MEETING SUMMARIZER USING TRANSFORMERS

IMPORT SECRET KEY FROM HUGGING FACE

```
from google.colab import userdata
userdata.get('HF_TOKEN')
    'hf kCEaGntMYKCimnXzpMcaFGffyaWiBueafb'
```

IMPORT LIBRARIES

```
!pip install transformers
from transformers import BartTokenizer, BartForConditionalGeneration
```

```
Requirement already satisfied: transformers in /usr/local/lib/python3.10/dist-packages (4.38.2)
Requirement already satisfied: filelock in /usr/local/lib/python3.10/dist-packages (from transformers) (3.13.3)
Requirement already satisfied: huggingface-hub<1.0,>=0.19.3 in /usr/local/lib/python3.10/dist-packages (from transformers) (0.20.3)
Requirement already satisfied: numpy>=1.17 in /usr/local/lib/python3.10/dist-packages (from transformers) (1.25.2)
Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.10/dist-packages (from transformers) (24.0)
Requirement already satisfied: pyyaml>=5.1 in /usr/local/lib/python3.10/dist-packages (from transformers) (6.0.1)
Requirement already satisfied: regex!=2019.12.17 in /usr/local/lib/python3.10/dist-packages (from transformers) (2023.12.25)
Requirement already satisfied: requests in /usr/local/lib/python3.10/dist-packages (from transformers) (2.31.0)
Requirement already satisfied: tokenizers<0.19,>=0.14 in /usr/local/lib/python3.10/dist-packages (from transformers) (0.15.2)
Requirement already satisfied: safetensors>=0.4.1 in /usr/local/lib/python3.10/dist-packages (from transformers) (0.4.2)
Requirement already satisfied: tqdm>=4.27 in /usr/local/lib/python3.10/dist-packages (from transformers) (4.66.2)
Requirement already satisfied: fsspec>=2023.5.0 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub<1.0,>=0.19.3->transform
Requirement already satisfied: typing-extensions>=3.7.4.3 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub<1.0,>=0.19.3-
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests->transformers) (3.3.2)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests->transformers) (3.6)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests->transformers) (2.0.7)
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests->transformers) (2024.2.2)
```

SPLIT MEETING TRANSCRIPT

```
def split_transcript(meeting_transcript):
    # Split the meeting transcript into speaker-turn pairs
    speaker_turns = meeting_transcript.strip().split("\n")

# Split each speaker-turn pair into speaker name and statement
    speaker_turn_pairs = [turn.split(": ") for turn in speaker_turns]

return speaker_turn_pairs
```

SUMMARIZE MEETING

```
def summarize_meeting(meeting_transcript):
    # Split meeting transcript into speaker-turn pairs
    speaker_turn_pairs = split_transcript(meeting_transcript)
    # Concatenate all statements into a single string
    statements = [turn[1] for turn in speaker_turn_pairs]
    meeting_text = ". ".join(statements)
    # Load pre-trained BART tokenizer and model
    tokenizer = BartTokenizer.from_pretrained("facebook/bart-large-cnn")
    model = BartForConditionalGeneration.from_pretrained("facebook/bart-large-cnn")
    # Tokenize the meeting transcript
    inputs = tokenizer([meeting_text], max_length=1024, return_tensors="pt", truncation=True)
    # Generate summary
    summary_ids = model.generate(inputs['input_ids'], num_beams=4, max_length=150, early_stopping=True)
    # Decode the summary
    summary = tokenizer.decode(summary_ids[0], skip_special_tokens=True)
    return summary
MEETING TRANSCRIPT
# Example meeting transcript
meeting_transcript = ""'
John: Good morning, everyone. Today, we'll discuss the progress on our latest project and plan for the upcoming sprint.
Sarah: We've completed the frontend design and started implementing the backend functionalities.
Mark: That's great progress, Sarah. How about the QA testing?
Sarah: QA testing is underway, and we've identified a few minor issues."""
Summarize the meeting transcript
```

```
# Summarize the meeting transcript
summary = summarize_meeting(meeting_transcript)
print("Meeting Summary:")
print(summary)
```

tified a few minor issues. We'll discuss the progress on our latest project and plan for the upcoming sprint in the next few days. Back t

MEETING SUMMARIZER USING PIPELINE

```
from transformers import pipeline
def summarize_meeting(meeting_transcript):
    summarizer = pipeline("summarization")
   # Token limit for summarization
   max_length = 100
    # Summarize the meeting transcript
    summary = summarizer(meeting_transcript, max_length=max_length)[0]['summary_text']
    return summary
def main():
    # Example meeting transcript
    meeting_transcript = """
    John: Good morning, everyone. Let's start our meeting. Today, we'll discuss the quarterly financial report and the marketing strategies
   Sarah: Sounds good, John. I'll present the financial report first. Our revenue increased by 15% compared to last quarter, primarily driv
    Mark: That's impressive, Sarah. What about our expenses?
    Sarah: Our expenses also increased by 10% due to higher marketing and operational costs. However, our net profit still improved by 20% c
    John: Great work, Sarah. Now, let's move on to the marketing strategies.
    Emily: For the marketing strategies, we're planning to focus more on social media campaigns and influencer partnerships. We've seen a si
    John: Excellent. Let's allocate more resources to those initiatives. Anything else to discuss?
    (No further discussions)
    John: Alright then. let's conclude the meeting. Thank vou all for vour contributions.
```