**Semantic spotter Assignment**

Myntra Fashion search AI

* **Objective:**
  + Create a generative search engine capable of searching a plethora of product descriptions to find and recommend appropriate choices against user query.
* **Design:**
* Loading the data set.
* Understanding and cleaning the data
* Feed the formatted data to Llama-Index
* Create the Llama-Index query engine
* Retrieve the document and present it to the user in well structured format.
* **Implementation:**
* In this project, I have used Llama\_index library to build the Myntra fashion Search AI.
* Used Chat.Completion.Create API from OpenAI to generate the marketing response message of the retrieved product.
* Used matplotlib library to show the image of the final product as per user query
* Used requests library to extract the image from the given URL.
* **Challenges:**
* SimpleDirectoryReader does not read csv file. I have read the csv file using pandas library.
* Llama\_index does not take dataframe as input. I had to convert the dataframe into list of documents of the text.
* Llama\_index LLM output is not as per the expectation. I had to take the help from OpenAI LLM models to generate the required output.
* Yes, we can customize the LLM prompt of Llama-Index, but it is little complicated to implement.
* **Lessons learnt:**
* Llama-Index storing and retrieval is faster than chromadb or other vector stores.
* Implementation is simple in using Llama\_index module
* But the flexibility and accuracy is lesser than chromadb.
* It is difficult to give customized prompt to llama-index LLMs. Where as in chromadb, we can give customized document, metadata, and prompt.