2458318

Jean-Francois Retief

Dev Blog Drafts

**Week 1** (remember to copy and paste to the discussion forum)

Setting up Git: I had already set up GitHub and GitHub Desktop last year for a game design group project and learned quite a bit from the experience. Although we mainly needed it for collaboration back then, but we also learned to use it as a global backup for our project.

Reading Reflections: “The Library of Babel” reading really put into perspective how overwhelming the amount of information we have today, emphasized by the fact that people were overwhelmed even before the internet (when they just had access to “finite libraries”). The website with the same name also puts into perspective just how incomprehensively large the internet is (because of this website alone, the internet already contains almost every sentence that can ever be written). As discussed in class, it was noted that this increase in access to information contributed to the shortening of our attention spans, which allows us to process more information than previous generations, just in smaller bits. I heard it often said that technology is the next step in human evolution, and if these small adaptations are anything to go by, that statement might just be true.

Case Studies: When comparing the usability of the Wits Home Site and Ulwazi’s Dashboard, it is clear that the Wits Home Site is in dire need of improvement. On the main page, the interactable parts of the site aren’t prominent enough. You have to scroll down to access the “search courses” section and as you scroll down further, the inconsistent placement of images and text makes it a chore to navigate. In contrast, Ulwazi’s Dashboard is much easier (and pleasant) to use. Everything on the site is neatly organized into sections (important tabs on the left, courses in the centre, and important announcements on the right). Taking my favourite website, Youtube, as another case study: there are things that I like and dislike about the site. I like that, similar to Ulwazi’s Dashboard, the site is clearly split up between important tabs on the left, and the videos on the right. There is also a few small “quality of life” things (like the videos previewing if you hover your mouse over the thumbnail and displaying how much of a video you have watched already at the bottom of the thumbnail) that really make the site more pleasant to use. I don’t like the increasing frequency of advertisements on the site, but I understand that is required for the site to make a profit.

My goals for this course: I want to qualify as a “successful student” as described in the “Course Outcomes” section of the CBO.

Dev Blog Drafts

**Week 2** (remember to copy and paste to the discussion forum)

My experience starting with HTML: For the most part, learning HTML gives a very similar feeling to learning any new programming language. The only major difference in approach that I need to get used to, is the semantic tags. Now I must wrap my functional code in containers and tags that are useless for the running of the code, but helps with search engine optimization. It is interesting to see all the tags that *functionally* do the same thing, but differ *semantically*. This will be an adjustment, but I’m excited to continue learning more about HTML.

Readings: In the “As We May Think – At 65” reading, Bush’s work was re-examined in 2010, and it reinforces the feeling of being overwhelmed that last week’s readings handled. No matter when you re-examine reading like these, or when they were originally written, there will be a sense of the writer grappling with the unimaginable scale of future advancements and technologies. Although Bush seemed prescient when he described a future technology, “MEMEX” very similar to what we know today as the internet, he simply grappled with what was needed in the future (a vast repository of human knowledge), not what would definitely be. He knew the *nature* of what advancements would likely be made, but not the *form* they will take.

Internet Histories: The different timelines looked at in class really put the progression of the internet into perspective. The internet, like most technologies, had an *exponential* growth rate. It was already growing fast in the 1990s, but today it is impossible to visualize just how big and how fast the internet is growing. The section of the theory lecture that handled the “browser wars” and “the life and death of the Flash player” also helps with putting the history of the internet into perspective. Even though the internet is only a few decades old, there were mountains of technologies and ideas that were used, changed, upgraded, and discarded within that relatively short time frame.

Dev Blog Drafts

**Week 3** (remember to copy and paste to the discussion forum)

~ 2458318 ~ Jean-Francois Retief ~ Week 3 - Blog Post

My experience continuing website development: This week, we started to learn CSS, and how to integrate it with HTML. It is convention to put the styling in a separate file, which is a further example of focussing semantics and convention, rather than simply focussing on functionality. It is possible to embed the styling the same file as the HTML coding, but it is considered good practice to separate it. This semantic approach to coding is the main difference between HTML (and CSS) coding and coding I’ve done in the past. Coding websites must be approached differently, to take into account web crawlers, search engine optimization, screen readers, and anything that needs to understand what is inside of my website (touched upon in the reading: “Lawson, B - How a Screen Reader User accesses the Web”).

Reading: In “Convention and Context, Mailloux, 1983” the whole idea of convention and semantics is touched upon. The reading gives multiple viewpoints and definitions of convention and conventions in context. The loose definition I most agree with, in the context of web development, is that convention is “quasi agreements” about how something must be done, for example: using ‘sections’ or ‘article’ instead of a simple ‘div’ to help the web crawler to understand the contents of your website.

Reflection on the lecture: Similar to the abovementioned reading, the lecture gave different definitions of a single term, this time the term is: *interaction*. It is difficult to have a meaningful definition of “interaction” in the context of the web since anything digital is technically “interactable”. For the context of web development, interaction should be split into two categories: trivial (does not meaningfully change the content of the webpage) and non-trivial (does modify the webpage in a meaningful way). What falls in each category should be evaluated on a case-by-case / user-by-user / website-by-website basis.

Dev Blog Drafts

**Week 4** (remember to copy and paste to the discussion forum)

~ 2458318 ~ Jean-Francois Retief ~ Week 4 - Blog Post

My experience continuing website development: This week, we started to learn JavaScript. I am much more comfortable with this type of coding since is very similar to code I’ve done before (C++ and C#). It is clear to see just how dynamic a website can be made with JS and how stylish with CSS, but one must take care not to put style before substance. The UI must be clear, easy, and fast for the user to remain interested in the website, so slow transitions, loading screens, and difficult-to-read styling are to be avoided, even if they look good.

Reading: In “The Basic Principles of User Interface Design” a bunch of helpful tips is given to take into consideration. But as the reading itself says: it all pretty much boils down to *making it easier for the user to interact with the UI*. UI Design is, obviously, user-centric. In “Alternative Approaches to Interface Technology, Gibson, 2004” describes less traditional UI systems and input methods. Some of which, like the “Hands-free” systems, have improved vastly since the reading was written. For example, at Wits, many of the card-interfaces at entrances have been replaced by touchless, biometric scanners, to make entrance to the university *easier*. It is simpler, clearer, reduces cognitive load, and provides useful feedback, as recommended in the first reading.

Reflection on the lecture on UI and Interactivity: Similar to last week’s discussion on interactivity, and its many definitions and debates of said definitions, Interface and User Experience also has many viewpoints and interpretations. The ideas of “interactivity” and “interface” are inherently linked: they are the action and the representation. The idea of interface elements being both “the item” and “the action” showcases the intrinsic link between these ideas. As mentioned in the lecture, many aspects of design do not have a mutually exclusive relationship with others. Many aspects form many different and complicated Venn-diagrams.

UI and my wireframes: My first attempt at wireframes did not take into account the alignment between the developer goals (my goals) and the user goals. For our assignment a suggested information/content hierarchy is given, so it is easier now just to consider the user’s goals, wants, possible pet-peeves, and overall experience, as well as any interface elements that might be needed to traverse between these moments of user experience. My new attempts are better, but as an engineering student: I’ve not been exposed to many portfolio-type websites, so I definitely want to investigate examples in the following weeks to see what wireframes and site-layouts work and don’t work.

Dev Blog Drafts

**Week 5 and 6** (remember to copy and paste to the discussion forum)

~ 2458318 ~ Jean-Francois Retief ~ Week 5 and 6 - Blog Post

While I spent most of these weeks finalizing my Game Design Assignment 1, I did however continue work on my website during this time. I worked on making my wireframes, style guide and other documentation more formal (for example: I took the wireframes that I had hand-drawn, recreated them digitally, and added annotations to explain my decisions and any changes I made during development).

These weeks’ technical lectures were about JavaScript concepts. I am not using JavaScript for this assignment, but I can see how I would be able to improve my website, or any future websites I will make, by including simple JS. My Assignment 3 website will most likely be very different from my Assignment 1 website, due to the addition of JavaScript. I am purposely avoiding JavaScript for this first website, because it is not a requirement and it will create a more noticeable difference between my work on Assignment 1 and Assignment 3 (i.e. it will be a better showcase of my growth as a designer).

Dev Blog Drafts

**Week 7** (remember to copy and paste to the discussion forum)

~ 2458318 ~ Jean-Francois Retief ~ Week 7 - Blog Post

My IxD Process during development of my website:

Goal Alignment: My goal is to allow the user (the marker) to easily navigate throughout my portfolio website which will contain a homepage, a blog section, a design section, an essay section, a profile screen, and a portfolio section.

Information Structure (Content Mapping): Every page as two nav-bars: one at the top of each page for navigating between pages and one fixed at the bottom of the screen to navigate within a single page. The homepage (the page that the website opens in) contains a brief introduction to the website and the navigation. The Blog page contains a blog-selection panel and the blogs themselves. The Design page will contain the style guide, wireframes as well as an explanation of my IxD process (similar to this part of this blog). The essay section will not have anything yet. The Portfolio page, similar to the blog page will contain an item-selection panel and the portfolio items themselves. Finally, the Profile page will contain a profile image and an “about the designer” section.

User Flow (Screens, Behaviour, Decisions): The user will start at the homepage. They can scroll down to read more, use the bottom nav-bar to quickly go to the bottom or top of the page, or use the top nav-bar to navigate to other pages. If the user goes to the Blog page or the Portfolio page, they can use the relevant selection panel to jump to their desired blog-post or portfolio item. They can also use the bottom nav-bar for the same purpose, or simply scroll down to the blog or item they wish to see. If the user goes to the Design page or Essay page, they can use the bottom nav-bar to navigate to desired sections/essays or they can simply scroll down. If the user goes to the Profile page, they can only navigate to another page after they’ve read the profile information, since the page is small and static (has no other interactivity).

Interface Elements: There are two ways the user can interact with my website, namely scrolling through each page OR clicking on links that will take the user elsewhere in that page or another page.

Design (Style Guide, Wireframes): In the design section on my website.

Implementation: Since JavaScript is not a requirement for this assignment, I decide to not use it at all, and make the website with a more restricted set of tools. This will create a much clearer distinction between this website and my next one, as well as show clearer growth as a designer throughout my assignment submissions.

Reflection on the lecture on Ethics of UX Practice: this lecture went well with the content we’re working on in one of my other courses: Professional Practice and Software Development. There is a constant push and pull between companies wanting to make a profit, and companies having to remain ethical during the pursuit of that profit. The same is true for an individual designer or engineer: our designs have real impacts on the users. Designers have the power to make almost anything, but they have a responsibility to put ethics before profit.

Reading: In “User experience - a research agenda, Hassenzahl and Tractinsky, 2006” a more engineering-like point of view was taken during an analysis of UX. This reading reinforced the idea covered in previous lectures that we can try to design for a certain experience, but due to many factors out of our control, we cannot guarantee that experience. The three perspectives highlighted by the reading essentially boil down to: aesthetics are also important (not just implementation), experience is subjective and not guarantee-able from a design perspective and a user’s emotion can be affected by your UX design, and this is one of the ethical concerns highlighted in this week’s theory lecture discussed above.

**Extra**:

~ 2458318 ~ Jean-Francois Retief ~ Extra Discussion on an article concerning dark UX patterns.

The article I found, “Dark Patterns: A New Scientific Look At UX Deception”[1] looked at many different examples and types of Dark Patterns in use. This article puts the ubiquity of these patterns into perspective: even large and well-known companies (such as Samsung, Facebook (Meta), Dominos, Microsoft, LinkedIn, etc.) often use some of these patterns to increase their profits or further their interests. While some of these practices can just be an annoyance (like hiding unsubscribe buttons or forcing users to subscribe to use a website), other practices are designed with the intent to trick the user to spend more money than they would otherwise (one of these, “Basket Sneaking”, is even illegal in some countries due to its unethical nature). Quite often, these patterns take advantage of users’ expectations and weaknesses. While this can be as harmless as switching the “ok” and “cancel” buttons in a pop-up that will take you to another website, a more insidious example from gaming is “loot boxes”. Loot boxes and casinos take advantage of the same phycological issues that gambling addicts have, but loot boxes have an advantage over traditional casinos: they are much more accessible and by a wider (and sometimes younger) audience. We as designers tend to manipulate users into using our products in a certain way, but we have a responsibility not to use this power for evil.

[1] Reed Steiner, 2020, Dark Patterns: A New Scientific Look At UX Deception. **URL**: <https://www.fyresite.com/dark-patterns-a-new-scientific-look-at-ux-deception/> [last accessed: 07/04/2023]

Draft for design section

My goal is to make a portfolio website, where a user can easily navigate within a page and between pages.

The user will be anyone who wishes to view my portfolio.

As stipulated in the assignment brief, the website will contain the following pages: Home, Blog, Design, Essay, Profile and Portfolio.

The user can use the Top Nav-bar to traverse between different pages. The user can use the Bottom Nav-bar (which is fixed to the bottom of the screen, not the bottom of the page) to traverse within a single page.

Both of these Nav-bars are implemented as a list of links (display: inline-block) that either link to an HTML file or an ID tag. No JavaScript was used for this implementation.

Other than these Nav-bars, the user can simply scroll through each page, if they wish to do so.

My goals are to have simple and recognizable UI element, to make all navigational components have warm colouring (i.e. shades of red) and to make all content components (such as articles or item-selectors) have cool colouring (i.e. blues and white).

The warm colours of the navigational components contrast well with the actual content of each page (which as cool colouring), and this clearly and visually separates the interactable nav-bars from the static content. The interactable content (item-selectors) has more vivid colouring than the rest of the content (i.e. deeper blues).

Every visual container on a page has rounded edges to give the site a smooth aesthetic. Every container also has a clear difference in colour from whatever appears behind it in the visual hierarchy. This hierarchy starts with the light-blue background and then goes to the white articles (which contain black text and aqua-blue items) and above that comes the red navigation (which contains white text that turns dark-red when the mouse hovers above it).

All these elements combine to create a unique visual identity that I quite like since it incorporated my favourite colours (namely red and blue) and thus the website’s visual aesthetic helps to describe me, my style, and my design preferences (which contributes to the goal of a portfolio website).

Wherever the default font wasn’t used, such as paragraph titles, the font family “cursive” and font style bold was used, since it was readable and it is different enough from the main text to be noticeable, but not distracting.

Readings Provided (References):

[Week 1] Borges, JL - 1998 - The Library of Babel.

[Week 2] Harper, S - 2010 - As We May Think at 65.

[Week 3] Mailloux, S – 2015 - Convention and context.

[Week 4] UXPin – 2020 - The Basic Principles of User Interface Design.

[Week 7] Hassenzahl, M & Tractinsky, N - 2006 - User experience-a research agenda.

Assignment 1 Submission

Link to deployed website:

<https://jeanfrancoisretief.github.io/Assignment-1-Website/>

Link to Github repository:

<https://github.com/JeanFrancoisRetief/Assignment-1-Website.git>

Dev Blog Drafts

**Week 8** (remember to copy and paste to the discussion forum)

~ 2458318 ~ Jean-Francois Retief ~ Week 8 - Blog Post

Reflection on lecture about one of the readings (“Graham, M. & De Sabbata, S. & Zook M.A. - Towards a study of information geographies: (im)mutable augmentations and a mapping of the geographies of information, 2015”): We discussed that, despite the ideals people had about the internet, access to information has not been equalized or democratized and every study, website and piece of information that is available on the internet, or uses online sources can have some modicum of bias due to this uneven split between the global North and the global South. An example of content affected by this inequality: the many metrics used to study this digital divide (such as usage vs participation, internet access, cost of access, etc.) are in themselves biased by this divide -it is a self-fulfilling cycle.

Reflection on the other reading: Like the reading gone through in class “Ballatore, A. & Graham, M. & Sen, S. - Digital Hegemonies: The Localness of Search Engine Results, 2017” also handles topics such as digital gaps between people, countries, etc. due to inequalities in data-access and specifically to this reading: inequalities in search results. This reading reinforces the idea of: the internet would’ve *ideally* promoted and facilitated equality in information access and search results, however in *reality*, tools (with good intentions) such as user-personalized search-result-optimization and personalization divide people more than ever. Attempts to mend by adding user-settings are not enough, since I can’t even count how many times I’ve been affected by the “Default effect” and didn’t pick the right settings for cites.

Reflection on my website in terms if these readings and the lecture: My website isn’t the most optimized cite on the web and I did not use any media-queries to make my website usable on different devices (since it was not a requirement) – like the example (the SA covid-registration website) mentioned in class, this would limit access to my website and contribute to this device (in a small way). Even inspirations for my website, methodologies used, and conventions followed most likely originate from the global North, which puts the “usage-vs-contribution” metric of on geographies reading into question (since, how much of the global South’s contribution is real-*original*-contribution).

Dev Blog Drafts

**Week 9** (remember to copy and paste to the discussion forum)

~ 2458318 ~ Jean-Francois Retief ~ Week 9 - Blog Post

Close reading:

“Digital inequalities in the age of artificial intelligence and big data – C. Lutz, 2019”

[Page 1 (141)]

The abstract touches upon algorithms that can contribute to digital inequalities and in this week’s lecture video there were examples of this touched upon that relate to AI algorithms. While most of these algorithms do not have any malicious or ill intent, oversights during coding can accidentally proliferate inequalities. (An explanatory example: AI interpreting profile pictures on a website could theoretically misidentify, misgender, or racially profile users -while the original intent was to simplify profile set-up for users, this unintentionally contributes to digital inequalities )

[Page 2 (142)]

In the investigation of the “First Level Digital Divide”, an important note to touch upon, is: even though more and more people have internet access in the present day, there are still Digital Access Divides in this area and other areas (such as access to AI-powered technologies or social media access) that are still extremely prominent today.

This section also notes that there are class-based Digital Access Divides. Lower socio-economic classes might still have internet access, but a “lower form” of it, i.e., mobile access via limited (and often costly) mobile data, while “higher-class” citizens have access to Wi-Fi and other more convenient technologies. It is important to take this into account when researching “population with internet access” since a lot of data could be skewed by these class-separations.

[Page 3 (143)]

Table 1 gives more context to how lower socio-economic classes, that likely can only connect to the internet via a mobile device, are much more limited in terms of the content and functionality they have access to.

In the investigation of the “Second Level Digital Divide”, also adds more context to digital divides between socio-economic classes. In many countries: wealthy, educated, and male citizens have historically had socio-economic advantages; and this is, unfortunately, no different in the digital world. Internet access, usage, and skills are especially skewed by age and gender.

[Page 4 & 5 (144 & 145)]

The “Third Level Digital Divide” (internet usage outcomes), as the newest defined divide, is as Lutz puts it: “the next frontier of digital inequalities research”(2) and since even the other two levels are not being perfectly researched at the moment, it will most likely be quite a while before we get to a point where we can confidently define and geographically describe all three digital divide levels.

Reference:

[2] Christoph Lutz, 2019, “Digital inequalities in the age of artificial intelligence and big data.”, Human Behavior and Emerging Technologies Volume 1 Issue 2 (p141-148) **URL**: https://onlinelibrary.wiley.com/doi/epdf/10.1002/hbe2.140 [last accessed: 26/04/2023]

Dev Blog Drafts

**Week 10** (remember to copy and paste to the discussion forum)

~ 2458318 ~ Jean-Francois Retief ~ Week 10 - Blog Post

Reading Reflections:

“The Road to Technocolonialism - G. Verdi, 2020” [3]

The main bulk of AI development is done in the Global North (specifically China and the US) and quite a large part of this development is military-related, which is an unnerving thought. It’s troubling since AI in other fields has failed due to unexpected biases (for example the facial recognition for the USA’s border-control and asylum-seeking app struggles with people with darker skin tones, which are people more likely to need the app). AI’s existing blunders due to data structures and information hierarchies (caused by the colonialism of technology, its content, and the frameworks their built upon) have had terrible enough effects on human lives, even before it has been militarized. Just imagine an unmanned, AI-controlled bomber-drone, with faulty facial recognition algorithms that could target the wrong people. This reading floats around the idea of techno-colonialism being a “New Dark Age” – well at the very least it could bring about many Dark Times for humanity. And this is not even considering the economic effects on the Global South yet. The second part of the reading illustrates the idea of instead of countries from the northern hemisphere colonializing southern countries, today a new trend is emerging. Companies and Corporations from the Global North sudo-colonizing the Global South (while they don’t control the entire country, they definitely control industries within that country).

“Algorithmic Colonization of Africa – A. Birhane, 2020” [4]

This reading fits in nicely with the Verdi-reading since it starts out by stating the new colonizers are corporations (or at the very least, corporate agendas are what drive algorithmic colonization). It also reinforces the idea touched upon in this week’s recorded lecture of the Global North (specifically Western) strangle-hold on the AI industry (and software in general) prevents significant innovations within African countries since they are kept reliant on the Global North’s developments (similar effects were observer with traditional colonialism). The Global South is vulnerable in ways that the Global North rarely considers: solutions for a problem might work in certain counties in the Global North, but not in other places within the Global South. A good example is the adage “*AI won’t replace workers, workers that use AI will replace workers that don’t*”. While this might be true to an extent in more well countries in the Global North, it most certainly is not applicable to impoverished countries within Africa, where the majority of the workforce are manual-labourers that simply do not have access to the education needed to use, understand and work with new AI systems being developed day-to-day. *The negative effects of any new technology are usually much less negative in the Global North* and the colonies are usually the ones taken advantage of.

This misconception of every problem has a universal solution is a direct result of the colonization of epistemologies and knowledge systems. Quite often when “*one-size-fits-all*”, it’s too big for most people – it does “*cover-all*”, but it does certainly NOT “*fit-all*”.

References:

[3] Giorgos Verdi, 2020, “The Road to Technocolonialism”, Institute for Internet & the Just Society, **URL**: https://www.internetjustsociety.org/the-road-to-techno-colonialism [last accessed: 03/05/2023]

[4] Abeba Birhane, 2020, “Algorithmic Colonization of Africa”, SCRIPTed Volume 17 Issue 2 (p389-p409) **URL**: https://script-ed.org/?p=3888DOI: 10.2966/scrip.170220.389 [last accessed: 03/05/2023]

Dev Blog Drafts

**Week 11** (remember to copy and paste to the discussion forum)

~ 2458318 ~ Jean-Francois Retief ~ Week 11 - Blog Post

Reflection on my website design (in context of the lecture “How we code matters”): Looking at the website I submitted, I can improve it greatly for the next submission by using JavaScript and responsive design. I did not include these, since they were not a requirement for the first submission, but I am going to include them now. There are many decisions (tiny “invisible decisions”) many designers make, like purely focusing on the project-requirements that have unintended effects. For me, it was a basic website without any fancy dynamic elements or media queries that allow the website to be viewed on different screen sizes, but if I was working on a more high-profile project – those effects could have been catastrophic. One day (hopefully) I might work on a high-profile game, so it is imperative that I learn the new literacy of looking critically at my code and considering possible hidden effects of my micro-decisions as soon as I can in my career.

“Ethnocomputing: ICT in Cultural and Social Context – M. Tedre, E. Sutinen, E. Kähkönen, P. Kommers, 2006” [5]

As discussed in lectures, everyone who goes through the current education system is primed to think in a certain “colonial” way. A good way to describe the epistemology we all learn is the scientific or “positivist” philosophy the reading describes. This philosophy, of considering reality as static, universal, and immutable, is the one adopted by many people in the technology sector, but – as I stated in last week’s blog – solutions are rarely “*one-size-fits-all*”. I.e., reality is ironically, rarely universal. As the reading concludes, a wider perspective needs to be adopted by any engineer or developer.

[5] Matti Tedre, Erkki Sutinen, Esko Kähkönen, Piet Kommers, 2006, “Ethnocomputing: ICT in Cultural and Social Context” **URL**: https://www.researchgate.net/publication/220422722\_Ethnocomputing\_ICT\_in\_cultural\_and\_social\_context [last accessed: 10/05/2023]

Dev Blog Drafts

**Week 12** (remember to copy and paste to the discussion forum)

~ 2458318 ~ Jean-Francois Retief ~ Week 12 - Blog Post

Reflection on my website design: I am currently working on an engineering project that requires me to build a website (that allows the user to play Texas Hold’em Poker). It was originally planned to be multiplayer, which would have required RESTful API or a WebSockets server to run (any backend communication between players/clients). Now that it has been scoped down to a single-player version, the majority of the project is front-end JavaScript (which this course was extremely helpful for). My group is going through the process highlighted in class of identifying a problem, Googling solutions, and adapting them or using them for our purposes (continuous research, even in the actual work environment).

Reading reflection:

"Traveling While Trans - S. Costanza-Chock, 2020” [6]

We have talked during lectures about an example of UI failure: the “Google gorilla fail”. That example illustrated how assumptions made during development (coding) can lead to disastrous outcomes. In that case, it was unintentional racism, but racial minorities aren’t the only ones affected by micro-assumptions and unintentional micro-aggressions made by software developers (which mostly consists of a cis-white-male majority). Gender minorities, such as trans and non-binary people, can also be affected. The case study of this reading (more accurately, the personal experience of the writer) illustrates the process of going through airport security as a nonbinary trans\* femme. The algorithms exclude any non-normative people during scans. The reading goes on to mention other groups that are affected by different biases within airport customs. These groups include: disabled people, women of colour, people wearing religious clothing, etc. These micro-assumptions that are made on a coding-level, LEVEL UP to micro-aggressions or even macro-aggressions as the process goes further to implementation. The reading then shifts to a manifesto for the Design Justice process and principles. To horribly oversimply the 18 pages covering Design Justice: **BE INCLUSIVE**, in every step of the design process (hiring developers, actual development, testing, implementation).

[6] Sasha Costanza-Chock, 2020, “Introduction: #TravelingWhileTrans, Design Justice, and Escape from the Matrix of Domination” **URL**: https://designjustice.mitpress.mit.edu/pub/ap8rgw5e/release/1 t [last accessed: 17/05/2023]

Dev Blog Drafts

**Week 13** (remember to copy and paste to the discussion forum)

~ 2458318 ~ Jean-Francois Retief ~ Week 13 - Blog Post

Reflection on my website design: I am mostly thinking about ways to ‘JavaScript-ify’ what I already have after Assignment 1. I intend to make my HTML files as short as possible, having most content added in via JS. I am also looking through the comments I received about my first iteration and thinking of ways to address them, like removing <br> tags. I do not intend to use APIs for assignment 3, instead waiting for the exam iteration.

Reading reflections:

“Algorithmic Injustices: Towards a Relational Ethics - A. Birhane and F. Cummins, 2019” [7]

This reading touches upon the inherent biases that are (intentionally or not) built into widely used technologies and algorithms. Many algorithms that employ machine learning, search for patterns in the data they get. This inevitably ends only one way: stereotyping. Not everyone fits into nice patterns that an “AI” can use effectively, and this leads to many unintended consequences when it comes to widely used technologies. The biases from machine learning, are not just a side-effect of the output of the algorithms, but (as the reading also suggests) an inherent, in-built problem that starts at the foundation of the technologies. Pattern recognition, when employ over a group of people’s data, is stereotyping.

The ‘needs of the many, outweighs the needs of the few’ mentality that many developers of these widely used technologies and algorithms have, is remarkably short-sighted. In a world that is constantly and quickly spreading out into different minority-groups, patterns that can be gleamed from the general populous are becoming less and less reliable. The idea of a ‘many’ is slowly becoming obsolete and will be replaced by ‘many fews’.

“The Need for Global Internet Connectivity - C. Daniolou, 2020” [8]

This reading touches upon how the spread of the internet as a necessity of daily life across the world, is negatively impacting people who lack internet access. This also contributes to the internet user vs internet contributor disparity in less connected areas of the world – i.e., cultural representation of these areas online is virtually non-existent, or written about by outside observers (not the people themselves) and thus can be incorrect. Groups that are already marginalized, are even more marginalized by this effect.

This problem is the worst in the Global South, but there are not many developers looking into solutions for this problem, since they have the abovementioned mentality of ‘the needs of the many, outweighs the needs of the few.’ It is, however, quite strange to me that an entire hemisphere of our planet is considered as the ‘few’ in that statement.

[7] A. Birhane and F. Cummins, 2019, ‘Algorithmic Injustices: Towards a Relational Ethics,’ **URL**: https://arxiv.org/abs/1912.07376v1 [last accessed: 24/05/2023]

[8] C. Daniolou, 2020, ‘The Need for Global Internet Connectivity,’ **URL**: https://www.internetjustsociety.org/the-need-for-global-internet-connectivity [last accessed: 24/05/2023]

Dev Blog Drafts

**Week 14** (remember to copy and paste to the discussion forum)

~ 2458318 ~ Jean-Francois Retief ~ Week 14 - Blog Post

This is the final blog before the submission of the ‘Assignment 3’ version of my website. I am working on the JavaScript-ifying of my previous work and adding responsive design to my webpage. I often test my website on MOBILE devices to see if the media queries are working correctly. See ‘V2’ in the design section for more details.