NLP ASSIGNMENT - DOCUMENTATION

The model produces MCA questions from the paragraph given. An overview of the model is depicted in the flowchart.

OVERVIEW Extraction of text from Image (Optional) Summarization of the text Noun phrases and Keywords Extraction (I/O = Answers) **Question Generation** (I/O = Questions)**Question Answering** Option 3 Option 4 (2nd Answer) MCA Questions and Answers

EXPLANATION:

- Extraction of words from the image using Pytesseract as in the problem statement image was asked to give as input.
- Summarization of the text using T5 transformers.
- Noun phrase extraction by NLTK.
- Keyword extraction by KeyBERT.
- Using Noun phrases and Keywords as answers to generate questions by Transformers library.
- Again generating answers for the question generated using Transformers to make a second answer.
- Generating random options from Noun phrases and keywords.
- MCA questions as a list of strings inside a dictionary.

CREDITS/CITATIONS:

- *) Inspired by Questgen.ai.
- *) Thanks and Credits to
 Tutorial by Ramsrigoutham for MCQ questions generation from text.

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*) @misc{mromero2021t5-base-finetuned-question-generation-ap, title={T5 (base) fine-tuned on SQUAD for QG via AP}, author={Romero, Manuel}, publisher={Hugging Face}, journal={Hugging Face Hub},
```

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howpublished={\url{https://huggingface.co/mrm8488/t5-base-finetuned-question-generation-ap}}, year={2021}
```

*) https://github.com/MaartenGr/keyBERT