

Assignment Cover Sheet

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Course Title:	MA/MSc Computing and Creative Industry (Modular)
Unit Title:	IU000145: Feminist Coding Practices
Assignment Title:	Feminist Computational Practices Reflection
Date:	04/Dec/2021
Assignment Question:	500 words portfolio summary
Word count:	492



"Technology is designed to make life easier for EVERYONE."

My project relies on the <u>Katiehughes</u> (GitHub)'s work. The purpose of code modification is to build a feminist chatbot that helps to demonstrate inclusive design techniques on a special occasion: designing for dyslexia. Differently, my ideal audience is non-dyslexic populations. Throughout the interaction with my chatbot, users are expected to develop a general knowledge of dyslexia and grow their empathy for dyslexia justice movements.

To summarize, I have completed four categories of editing task: reconstructing dialog, introducing new functions, revising interface layout, and reorganizing codes for sharing. As dyslexia affects one's reading speed and comprehensibility, the conversation is written in concise languages and active voices. Each sentence is short and direct and avoids abbreviations and jargon. Whenever possible, an image or video is inserted to replace wordy texts for further elaboration as it can diversify informational cues and elevate the feasibility of digesting information.

Four new features and interface styling are brought into this revised work: switch background color, adjust font size, change font style, and a text-to-speech function. British Dyslexia Association recommends that single color, especially cream or soft pastel helps to improve focus and readability. Moreover, research shows that dyslexic users are prone to read a sentence in clustered words. Basic letter shape and larger word size can amplify their persistency in reading. Therefore, I increased the inter-letter and inter-word spacing and reset line spacing for CSS styling to simulate the feeling of "clustering" or "creating a shape cue." All texts are left-aligned and have a limitation of 70 characters for an easy read. Readable font is set to be sans serif as it is easily accessible and features less crowded letters. However, considering personal preference, this color or font switch feature allows user to set up their comfortable reading environment. Lastly, I also incorporate a VoiceOver function that can enhance text processing by utilizing reading and listening skills.

To me, feminist coding is a methodology and perspective. It is a cross-disciplinary design approach that requests and actualizes socio-technical critiques into programming activities. I believe



that the code itself does not disfavor anything or anyone. The way we write and deploy nourishes bias and discrimination and excessively marginalizes disadvantaged groups such as the dyslexic people in the assistive technology. It itself is also a socio-technical reflection as it raises cultural and gender awareness in technology development. The notion of feminism is expanded to promote social justice, respect diversity and difference and encourage shareability and collaboration. Together this concept helps me think about my privileges when devising web accessibility. For instance, I implement clear binary instructions to direct human-bot interaction. For people with dyslexia, less mental effort and higher intuitive action are vital since these can boost their tolerance for a successful attempt with a device. This concept also helps me rethink sharing and reusing my knowledge of dyslexia-friendly design. On that account, I reconstruct the source code and rewrite ambiguous comments about functions and variable names for future use.



Appendix 1: resource used for designing for dyslexia

- 1. Asmus, S., 2021. Designing for Dyslexia. Branding101. URL https://medium.com/branding101/designing-for-dyslexia-9e61945f82b0
- 2. British Dyslexia Association, n.d. Dyslexia friendly style guide [WWW Document]. British Dyslexia Association. URL https://www.bdadyslexia.org.uk/advice/employers/creating-a-dyslexia-friendly-workplace/dyslexia-friendly-style-quide
- de Santana, V.F., de Oliveira, R., Almeida, L.D.A., Baranauskas, M.C.C., 2012. Web accessibility and people with dyslexia: a survey on techniques and guidelines, in: Proceedings of the International Cross-Disciplinary Conference on Web Accessibility, W4A '12. Association for Computing Machinery, New York, NY, USA, pp. 1–9. https://doi.org/10.1145/2207016.2207047
- 4. Rello, L., Baeza-Yates, R., 2017. How to present more readable text for people with dyslexia. Univ Access Inf Soc 16, 29–49. https://doi.org/10.1007/s10209-015-0438-8
- 5. Shaun Anderson I, 2007. How to design websites for blindness, deaf, disability & dyslexia [WWW Document]. Hobo. URL https://www.hobo-web.co.uk/design-website-for-blind/

Appendix 2: conversation flow diagram

