Experiment Workflow

Step 1: Data Extraction

In the first step of the experiment, validation datasets are extracted from the LaMP website using a Python script named **data_set.py**. This script accesses the relevant URL on the LaMP website to retrieve the required datasets for further experimentation.

Step 2: Random Data Points Selection

To accommodate resource constraints, a subset of 100 random data points is selected from the extracted validation datasets. The Python script responsible for this process is named **random_100_datapoints.py**.

Step 3: Updating Queries with BM25 and MMR Results List

In this step, the experiment involves enhancing queries with information derived from BM25 and MMR algorithms. The BM25 results list is obtained by utilizing the given query and user profile. The top-k results are then appended to the query for prompt generation. A similar process is followed for the MMR list, where MMR document scores are calculated on top of the BM25 results list. The Python script for this step is found in the file **BM25_and_MMR_implementation.py**.

Step 4: Feeding Updated Query to LLM

The next step involves sending the updated queries to a large language model, specifically using gpt-3.5-turbo. The Python script handling this interaction is named **chatgpt.py.**

Step 5: Output Formatting

Following the language model processing, the generated outputs need to be formatted into the desired structure. The Python script responsible for this task is named **output_formatting.py.**

Step 6: Evaluation

The final step of the experiment involves evaluating the formatted outputs using the **eval_task.py** script. This step aims to assess the performance of the model against predefined evaluation criteria.

Note: Please ensure that the code properly references local files by providing the correct file paths during execution in Python.