**Work procedure of our project:**

There are mainly two python files 1) app.py 2) prep.py

App.py runs for the data manipulation purpose and it is the main flask connected program

Prep.py contains the main functions which are needed for the project it also contains the model

This prep.py is pickled so that model can be used for further uses.

**Functions in prep.py**:

Search\_word(): it is used to search the topic given by user is present in data set and stores the indexes of the rows where it matches this indexes are later used.

Summarizer(): returns a summary text from the given text.

Postprocesstext(): used to separates sentences from the summary text.

get\_keywords(): gets important keywords that are most important in a given sentence that are used for question generation later.

get\_question(): it generates question using t5-base transformer model which is finetuned for this purpose and will generate questions from data using impkeys as main words .

**functionality of app.py:**

it takes the input from input.html file form where user enters the input then it uses the search\_word function to search that topic in the list stores the indexes of the data where the topic is available

then these data where the topic is present are then sent to the question generation unit where initially summarization takes place and then imp\_keys are generated from that summarized topic , these keywords are then given to question generation model along with summarized text then it generates the questions and stores in a list.

After all the questions generated it is then displayed on the index.html file