MANTHAN

राष्ट्रीय सुरक्षा सर्वोपरि

Solution By: Endgame

PSID: INTL-NLP-11

Team Leader Name:
Ankit Kumar

Idea Introduction

IDEA TITLE- BASELINE

Tech Stack
1. Python
2. NLP
3. Deep Learning

Resources Used
1. IEEE Papers
2. NPTEL
3. python.org
4. Statistical Inference by George Casella

Any Third Party API/Services used
1. Yes

ABSTRACTION-BASED TEXT SUMMARIZATION

Our solution produces a short and accurate summary from a large number of news articles on terrorism using the abstractive summarization method. By conserving significant information this approach produces an effective summary having less redundancy and more grammatically correct sentences within a short period of time.

Your Approach Towards Idea

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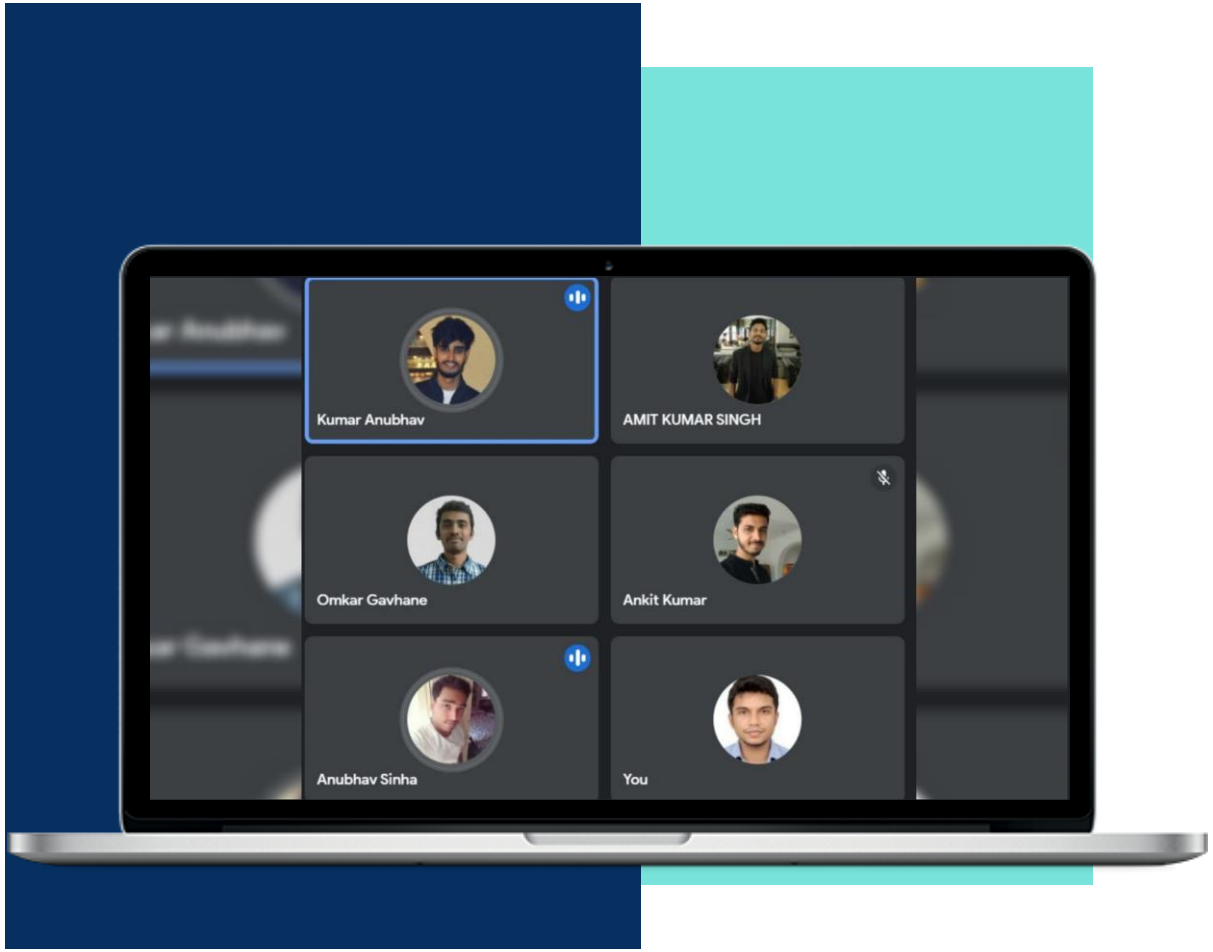

Approach:

- Collection of news article related to terrorism.
- Build a model to generate summary.
- Calculate Accuracy and remodel accordingly.
- Model will generate summary of new article.

We have considered the given problem as an application of deep learning and NLP.

We will build a model that will generate a concise and unbiased summary capturing all salient aspects of the source text.

The same model can be used to generate a summary from audio files in both formats i.e. text and audio.

Team Slide

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IIT Patna

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Development Pipeline

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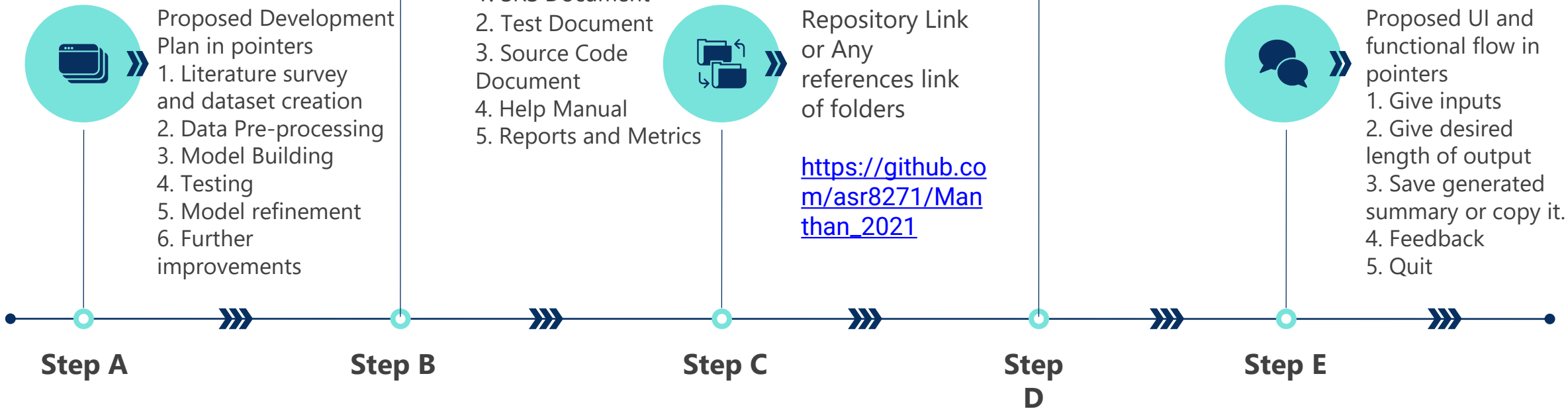

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Vision of Innovation/Idea/Solution

Explain How you developed Idea.
Answer : After analysing the problem statement, we gathered information from various sources(research papers, NPTEL videos) and extracted relevant information that helped us in developing the idea.

Any early stage innovation detected while developing the solution.
Answer : In early-stage, we found that data pre-processing and mathematical manipulation on this data solves most part of our problem.

How much time it will take in conversion as a final product?
Answer : 1.5 Month (Approx.)

How your idea is different and innovative form other ideas- a default comparison?
Answer : We are building an abstractive summarization model for multiple inputs/documents which will generate a semantically correct short and concise summary, without being biased towards any source while already existing models work for single input and mostly uses an extractive method for summarization.
Further, we are in plan to improvise our system to work with audio input as well.

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