Project Proposal

- **Project title:** **Text Summarization**

- **Data set:** https://www.kaggle.com/datasets/cuitengfeui/textsummarization-data

- **Project idea:**

The main objective of a text summarization system is to identify the most important information from the given text and present it to the end users.

- **Software:**

Tools :-

Jupyter Notebook
Pycharm

Language:-

Python

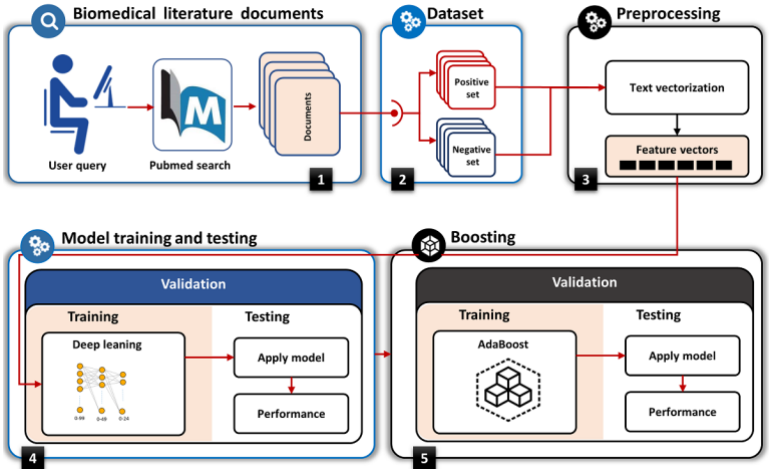
- **Related Papers:**

1- **Text Summarization with Pretrained Encoders**
In this paper, it showcase how BERT can be usefully applied in text summarization and propose a general framework for both extractive and abstractive models. It introduce a novel document-level encoder based on BERT.
   - The Github code. from here
   - Dataset used. CNN/Daily Mail , XSum
   - Ref. from here

2- **Enhancing Extractive Text Summarization with Topic-Aware Graph Neural Networks**
This paper proposes a graph neural network (GNN)-based extractive summarization model, enabling to capture inter-sentence relationships efficiently via graph-structured document representation. the model integrates a joint neural topic model (NTM) to discover latent topics, and achieves state-of-the-art results on CNN/DM and NYT datasets.
   - Datasets Used . from here
   - Ref. form here

3- **Clinical Context–Aware Biomedical Text Summarization Using Deep Neural Network**
This paper aims to circumvent these limitations through achieving precise, succinct, and coherent information extraction from credible published biomedical resources, and to construct a simplified summary containing the most informative content that can offer a review particular to clinical needs.

This paper uses sequence of step as following.



Clinical context–aware (CCA) classifier trained on 250-dimension feature vectors, 100 nodes at the embedding layer, 100 memory units of the long short-term memory (LSTM) layer logical hidden layers, and 5 classification nodes.

- Dataset used . form here
- Ref. from here

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