Website design report

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Abstract

Despite the technology's latest advancements becoming more accessible to different groups of society, some of the communities become marginalised. For that reason, the website built is aimed at users from communities that require more support in terms of ease of use. It offers intuitive interface design and is tailored to work well for people with various disabilities.

1 Introduction

This report summarises the design process we have been following while building the website. Our goal was to create the website which makes use of powerful tools that CSS and jQuery provide, while keeping in mind the user's experience. We were aiming at creating a website which would be easy to navigate for people from different age groups, with various levels of exposure to computers. Accessibility for colour-blind, visually impaired people and self-explanatory navigation panel were things we focused on. The interaction with the website was meant to be seamless even for a potential customer who has stumbled upon a website for the first time. We also wanted to show the website's connection with the fashion industry as well as smart clothing niche, which is visible through several elements of our product.

2 Scenarios

We had more possible scenarios, however we decided to include only the most relevant ones.

2.1 Construction work and young family with small children

Mary drives her children to school. It is a very sunny day in Texas. She applies sunscreen to them before they leave the car, but is still unsure how much time they will spend out in the sun and cannot check on them herself as she is busy with work. She knows that there are ways to monitor the UV exposure and wants to invest in ways to prevent it. People in her family have previously died from skin cancer, so she has to take protective measures in order to minimise the risk. She is reminded of the danger imposed on her relatives.

Afterwards, Mary drives to work where she needs to wear protective gear on a construction site located close to the desert. There is not much opportunity to find shelter from the sun. However, the employer is open to suggestions when it comes to work safety. Mary mentions the shirts she discovered on sale, which can be sold to companies at a bulk price. The boss orders a considerable amount of clothes thanks to the recommendation and the whole crew now has equipment which indicates whether they should take a break or reapply their suncream. Mary gets a discount from her employer to order some clothes for her closest family thanks to reducing the workplace hazard. The next day, she tells the children how to use the clothes and instructs the teacher asking to limit the time her kids spend outdoors when the shirt starts to change colour.

2.2 Potential investor looking for an inspiring start-up company

When researching a company to invest in Branko wants to be able to quickly find information he seeks through the companies website. He wants the team members to be easily findable with pictures and links to LinkedIn, he wants the annual report to be easily readable, also the roadmap (where the company is heading and how they will achieve those goals) must be on the website and clearly explained for investors. He is organising a community run to raise awareness for skin cancer

and would like to purchase a considerable amount of T-shirts to be used for the participants of the run. He approaches the company and decides to order shirts with customized logos of his charity thanks to the website matching his criteria.

3 Use cases

3.1 Buying a product on the site

1. User browses the website

2. User finds and clicks the redirecting button

3. System redirects the user to an external shopping site

3.2 Signing up for the newsletter

1. User browses the website

2. If he has not signed up yet, a pop-up message asks him whether he is be interested in receiving e-mails related to his field

3. The user fills in his details and is added to the users database

4. The administrator is able to send e-mails to given set of users

3.3 Contacting the company

1. User browses the website

2. User finds and clicks the 'community' button

3. User finds all options for contacting the company

4. User uses one of the options to contact the company

3.4 Assessing a company for investing

1. User browses the website

2. User may gather information about the company by

   - reading info on the slideshow
   - finding and clicking the 'about' button
   - finding and clicking the 'community' button
   - reading the twitter news feed
   - signing up for the newsletter
   - finding and clicking the 'store' button
   - learning about the team behind the company
   - finding annual reports
   - learning about the road map and future milestones

4 Personas

4.1 Parent

4.1.1 Occupation

Working professional with stable income, in the mechanical engineering industry, has spare money

4.1.2 Personal details

Mary lives in America, in an area with higher risk of sunburn, has a big family and cares for their health, needs to work outdoors for prolonged periods of time, has to wear safety clothes throughout most of the day. Has freckles and very pale skin, putting her in the 1st category for sunburn risk.

4.1.3 Attitudinal details

Mary is concerned about the safety of her child. Aware of UV's effects on the body, but does not know the details (increased risk of skin cancer). Knows that UV can be a significant health issue, especially for smaller children.

4.1.4 Goals and motivations

She can be convinced about the reliability of the product and understands its applicability. Wants to use the product to avoid further issues with health in a country where medical care expenses are high. Interested in smart clothing and wants to stay fashionable in the meantime.

4.1.5 Behavioural details

She wears the shirt along with other family members, checks whether the shirt has changed colour depending on the exposure to the UV rays.

4.2 Grandparent

4.2.1 Occupation

Retired

4.2.2 Personal details

Lives with his wife in the suburbs of a major city in California, two children and 4 grandchildren. The wife has dementia.

4.2.3 Attitudinal details

John is aware of the fact that UV light can be harmful and wants to protect himself and his children and grandchildren. His wife forgets to apply sunscreen. They both have a hard time using computers, but can manage with simple instructions.

4.2.4 Goals and motivations

He wants an alternative for expensive sunscreen and also wants what is best for his children and grandchildren.

4.2.5 Behavioural details

He uses the product for himself as a replacement for sunscreen. When the t-shirt changes colour, he knows he has to get out of the sun.

4.3 Investor

4.3.1 Occupation

Financial manager

4.3.2 Personal details

Has money to invest, wants to support the campaign spreading awareness of the effect UV can have on a human body

4.3.3 Attitudinal details

He respects nature and understands its dangers. He understands that skin cancer is a big problem and that sunscreen is not always readily available especially for children.

4.3.4 Goals and motivations

He is looking for opportunities to invest in companies that make the world a better place while also making a profit of course. He thinks it is important for a company to be completely transparent with its (potential) customers and have a clear roadmap for their own future.

4.3.5 Behavioural details

He understands the relevance of smart clothing and its rapid growth on the market. He is looking for a startup company with promising, unique product that can generate bigger revenue without requiring a large amount of investment.

5 In-depth explanation

5.1 Encountered obstacles

We realised early into the project that most of our concepts, even though they were good, could have been difficult to understand for an ordinary user, who wants to quickly get the information from the website and does not know the interface beforehand. Therefore, we decided our implementation should be simple and clear rather than sophisticated and hard to navigate. We had to compromise on the ideas which involved a lot of animation and rather use easy, static solutions.

We did not use any frameworks due to the time restrictions for the project and the fact that the website does not have to be rendered dynamically.

Some of the project parts were unclear to us, and we have emailed some of the concerns we had, however we did not receive an answer, hence we had to use our own assumptions (shopify link, forum, user database).

While having a user database would have been beneficial in the long term, we decided not to have it since the only reason we would want to log in to the website would be to receive a newsletter, which can be done by simply providing an e-mail address.

5.2 Implemented solutions

We have made use of parallax effect so that when the user scrolls down, he/she will see the images in the background moving along at a slower pace.

For the anchor and "back-to-top" tags, we used jQuery to provide smooth scrolling rather than jumping to that point in the website. This gives the user a feeling that after they clicked the hyperlink, it did redirect them to a different location.

The menu bar at the start page disappears as the user goes down, since the user can click blocks to navigate as well as go to the footer for more information.

The social media buttons can also be implemented further, we created links to certain websites as placeholders.

There is a button in the menu bar, which changes colours used in the website and the font size upon clicking it.

The website contains a carousel, which has arrows indicating that the user can go left or right to see more images. It can be used as a gallery showcasing the most popular/trending products of the company.

6 Summary

We believe we achieved our main objective of having a user-friendly website, however we also understood the difficulty of making it accessible for specific disability groups. It would take much more time for us to make the website adapt to users with various handicaps.

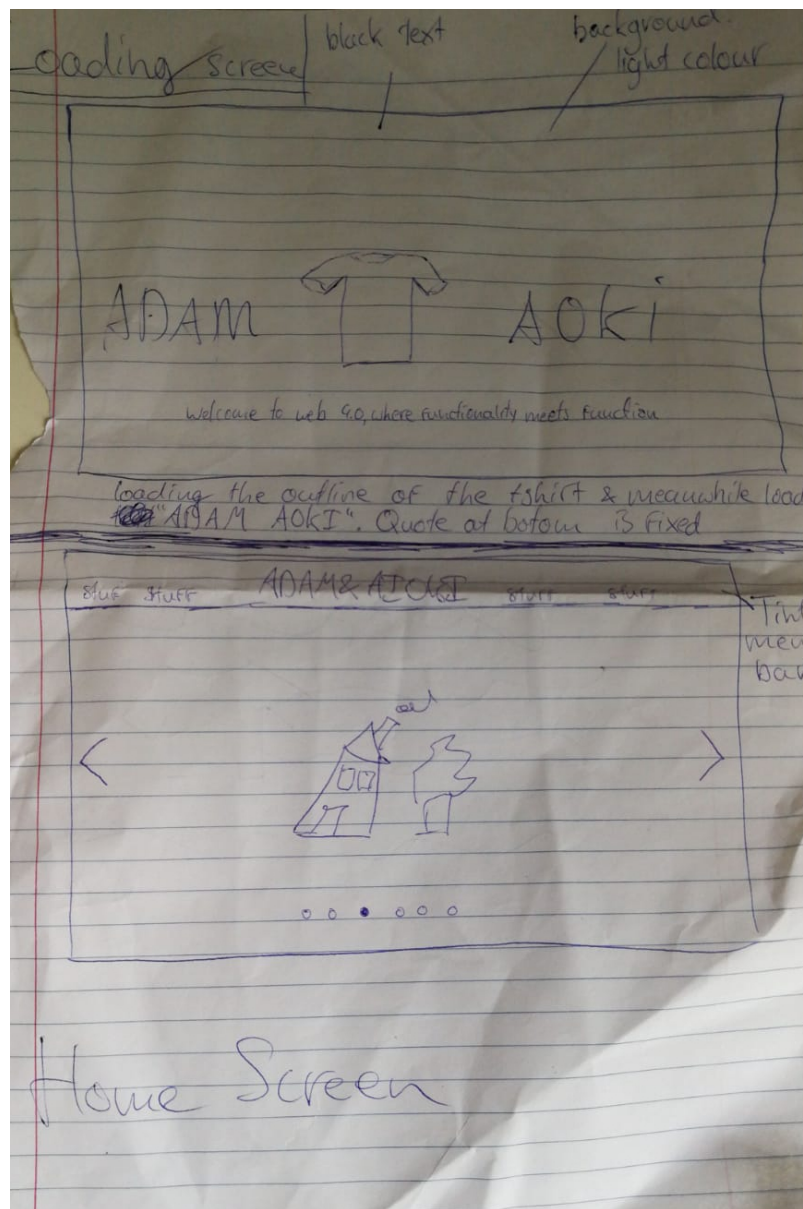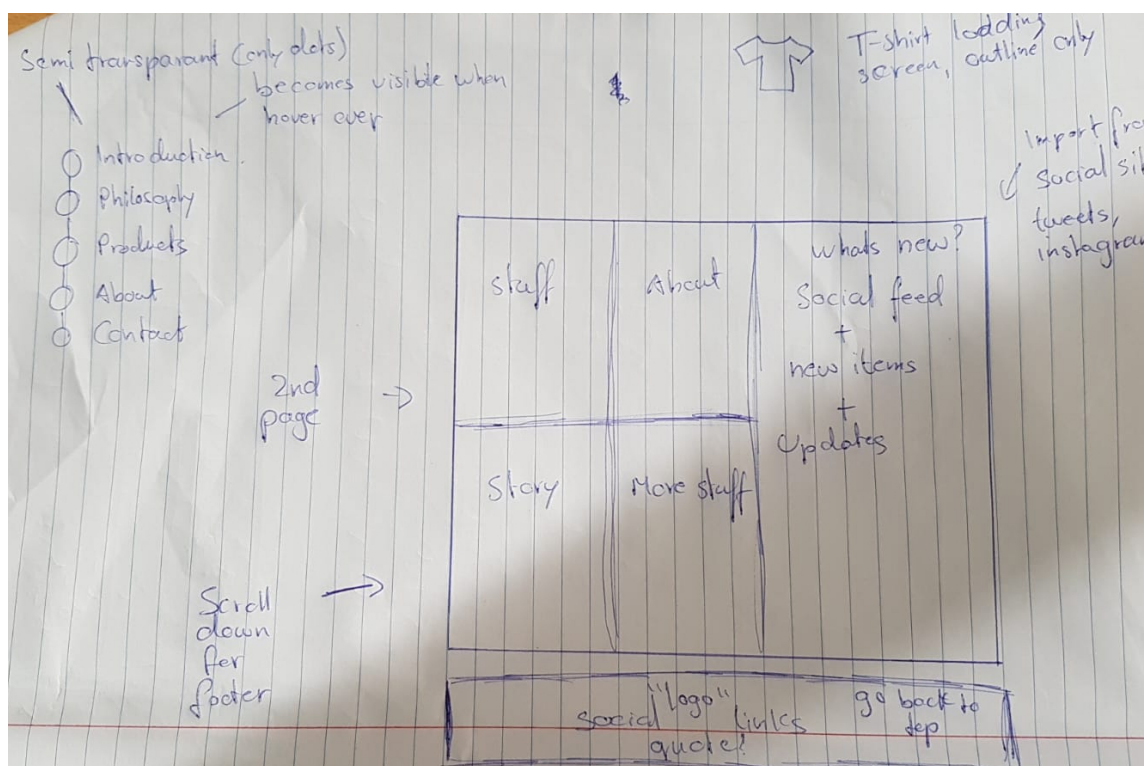This website can be used as a good starting point for creating a bigger community with people regularly viewing the articles.

Figure 1: Initial start page sketch

Figure 2: Block design sketch