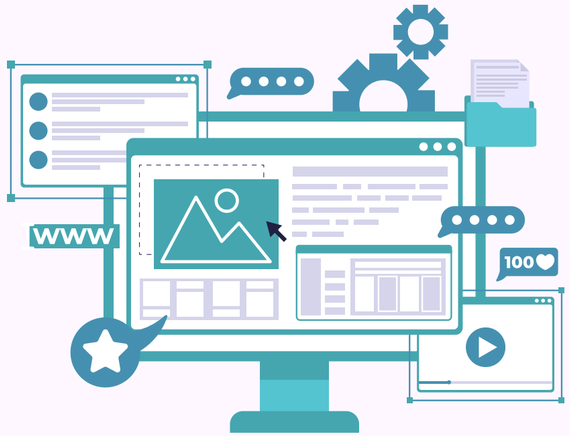
CODE GIST

Team-5

Problem statement

To explore the development of a sophisticated code summarization tool to enhance code readability, improve software documentation quality, and accelerate code comprehension and collaboration among developers.



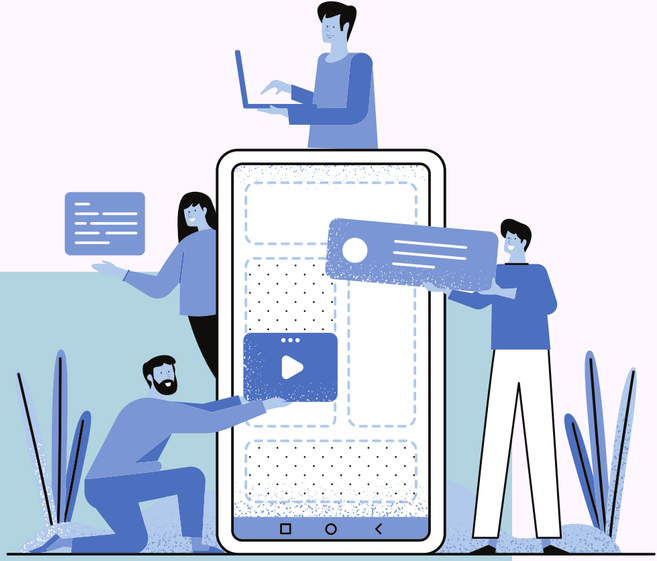
Why is the proposed solution better than existing ones

- **Deep learning Approach:** leveraging transformer-based models, pre-trained on code and our tool generates that summary
- **Fine-tuning and optimization:** by fine-tuning of pre-trained transformer model our tool accurately generate summaries
- **Efficient data preparation:** Our tool utilizes advanced tokenization techniques for code ensuring appropriately processing of model

Technical work details

1. **Model Implementation and Fine-tuning:**

- Implement BERT, CodeBERT, and T5 models for code summarization.
- Fine-tune the pre-trained models on your dataset to adapt them to the specific task of code summarization. Experiment with different hyperparameters to improve performance.



1. **Evaluation and Comparison:**

- Choose appropriate evaluation metrics such as BLEU score, ROUGE score, and METEOR score.
- Compare the performance of BERT, CodeBERT, and T5 models using these metrics to identify the most effective model for code summarization we got BERT.

Thank You