

Arabic Chatbot Sentiment Analysis using Flask API

Motivation: -

Huggingface has many models for text summarization but most of them are in English and the rest of them are in other languages, and as our native language is Arabic, so we decided to build a model which can summarize articles in Arabic.

Summarization: -

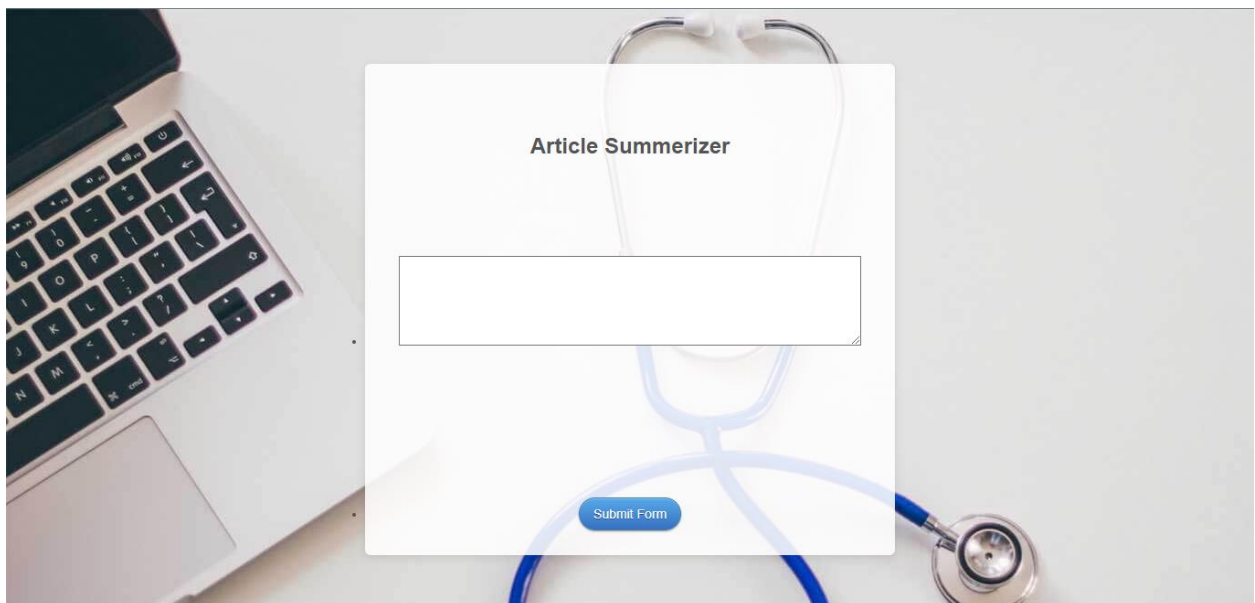
- We used 3 models from huggingface to build our project:
 - Helsinki-NLP/opus-mt-ar-en
 - sshleifer/distilbart-cnn-12-6
 - Helsinki-NLP/opus-mt-en-ar
- We use Flask API with Ajax in JQuery to submit the article from the text area in the web app and get the summary from the models we built.

Procedures:

- 1- The user insert the article in Arabic in the text area in the web app.
- 2- We send it to the first model which translate from Arabic to English.
- 3- The output from the translator model will put as an input to the second model which get the summary of the translated article.
- 4- The output of the summary model will be sent to the translator model which translate the English summary to Arabic.
- 5- The output of an English to Arabic translation model is showed to the user as a summary of the article in Arabic.

Conclusion:

Web app components :



[%D9%8A%D9%84%D8%AA%D9%82%D9%89-%D9%88%D8%B2%D9%8A%D8%B1-%D9%82%D8%B7%D8%A7%D8%B9-%D8%A7%D9%84%D8%A3%D8%B9%D9%85%D8%A7%D9%84-%D9%84%D9%85%D8%AA%D8%A7%D8%A8%D8%B9%D8%A9-%D8%AC%D9%87%D9%88%D8%AF-%D8%AA%D8%B7%D9%88%D9%8A%D8%B1-%D8%B5%D9%86%D8%A7%D8%B9%D8%A9/5576409](#)

