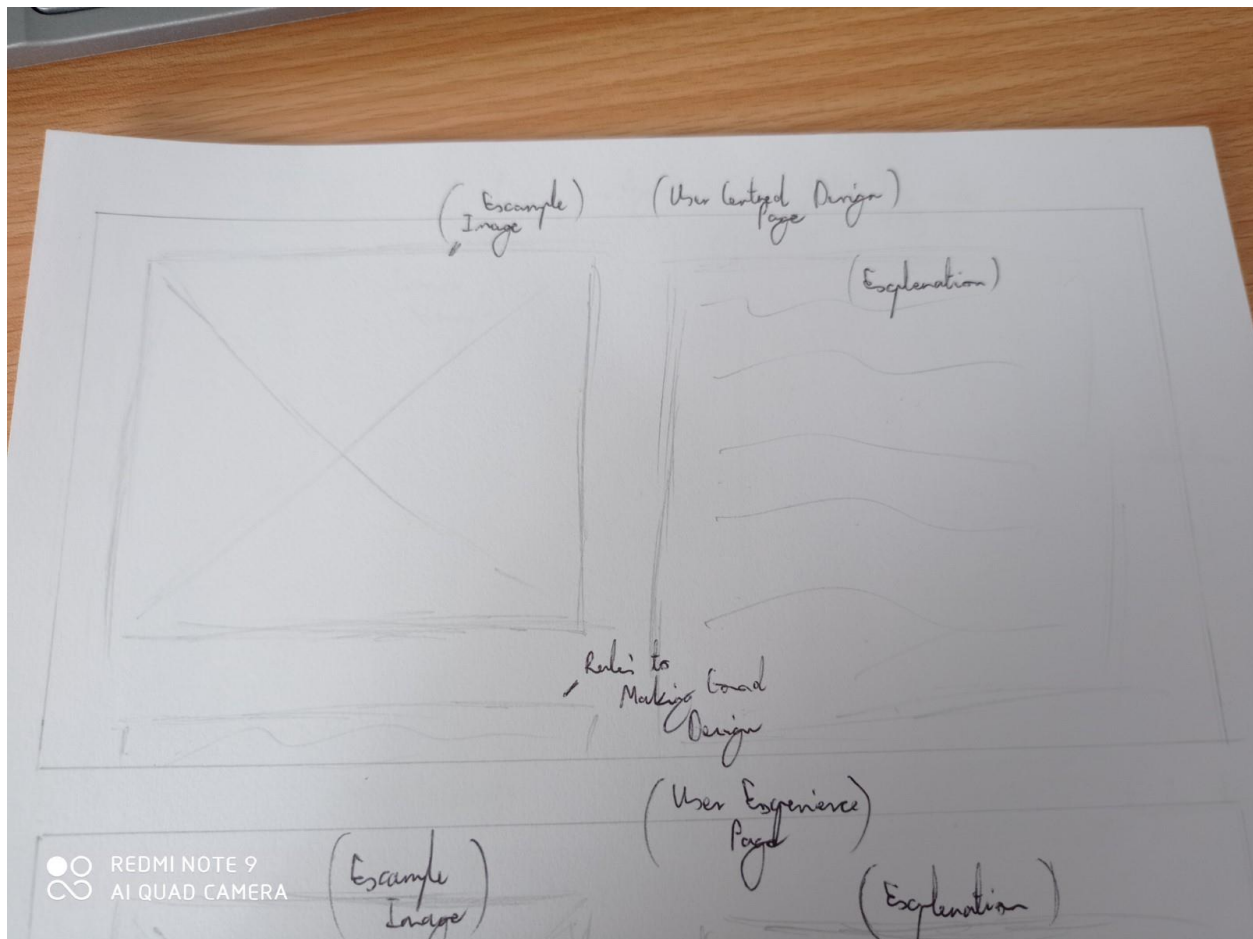
Fonts: (Nathan)

For the heading we used 'Source Sans Pro', sans-serif

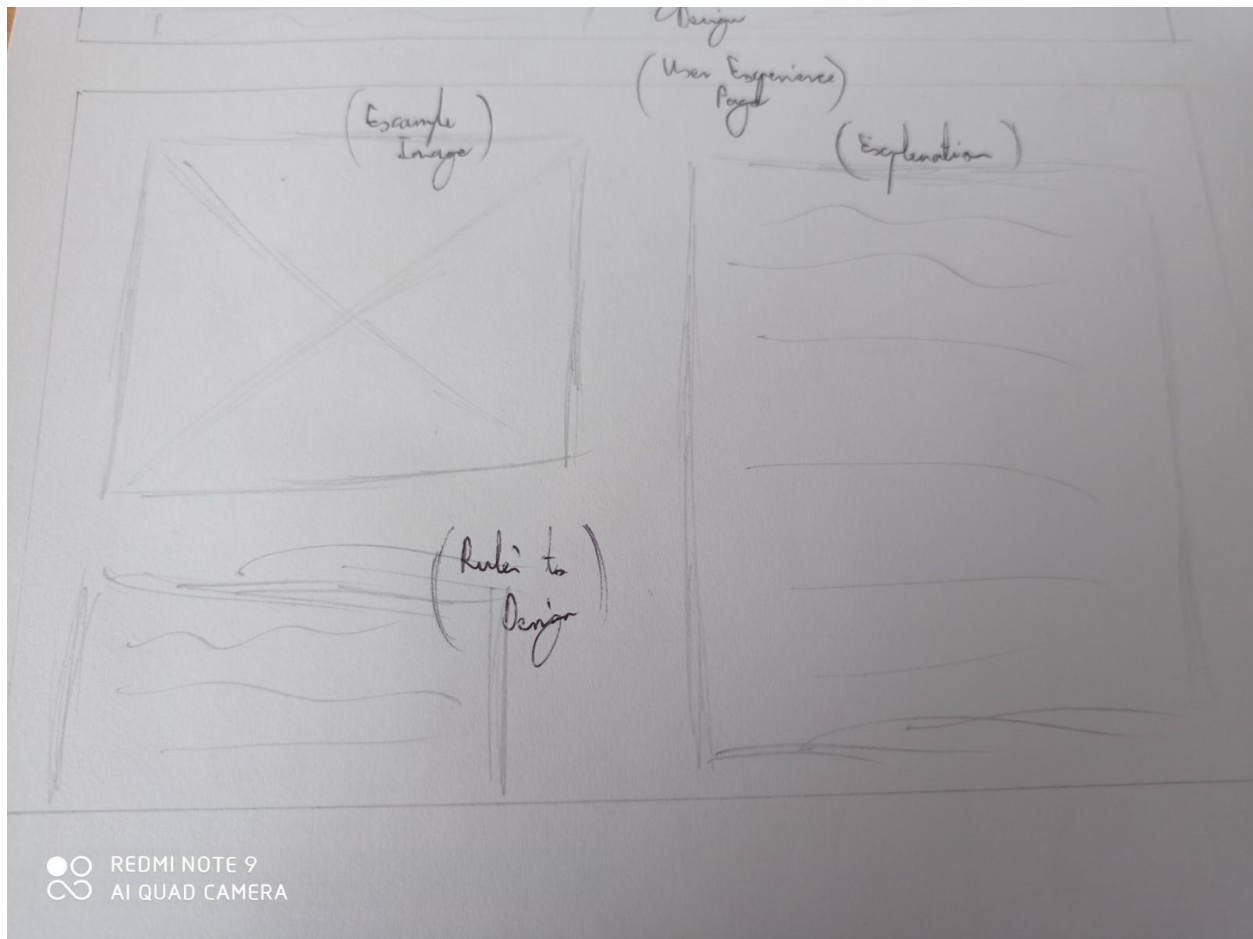
Heuristics Page



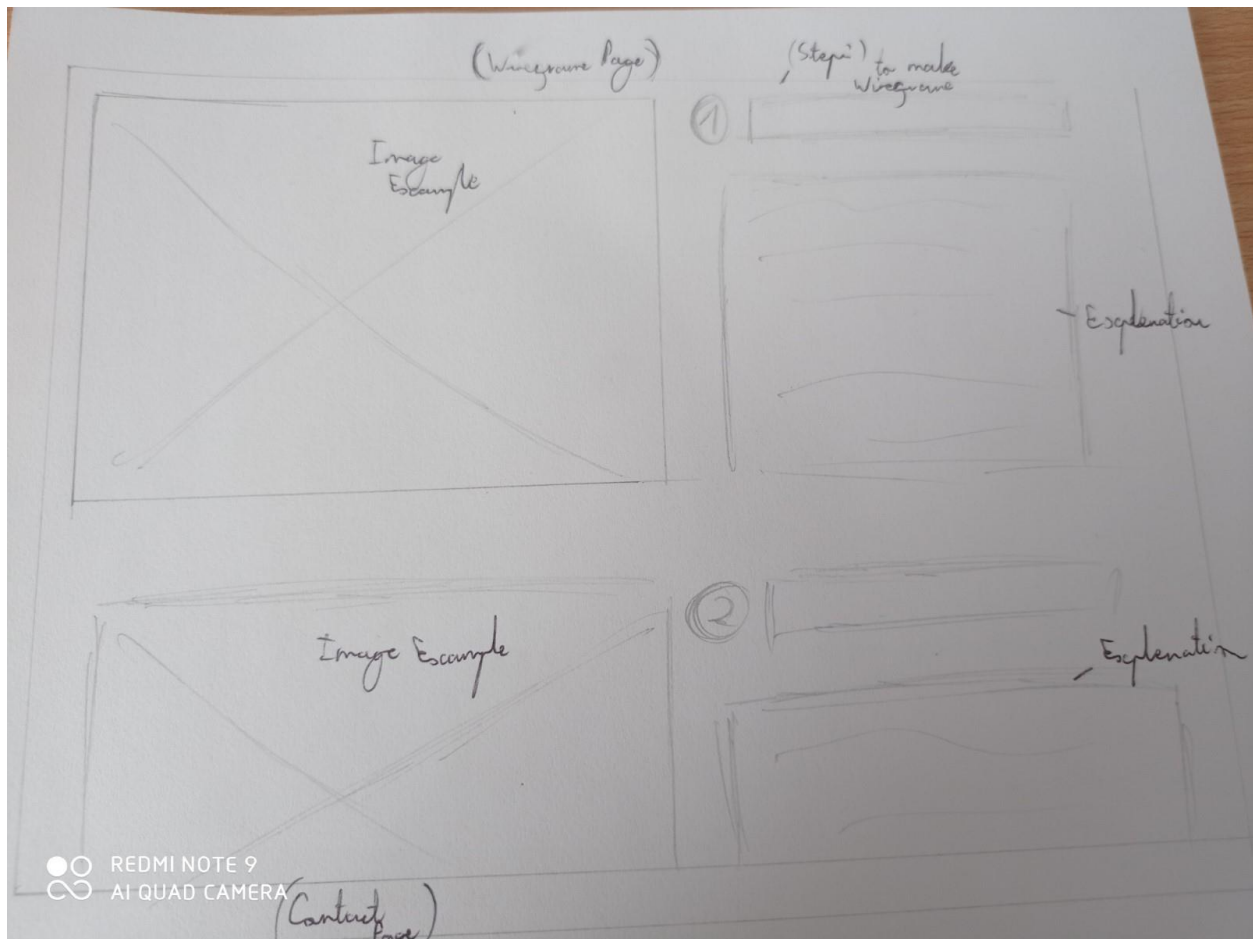
User Central Design Page



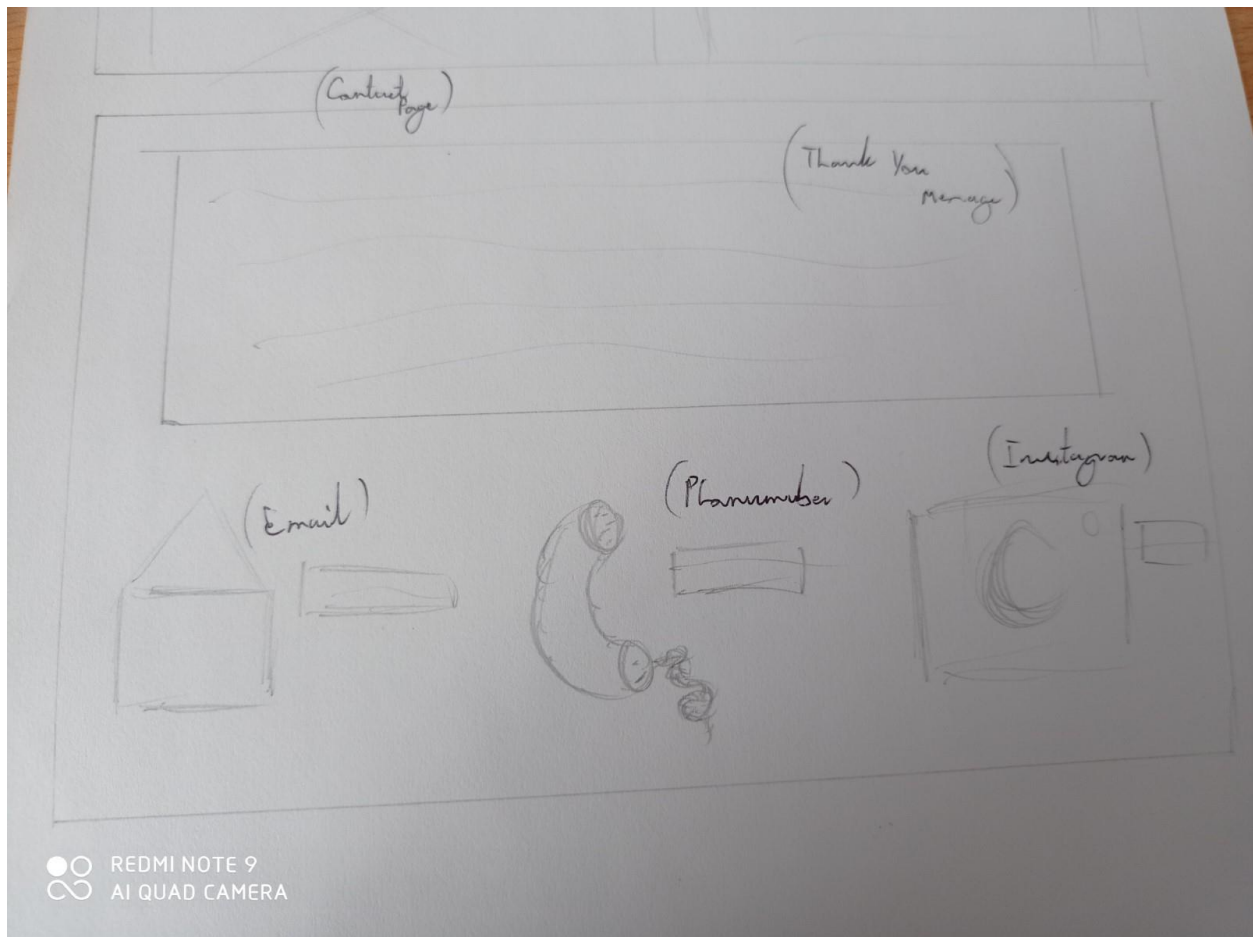
User Experience Page



Wireframe Page



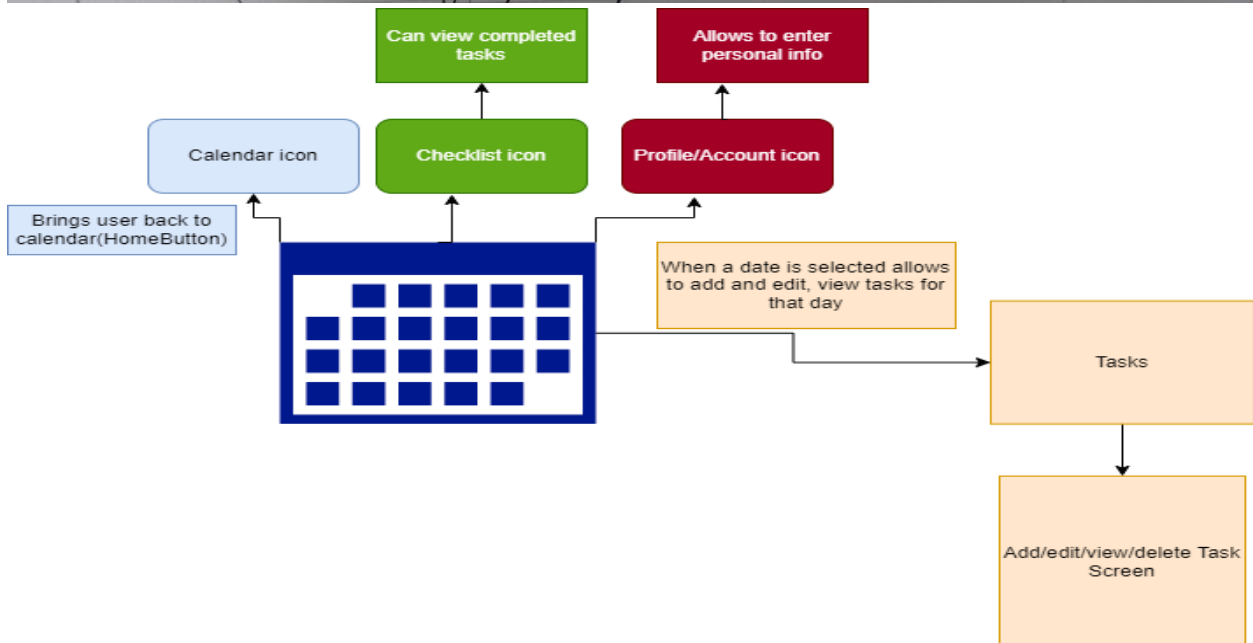
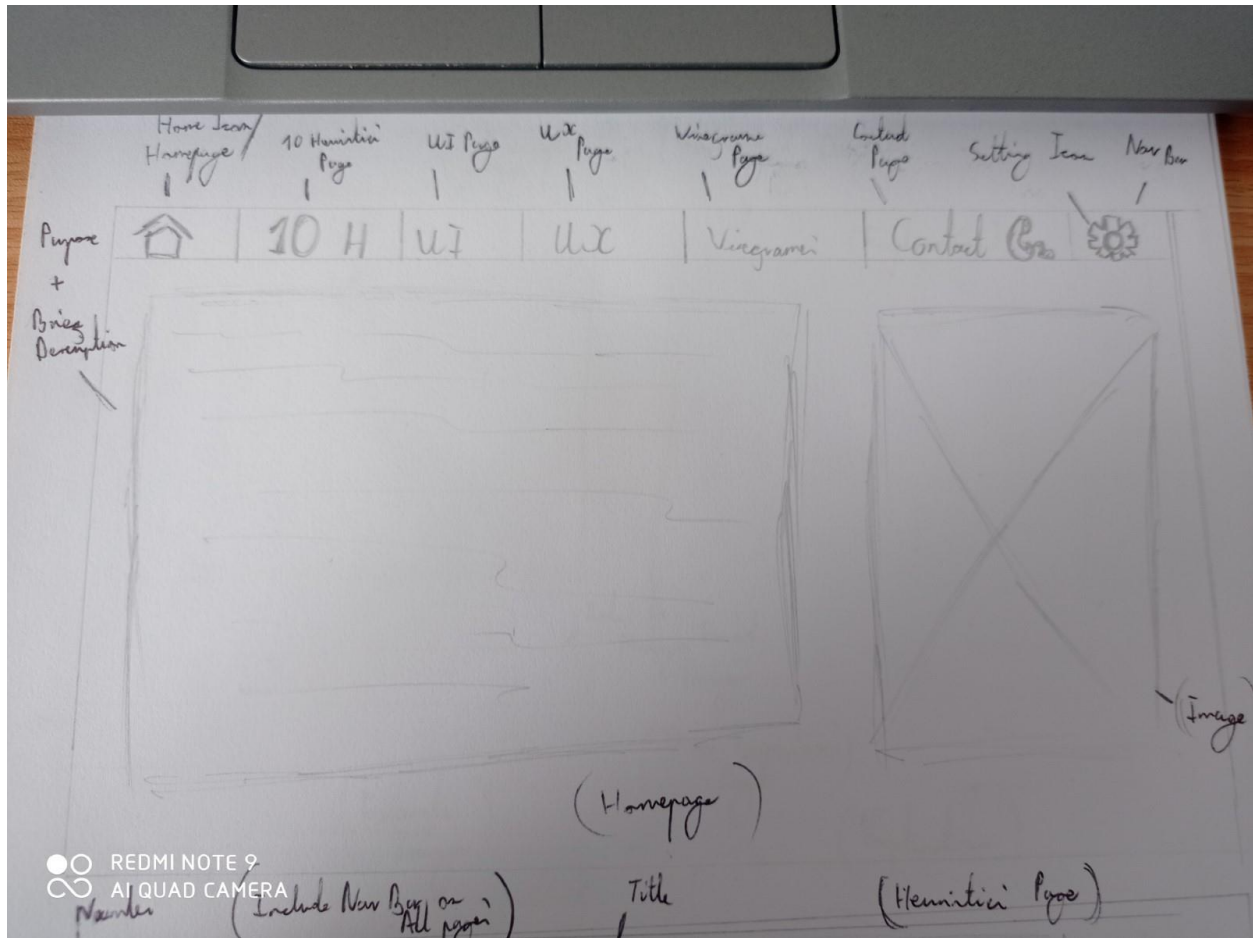
Contact Page



Images/Media

Alan's Images:

Source: Personal Folder for User Prototyping Project



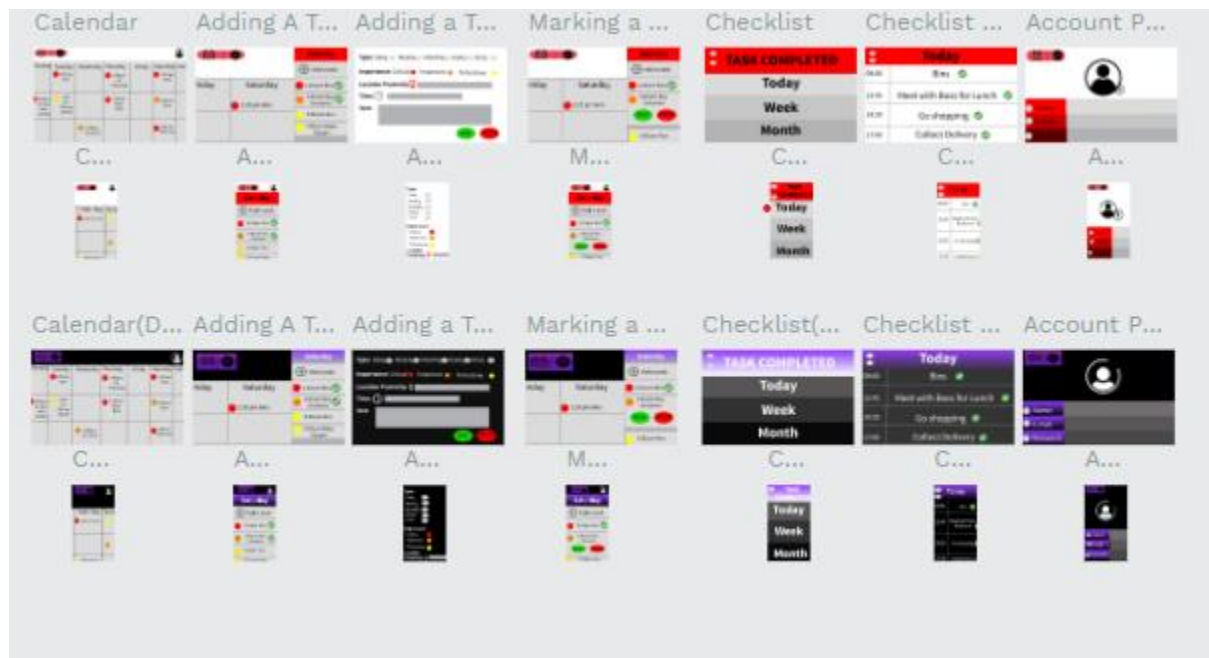
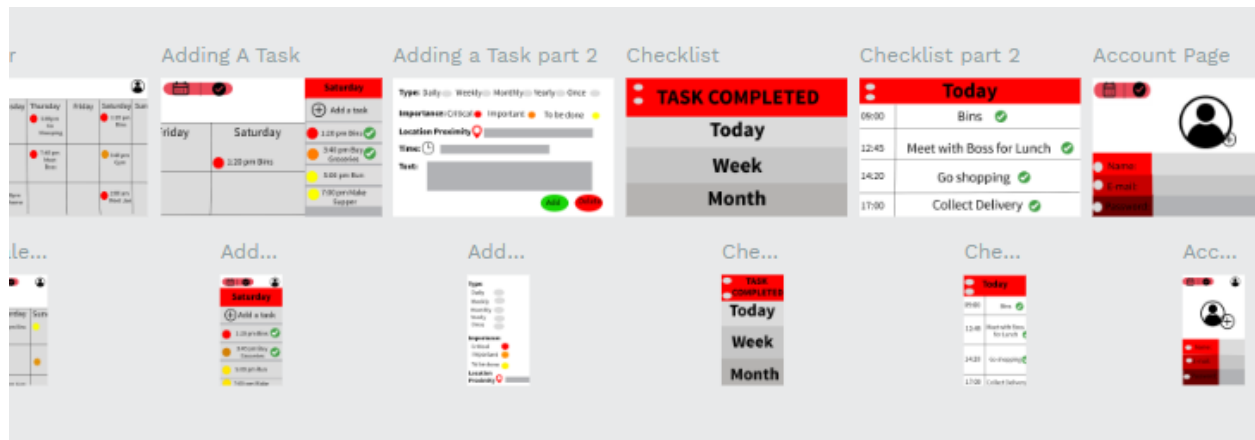


Image taken from:

<https://www.justinmind.com/blog/user-centered-design/>

What is user-centered design

Research

It begins with research to get to know the users, their objectives and contexts

Empathy

It is based on empathy to put themselves in the place of the users

Iteration

Uses an iterative process that allows for constant evaluation and improvement

Image and text taken from:

<https://www.interaction-design.org/literature/topics/user-centered-design>

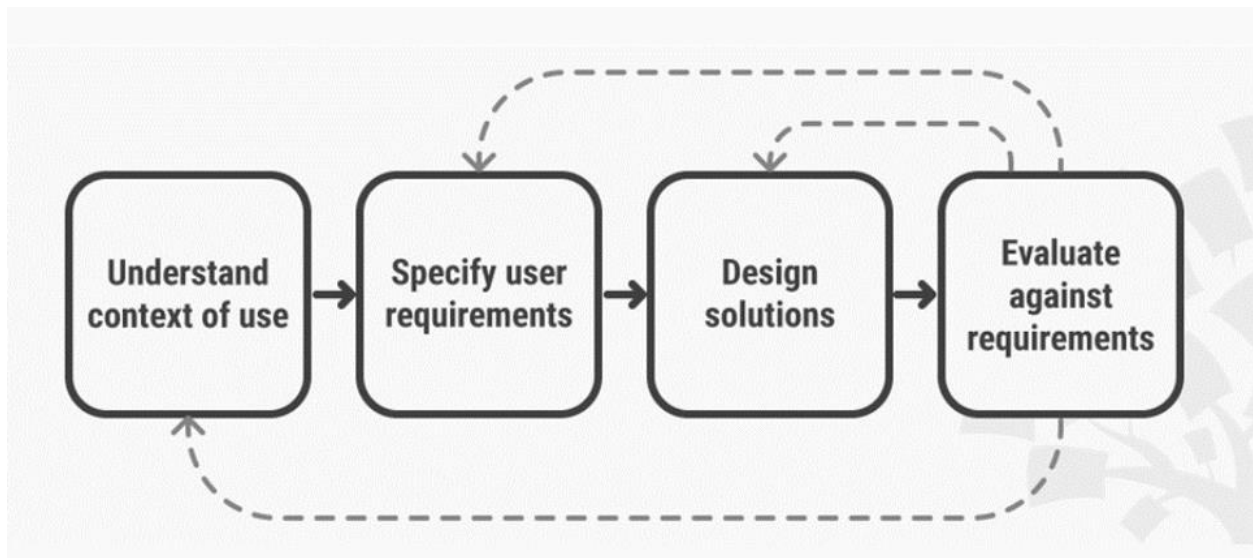


Image from:

https://medium.com/@afrah_2499/stop-making-ugly-looking-applications-8ce8c85f9b18

10 Usability Heuristics



Visibility

Show system status, tell what's happening



Mapping

Use familiar metaphors & language



Freedom

Provide good defaults & undo



Consistency

Use same interface and language throughout



Error Prevention

Help users avoid making mistakes



Recognition

Make information easy to discover



Flexibility

Make advanced tasks fluid and efficient



Minimalism

Provide only necessary information in an elegant way



Error Recovery

Help users recognize, diagnose and recover from errors



Help

Use proactive and in-place hints to guide users

Based on Nielsen's ten heuristics. Updated by Scott Klemmer and Janaki Kumar.

Use of Ai

Claude sonnet to generate text

prompt: We hope we can all teach vistors about user centered design, user experince and wireframing basics. We will make learning these concepts

easy by showing good and bad examples/uses along with detailed information and multimedia. extend this text to 2 paragraphs

response:

We hope we can all teach visitors about user-centered design, user experience, and wireframing basics. We will make learning these concepts easy by showing good and bad examples/uses along with detailed information and multimedia. By providing a comprehensive and interactive learning experience, we aim to equip visitors with the knowledge and skills necessary to create user-friendly and intuitive designs.

User-centered design is a critical aspect of modern product development, as it focuses on creating solutions that meet the needs and preferences of the end-users. Through our platform, visitors will gain insights into techniques such as user research, persona creation, and usability testing, which are essential for understanding and catering to the target audience. Additionally, we will delve into the principles of user experience design, exploring topics like information architecture, interaction design, and visual design. By showcasing real-world examples of both effective and ineffective implementations, visitors will develop a keen eye for identifying and resolving usability issues. Furthermore, our multimedia resources, including interactive tutorials and video demonstrations, will provide hands-on learning opportunities, reinforcing the theoretical concepts with practical applications. With a strong emphasis on wireframing, a crucial step in the design process, visitors will learn how to create low-fidelity prototypes that facilitate communication, collaboration, and iterative refinement before investing significant resources in development.

