HCIN6222

POE Part 1

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Before we begin

I would like to express my distain for the documentation guidelines of "*Use Arial font, size 11pt, justified paragraphs and line spacing 1.15.*". I much prefer using something like Century Gothic at size 12 or, if I am ever permitted to, Comic Sans as I find them easy to read and much less crowded. Due to the restrictions on the page numbers, I have had to sacrifice my preferred formatting style so that I could fit everything into the 10 pages. I would also like to state that I found the marking rubric extremely unhelpful as simply repeating the sentence "An excellent description of [heading] is included" does not give me much to work with. I have done my best with the information and impressions about the requirements I have been given from the POE document, our previous lecturer and current lecturer, conflicting as those sources may or may not have been. The grammar in this report may sound a little off and this is due to some of my most commonly used words get me flagged for AI usage. Words and phrases like "as well as", "ensure", "the need for", "crucial" and "seamless" for example are all deemed as AI language (see this AI checker report as proof https://www.zerogpt.plus/en/report/check/43660cb0359686764d744898267a3f3f). I do my best to avoid them now given the current academic climate.

AI Usage Disclosure

In alignment with the "IIE033 Policy on the Integration of Artificial Intelligence (AI) in Teaching and Learning (2025)", I have used AI support in a manner that fully complies with the institution's ethical and pedagogical standards. Specifically, my use of AI falls under the approved category of "AI as a learning support tool" as outlined in *Section 4.1, Point (a)*, where AI is permitted to assist with idea generation, concept clarification, and iterative refinement of academic work. All AI-generated content was critically evaluated, manually edited, and used to enhance my understanding of Human-Computer Interaction principles, including usability goals, interaction types, and accessibility standards. No AI was used to generate final submissions without human oversight, and all referencing outputs were verified for accuracy and formatted according to institutional guidelines. This approach reflects the expectations set out in *Section 5.2, Point (c)*, which emphasizes the importance of human accountability and transparent disclosure when AI is used in academic contexts. I acknowledge that I remain the sole author of this work and that AI served only as a supplementary tool to support my learning and documentation process. Below are links to an AI checker report as proof of my efforts to align with the policy:

Part 1: https://www.zerogpt.plus/en/report/check/72a3abccd05ff0a97db5b207d0f292f0

Part 2: https://www.zerogpt.plus/en/report/check/e7673b0edeb6d5c5c34af203a62a7aec

In reference to User Feedback Survey

I did create and distribute a survey to my peers via the HCIN WhatsApp group however I do not think it is to be taken seriously for a couple reasons. The survey only garnered 3 responses despite the group having nearly 80 members, and of those 3 responses the "feedback" is not of much use to me. The only piece of data that has been useful is that users would prefer a Rosebank themed colour scheme. The survey was also conducted on a now outdated prototype that contains many features that I am no longer moving forward with, and it is missing features I discuss in this report. I will include a table of the results below as proof of the quality and quantity of responses I was working with. I feel this shows that it would be futile to expect meaningful user feedback in the future from my targeted users given with their own free will. One could make a new survey and could force the students to submit responses simply to say, "we now have data", however I feel making the users feel forced to complete the survey will surely lead them to give whatever responses require the least amount of effort or input, invalidating the data gathered. I have highlighted the particularly unhelpful answers in red and the only relevant and usable data in green.

Questions	Respondant 1	Respondant 2	Respondant 3
Have you interacted extensively with the Figma prototype via the link sent to you alongside this Google form?	Yes	Yes	Yes
Was it clear what the websites' function was?	Yes	Yes	Yes
Provide a more detailed explanation of why you feel this way about the website's functionality.	The words stood out and i didnt even know u cud click certain things if it wasnt for the labels<3	The navigation was clear	It's good
Is there anything that you felt was missing from the websites' functionality?	Yes	No	No
Provide a more detailed explanation of why you feel this way about adding new functionality.	it was easy and simple	Nothing cause i understand what the website does	It's good
Was it easy and intuitive to navigate the website?	Yes	Yes	Yes
Provide a more detailed explanation of why you feel this way about the websites' navigation.	The website was so simple, and surprised me with how well it worked, I'll defs use this for future references	Yes	It's good
Which colour scheme did you prefer?	Rosebank colours (red and white)	Rosebank colours (red and white)	Both equally
Provide a more detailed explanation of why you feel this way about the websites' colour options.	Since its our campus and was submited to us as rosebank students, also a rosebank student created it, the green throws us off since we're use to rosebanks red	It represented the school colours but they are a dull	I like purple
What colours do you think would be more fitting for this type of website if you were not fond of the current options?	red and white	Bright colours but less gradient and colours that will be considerate for people who are colour blind	Blue
Provide a more detailed explanation of why you feel this/these colours would be a better fit for this kind of website.	Since its our campus and was submited to us as rosebank students, also a rosebank student created it, the green throws us off since we're use to rosebanks red	Explained it above	It's good
Was changing the colour scheme intuitive and easy to use?	Yes	Yes	Yes
Provide a more detailed explanation of why you feel this way about the websites' colour pallet switching.	Since its our campus and was submited to us as rosebank students, also a rosebank student created it, the green throws us off since we're use to rosebanks red	I	No stress
Which font did you prefer?	Arial style font	Arial style font	Both equally
Provide a more detailed explanation of your preference.	..	Its more clear	Yes
Would it diminish your enjoyment of the website if your font and colour preferences were left available for others that may prefer them?	No	No	No
Provide a more detailed explanation of why you feel this way.	its not my website, you are the creator therefore you get to decide, this isnt a race<3	I	Good
Is there anything you would like to share that wasn't covered in this survey?	overall size of tools and words where a lil big and all the website didnt fit the pag, if i made the tab small then the website wouldnt adjust it will jusr cut away(if that makes sense) overall the website was surprising in a good way because I can actually use it in academics<3	Nope	Nope

Website Functionality

The website will essentially be a reference generator that outputs the reference in the exact format stated in Rosebank's guidelines. The website will be "accomplishing a very specific task" of only generating references for websites, not papers or books or anything other than websites. It can generate references one of two ways.

Option 1 is that it will accept manual data entry from the user to generate the reference. This meaning that the user will fill in a form with fields like "Title", "Author" and other relevant fields with the websites information and then the website will take this data and string it together to create a reference aligned with the formatting guidelines.

Option 2 is that it will use the URL given by the user to search the reference database or scrape the websites metadata to complete a reference. When a user submits a URL, the site first checks whether the metadata has already been stored by another student, allowing for instant retrieval and reducing the repeated scraping of the metadata of commonly use websites. This will increase efficiency. It will then display the data it has on record in a form so that the user can double check its legitimacy and make changes as needed. They can also report the stored reference as incorrect; this will alert moderators to check the database record against the actual website manually to correct any errors. The site is not responsible for what data the users give it as it relies on the good faith of students to check what the site outputs at various stages to make sure it is correct. If no match is found, the site attempts to extract key details such as author, publication date, and title using standard HTML tags in the metadata. If the site cannot find all the information needed to complete the reference, it will auto populate the form while alerting the user to the fact some data was not found and prompting them to enter it themselves.

The site will encourage users who have one or more fields "unfillable" due to the user or the site being "unable to find that information" to rethink using the source in academic writing. This will encourage source critique, a skill that is slowly being lost to things like AI and the sheer volume of information on any given topic available to us. Even I find myself becoming less selective with my sources nowadays. It will have a heavy focus on being accessible and user friendly.

Implementations

Usability goals

- **Effectiveness**: The user will be able to use the site to string their website references together in the correct format taken straight from the referencing guideline. There are 2 ways the user can generate their references:
    - They can enter all the needed data for the reference and then have the site format it according to guidelines
    - They can submit the URL of the website and the site would scrape the metadata to check if the information needed is in there and auto populate the fields best it can (with the user entering any missing data) and then generate the reference from that.
- **Efficiency**: The process of "generating" the references should take minimal time especially if the user already has all the information needed and just needs it to be formatted. The field for "Date accessed" will autofill to the current date, however the user is fully able to change this to whatever date they wish. All references made will be entered into a database to allow for faster retrieval of references and related information (especially concerning the URL method). If the user uses the URL method then the site will first check the URL against the database to check if this site and its information hasn't already been entered by another student. If the data exists in there, then the site can pull the data from there instead of scraping metadata which will make referencing common sites much faster. The time it takes for a reference to be generated will essentially rely on these things:
    - Internet speed
    - Device hardware
    - Users typing speed
    - If the website already exists in the database
- **Learnability:** The site will be made simple enough for all users to be able to understand how the tool works. This will be achieved by a mix of exaggerated underestimation of user ability and user feedback to create a site that anyone can use no matter their computer literacy. The site must also be designed so that it does not talk down to the user by handholding in an obnoxious way.
- **Error prevention:** Site will have checks on fields to prevent invalid data from being used.
- **Satisfaction:** The site will make the task of referencing feel easy and stress free since referencing usually comes at the end of an assignment when the user is pretty much over it and just wants to be done. Making the UI to feel fast and optimized will go a long way to achieve this.

Desirable aspects of user experience

- **Supportive:** The UI will include "tooltips" and error messages designed to guide the user into correcting any wrong inputs. It will also help guide the user to where they want to be.
- **Minimalist:** Only the most necessary things will be visible to the user on each page. The pages will be made minimal, meaning the user will have to go through maybe 4 pages maximum to reach their reference:
  - Chose method (Manual population or auto with URL)
  - Enter URL if applicable
  - Enter data into fields as needed
  - Receive reference to copy paste into their document
- **Responsive:** The site will tell the user immediately when they failed to do a necessary task (left a field blank) or when their reference is ready to use. The site will also be able to switch from light mode to dark mode for users who prefer one theme to the other (I could not live without dark mode, but others feel differently).
- **Trustworthy:** The users can trust that their references are aligned with the guidelines as the format was trained on those guidelines.

Design Principles

- **Visibility of status:** The site will make it obvious to the user what is happening/what needs to happen at different points of the process and when their reference is ready to use.
- **Consistency and standards:** All elements of the site will follow a set theme and will use maybe 3 colours (probably Rosebank colours since it is for Rosebank students, even if my personal preference is for lime green) for everything in the site, keeping the appearance uniform and easy to process.
- **Error prevention:** Site will have checks on fields to prevent invalid data from being used.
- **Flexibility and efficiency of use:** The "Date accessed" field will autofill.
- **Aesthetic and minimalist design**: The site will be designed to make it as easy on the mind as possible. Students using a refence generator are most likely tired and have already experienced enough cognitive load, so the design should be very simple to navigate and use to accommodate tired students.

Interaction types

- **Instructing**: Users will input data manually into form fields (e.g., author, title, URL).
- **Conversing**: The system will respond with contextual messages, such as "Reference generated!" or "Please enter a valid date."
- **Manipulating**: Users can copy the generated reference to their clipboard or reset the form to start over.
- **Responding**: The system may auto-fill fields based on metadata or database lookups (if that website is stored in the database), responding to the user's URL input.

Social interactions

- **Shareability**: Users can copy and paste references into group documents or chat platforms, ensuring consistent formatting across team projects.
- **Database reuse**: If multiple students reference the same site, the tool can retrieve stored metadata to help autofill the field for the users, increasing efficiency.
- **Peer support**: The tool could include a "report incorrect reference" feature, allowing users to flag issues and contribute to quality control. This would go hand in hand with having a couple "moderators" that check database entries (especially when there's differing data for the same URL from different students) and then visit the site itself to find the correct data for that site and then edit the database record to contain the correct information. This will then improve the accuracy of the tool and avoid being overrun by "trolls" having a go at it.

Emotional interaction

- **Tone**: The site will attempt to sound friendly and encouraging to make the user feel at ease using it. The error messages will be worded in a gentle way and other text will be worded to be as clear, unambiguous and positive as possible.
- **Visuals**: Rosebank red, white and black/grey will make users feel confident in the sites alignment with the college guidelines. I will attempt to make the site feel overall "rounded" or "harmless", meaning rounded corners instead of harsh 90 degrees and a neutral font to make the site feel welcoming.
- **Feedback**: Positive reinforcement after task completion adds a sense of accomplishment. Gentle corrections when the user has failed to complete a task correctly will avoid the user feeling angry at the site for telling them what to do.

Web Content Accessibility and Guidelines (WCAG) 2.0.

- Under the principle "Perceivable", it will be considerate of the following aspects:
  - Providing alt text for all relevant elements
  - Attempt to make the website screen reader compatible
  - Implement logical flows
  - No relying on colour alone to convey aspect of element
  - Sufficient contrast to make all elements readable
  - Attempt to make elements arrange themselves well even when zoomed in
  - No using images of text, all text will be actual text
- Under the principle "Operable", it will be considerate of the following aspects:
  - Most if not all functionality should be accessible and usable via keyboard alone
  - Implement quality metadata in the html tags
  - Labels will be detailed and not vague
- Under the principle "Understandable", it will be considerate of the following aspects:
  - Make the language of the page clear in the metadata
  - Clearly explained error messages
  - Have placeholder text in entry fields to give user a better understanding of what they need to enter in that field
- Under the principle "Ensuring Content Reliability", it will be considerate of the following aspects:
  - Form elements will have accessible names and roles

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