Someone, from somewhere:

Prototype Report

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Submitted in partial fulfillment of

CART 451

Concordia University

Fall 2023

Project Description

Someone, from somewhere (*Sfs)* looks to build on recent advancements in natural language technologies via integration with *OpenAI*[1] and a database of randomly generated images. What it should generate it the end is a single character suggestion along with five unique facts based on answers provided by the user. This project takes inspiration from the literary game of *Mad Libs* by both limiting user input and hiding what the final, parsed results would be. It is the objective of this project to allow those who work in creative non-fiction to generate basic ideas for characters while also using their imagination to fill in the details.

[1] 'OpenAI Platform' <https://platform.openai.com> [accessed 2 October 2023].

Status Update

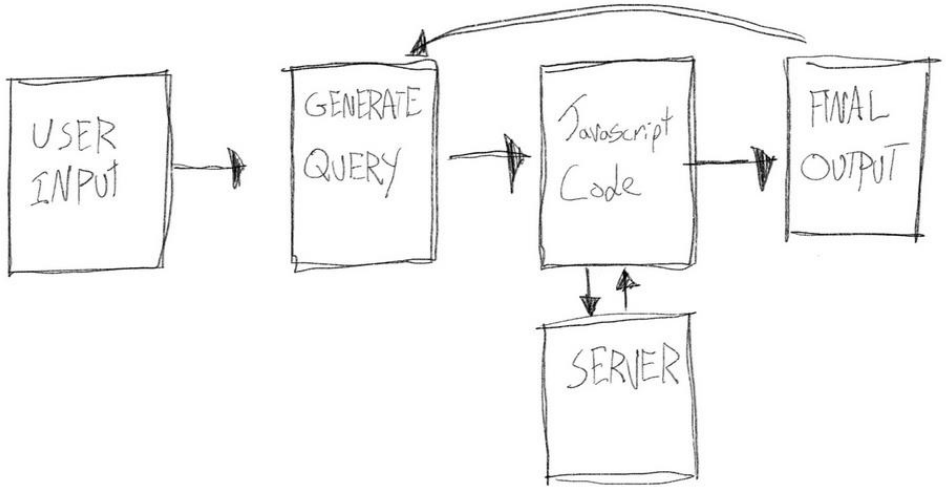
Sfs currently performs at a minimally acceptable level in terms of producing the final output. The user is presented with three questions about the kind of world they would like to generate which the server code pings OpenAI with for a response. Upon successful contact, a random facial image is pulled from the *100,000 Faces*[2] repo to be paired with the formatted server values. What the user receives is a pop up with a picture and 5 random facts about the individual.

While successful sounding, there are some issues that have arisen which will require fixing before the final build. The first is to do with the lack of variety *OpenAI* provides in its answers when the same data is provided for a query. Original designs had anticipated more variety in the returned values, but the *temperature* parameter doesn't provide the randomness I thought it would. Additionally, higher levels of *temperature* leads to a problem in formatting the final output (meaning it fails to generate proper formatting for the answers). I've recently come across the concept of *salting* to help improve this and will be researching further for the final build.

The other issues lie more with the front end such as improving the quality of questions asked and the layout of the website. More thought will be dedicated to those in the final design, but for now they are known issues with no definitive answers. It's still the goal to create a simple interface that is both welcoming and utilitarian but I fear I may be overthinking what needs to be added.

[2] Ozgur Ozer, '100,000 Faces', 2023 <https://github.com/ozgrozer/100k-faces> [accessed 1 October 2023].

System Diagram



User Input

User is presented with questions they will need to answer.

Generate Query

A single button which begins the processing of formatting the user input into a value that will be read by the server. In this case, the string value is formatted like someone giving instructions in natural language.

Javascript Code

Non-server related code. Here we generate the POST for our server and control the pop-up effect for our character card. There is also some code to randomly pull a face from the *100,000 Faces* database as it is not a server-dependent feature. Results returned by the server as paired with CSS formatting before being shown in the final output.

Server

A POST request is sent to *OpenAI* using express and node.js that tells natural language processor how to act. In this instance, I'm telling *OpenAI* that it is helping me create a character based on a world I'll describe to it. Regex is used to clean up the returned value before sending it back to the Javascript code for final processing.

Final Output

The formatted character card is presented to the user. From here, they can run the query again to get a different result.

Bibliography

‘OpenAI Platform’
<https://platform.openai.com>
[accessed 2 October 2023]

Ozer, Ozgur, ‘100,000 Faces’, 2023
<https://github.com/ozgrozer/100k
-faces> [accessed 1 October 2023]