The Final Project: Gender Neutralizer

Aesthetic Programming
Digital Design - 3. Semester
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The focus area of the project

We mainly want to focus on the topic of ***code and language*** in the digital culture. This by creating a program that can manipulate what is visually accessible to you, and often forced upon you while you are engaged in the digital world. We want to challenge the lack of control of the **contemporary** constant **feeds** and **data streams** that we experience on the web, by creating something that affords the individual to choose, and take control of what is shown to them and therefore make web content from external sources less powerful and influential. As a reference point, it can be thought of as the browser extension **AdBlock** that gets rid of all adds that are visually forced upon you while browsing the internet, therefore granting you more **control** as an individual by partially granting you power over how the web is going to be viewed by you.

 To do this we had a lot of ideas for the functionalities of the program, like one that can change negative words into positive ones or one that removes all adjectives. But in the end, we decided to go with a program that **neutralizes genders**, by this we mean a program that changes the notations of genders into something that is neutral and not gender specific, a program that will make a neutralization of natural language through computer code.

The Functionality of the Program

The approach that we have chosen towards making a program with a function like this, is to make a ***web extension***. This extension has to be integrated in the browser and be running alongside while the user is browsing different websites. The program that is called by the web extension needs to be able to examine the content of the current webpage and locate all the gender notations. Once located, the specific structure of the gender notation needs to be examined and get replaced with an appropriate and context specific neutralized notation.

 The question we're left with then is of course how exactly our program will be able to do this. Making an extension "find" all the **HTML** text on a website is actually a rather simple matter but looking it through for specific words is the tricky part. Fortunately for us, there exists a **library** for **P5.js** that can help us with this: **RiTa.js**. This library enables us to convert a string of text into an array which holds each word of the string as a separate value. We can then use a **for loop** to go through the array checking if each word is one of the gender notations that we define at the beginning of the program and if it is, replace it. This process will then have to be completed for every string of text on the website. We've made a flowchart to better illustrate the complete process:
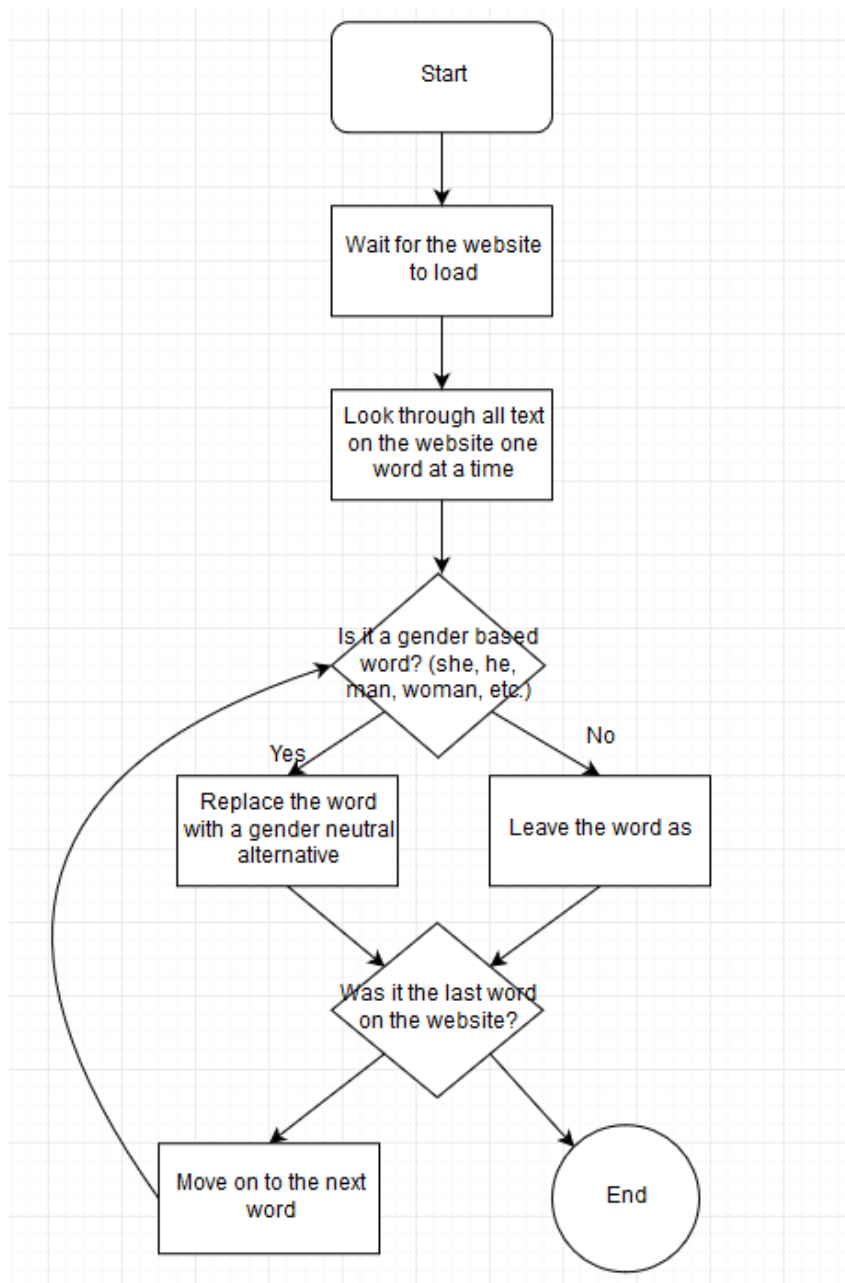
Figure 1 A flowchart showing exactly how the Gender Neutralizer is intended to work.

As mentioned though it is not enough for our program to be able to identify gender nouns. It also needs to be able to differentiate between them, so it can replace them with words that make sense in that particular context. For example, if you replace "her" with "their" or replace "man" with "person" the sentence will generally still make sense, but if you were to mix the two up the sentence would become nonsense.

The problem we want to address in our final project

By continually experiencing a factor in the same relations, acts as a catalyzer for the creation of **stereotypes**. If we are constantly exposed to specific genders being related to specific statements, there is a good chance that we will automatically start to perceive them as being true.

The conceptual view of the program

We want to address in what way and why there is a difference in how machines and humans experience genders. To do this we are first going to go into debt with the **humans understanding** of language and gender, for example humans are very sensitive to genders, knowing the gender involved in the context changes how it is perceived, due to our conventions of the topic and its relation to the gender. Second, we will be describing the **machines understanding** of language and genders and answer the question, how is the machine sensitive to genders and in what ways? The interesting thought here is, that the machine is only acting upon genders, if it is told to do so by the algorithm or the user, otherwise it would stay completely neutral.

We want to illuminize how **mass-media**, **social-media** and the internet has an effect on our political, cultural and social opinions related to gender, and how we can take control over the output we get from these sources. Internet media can generate a certain mood against for example politicians, religions or even genders. The gender neutralizer gives the user control over websites, where websites usually control what to show you. It is a way to adapt the content to individual opinions, instead of adapting individuals to the mass-media's opinion on cultural, political or social conflicts.

We want to reflect upon the consequences of neutralizing genders on the internet, what are the **pros** and **cons** of being totally unaware of the related genders in the context? You can remove things you don't want to see, but completely ignoring a subject can also be dangerous and cause you to forget about it completely. Just because you don't want to see it doesn't mean it isn't important/impactful. The ability to hide unwanted content can Seem useful, but does it just help as hiding a problem? So what "bad" and what "good" will this bring to the individual invested in the internet? but also what kinds of effects will it have **politically**, **culturally** or **socially**? Is there a possibility that this can bring an effect towards gender stereotypes or even make changes in the gender **equality**?

Another question is, how would a neutralization of genders on the internet be critical towards the criticizing of black boxing in the world of digital media? Is removing gender specifications just a way of hiding the truth and striving further away from the hunger and fight for transparency?

Possible References

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