Someone, from somewhere:

Final Report

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Abstract

Someone, from somewhere (*Sfs)* is an AI tool designed to assist those who work in the field of creative non-fiction by creating random characters from user answers to pre-determined questions. Three separate sources (Open AI, 100K Faces, and MongoDB) are combined to create a single character card from each query launched. By limiting user character input to specific question as well as using a Tarot Card based randomization system, *Sfs* provides the basics for characters in a user's fictional world while allowing that same users imagination to build the idea into something unique.

Furthermore, *Sfs* seeks to remove some of the concerns non-technically focused artisans have regarding natural language processing. Issues such as having their individual creative process used to train models can lead to a dismissal of the technology for valid reasons. To remedy this, a rudimentary salting process and a limitation of user input adds a sort of *natural language noise* to every query. It is the hopes that practices such as salting can be used to address the problems presented by ai-based data collections.

Technology Overview

100,000 Faces

100,000 Faces[1] is a git repo containing 100,000 ai-generated faces that can be called at random. This component was used in the generation of character portraits that would show up with each query. The reason for using this over something like an AI-image generator was for a combination of economic and creative reasons. Models such as Midjourney require payment to use, and this amount varies based on the quality of output. Using a pre-made set of faces meant not having to feed any existing AI models and allowing an injection of randomness into the final character output.

MongoDB & Kaggle

MongoDB[2] is a database platform that allows for the creation and testing of user generated datasets. Kaggle[3] is a website offering multiple open-source datasets that can used with platforms such as

MongoDB. In this case, I selected a dataset featuring all the cards in a standard deck of tarot cards and parsed them to return only the names of 3 random cards. Those three cards would form a sort of "reading" for the character generated by OpenAI which would lead to different outcomes every time a query was generated.

OpenAI

OpenAI[4] is a natural language processor that has been used in creations such as the well known ChatGPT[5]. For this project, OpenAI is queried through an express request to act as someone helping the user come up with characters. User results from the initial questionnaire are then pipped in as a question and the returned results are then parsed into 5 bullet points. The technology is still quite finicky (especially the more parameters you add) and does not

[1] Ozgur Ozer, '100,000 Faces', 2023 <https://github.com/ozgrozer/100k-faces> [accessed 1 October 2023].
[2] 'MongoDB: The Developer Data Platform', *MongoDB* <https://www.mongodb.com> [accessed 8 December 2023].
[3] 'Find Open Datasets and Machine Learning Projects | Kaggle' <https://www.kaggle.com/datasets> [accessed 8 December 2023].
[4] 'OpenAI Platform' <https://platform.openai.com> [accessed 2 October 2023].
[5] 'ChatGPT' <https://chat.openai.com> [accessed 8 December 2023].

allow for a lot of customization to avoid overly similar results per query. Supplementing the tarot reading produced by MongoDB & Kaggle allowed for better outputs to occur.

Implementation

Current Design

The current build of *Someone, from somewhere* performs almost idyllically to the original concept.

From a technical standpoint, it uses two external databases (MongoDB and 100,000 faces) selected by me as a salting mechanism for OpenAI AND the end user's imagination. After user information has been collected on the front-end, a query containing a rephrased version of the user input is sent to server.js for processing. The server asks MonogoDB for 3 random tarot cards and stores those for the next step.

Next step, OpenAI is given a few directions before starting to work on the user prompt. These directions include telling the AI:

- *They are someone helping me create a character from a world I'll describe to them.*
- *They are to limit the response to one character with 5, one sentence facts about themselves.*
- *They are not to address the character by name and descriptions will only use 'They'*
- *pronouns when addressing the character.*

The tarot card pulls from the previous MonogoDB query are then used to give more variety to the potential output. Each card is asked to be understood for their meaning by OpenAI to influence the characters past, present, and future.

After this server work is done, the results are parsed and returned to be integrated with 100,000 faces. A face is pulled from this dataset and paired with the returned server.js query to make a single pop-up. What is left after everything is a random image of someone paired with 5 random facts based on the initial user input.

The sites barebones style is ideal in creating a less polished front-end. I wanted to create a more utilitarian approach that didn't try to implement flashy web design. It's my hope this aesthetic would make *Sfs* be seen more as a tool rather than just some website.

Future Design

Salting as a means of randomization for natural language processing is a feature I would like to develop further. Adding a pool of questions the user is given rather than a set amount would be a good place to start. This could be expanded on further by only showing one question at a time to better focus user interaction.

One other direction I would like to expand towards is by including the ability to generate objects. The same output format would occur, but this time it would be about a random object in this world and 5 random facts about it. Further research would be needed to figure out how to develop this without using an image processing AI.

Design Analysis

Success of the design came in the form of individuals outside of class engaging with the tool. Feedback was sought from those in creative literature and narrative development. These individuals would often focus their feedback on what they would do to improve the character traits rather than the website design itself. They were engaging with the creative suggestion rather than the tool which meant their creativity was being exercised. The added photos were then looked at to expand the understanding of the text leading to further individual analysis.

Overall, the initial tests were successful in getting the targeted users to engage with the tool appropriately.

Bibliography

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