

Generate Marketing Content

The market content generation is a use case scenario where the user

- enters the format (a linkedin post, a blog, etc.)
- enters the topic (Generative AI, web development, etc.)
- enters the length of the generated content
- Chooses the emotion (can choose between 4 emotions: Neutral, Formal, Happy, Sad)

The process:

A function `marketing_content` is created which takes in format, topic, emotion and length as arguments. This function returns the formatted response from the LLM model.

Step 1:

The latest Llama 3 is the model of choice for this assignment. The Llama 3 model is accessed using the Groq API. Specifically, the 8 Billion parameters version of Llama 3 is being used for this assignment.

Step 2:

A prompt is created using `ChatPromptTemplate` which utilises the user inputted formats, topic, emotion and length to create a prompt. It has 2 elements, one is the system message and the other is the user message. The format, topic, emotion and length are entered by the user and used in the system message that acts as an instruction to the LLM. An `output_parser` object is created and a chain is formed using the prompt, LLM and the parser.

The API:

The API is created using the flask web framework. It is a simple app with just one route (the root) which handles both GET and POST HTTP methods. A function `index()` will be called when we access the root path. Using `request.form.get("format")`, `request.form.get("topic")`, `request.form.get("emotion")` and `request.form.get("length")`, we get the format, topic, emotion and length from the user using a HTML form. These are passed to the `marketing_content` function. The function returns a string (output from the LLM).

Then the `index.html` template is rendered using `render_template` and the values of format, topic, emotion, length and output are passed as variables to the template.

The HTML:

A basic UI is created to interact with the app. The `index.html` has 3 input text fields for format, topic and length and a drop down for emotion and a submit button. The page displays the format, topic, emotion and length entered by the user and the response (the returned output) from the LLM.

Screenshot:

