Lab 2 report

For this assignment I was happy to be given access to a GPT API key that I could freely implement within my state machine chatbot.

Within my chatbot, its first implementation (and most useful one) was that of a “database” substitute, being able to provide information on various queries. Using GPT for this wasn’t without difficulties, as it required a significant amount of prompt engineering to make sure that it would return the data in a constant and desirable format, which would later be ingested by the chatbot and further used. I have achieved a suitable prompt by being overly specific with my query, underlying my search criteria explicitly (ex. taste as ${variable}, type as ${variable}), what I want the results to be such as flavor notes, brand, and origin, how many results do I want (at least 3) and the format I want the data in (JSON).

This wasn’t my only hurdle which needed to be overcome, as for consistency’s sake, the API’s temperature must be kept at 0, otherwise it will return a new result each time it would be invoked, which wasn’t fit for this scenario, but it lead to interesting results, seeing how often it would provide wrong answers (for example delivering Stout beer instead of Porter or mixing Pilsner with Lager) even though the query was simply repeated.

Another experiment that I did with the GPT API (unsuccessfully I might add) was using it as a way to generate answers to unexpected user answers or queries. While this method proved useful, its inherent unpredictability makes it difficult to account for its answer in any meaningful way. This coupled with the loadtimes, made any “offtopic” answers feel too unnatural and slow compared to the usual experience. I believe this could be averted by using filler utterances to mask the GPT load times, but this is beyond the scope of the current lab and better suited to the final project.

Overall I must say that the GPT api is a useful tool to have for augmenting chatbots, but due to its unpredictability in answering, I cannot call it a useful chatbot for professional most industry use-cases.