QuickRead

Your on-the-go PDF and Text Summarizer!

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The Goal

- The frontrunner in chatbot technology - ChatGPT - boasts impressive summarization features, but it lacks a convenient way to upload files to summarize

- Aware of this issue, we developed an application that would resolve it

The Technology

- We leveraged the Cohere platform's API to process input given by the user

- Specifically, we used **.summarize()**

- The application itself is pure Python, using the CustomTkinter framework for the GUI and a slew of Python files for processing the input

Step-by-Step Process

1. When the app is run, a chatbot-esque GUI window opens up
2. You can then select one of the three example texts, copy-paste your own text, or upload either a .pdf or .txt (a live readout on the right will show the contents of the files)
3. You may then select how long you would like your summary to be
4. Given that you have neither reached the request limit for the Cohere API nor have an input of less than 250 characters, you may hit **summarize** and watch the summary appear on the left!

QuickRead

Window 1 (left)

QuickRead

Try summarizing some of these articals:

| History of Rome | The moon landing | The invention of Programming |

Paste what you want to be summarized here...

Your summarized text will appear here.

Some uses for QuickRead:

Paste long emails that take too much time to read.

Copy over articles from the news that you never have enough time to read.

Review topics from your school textbook before your next exam.

Open files from your computer within QuickRead for easy summarization!

[Summarize] [Medium Summar ▾] [Upload File]

Window 2 (right)

QuickRead

Try summarizing some of these articals:

| History of Rome | The moon landing | The invention of Programming |

Rome was founded around 625 BC in the areas of ancient Italy known as Etruria and Latium. The first period in Roman history is known as the Period of Kings, and it lasted from Rome's founding until 510 BC. The end of the Period of Kings came with the decline of Etruscan power, thus ushering in Rome's Republican Period. Rome continued to expand through the Republican Period and gained control over the entire Italian peninsula by 338 BC.

Founding (c. 625 BC)
Rome was founded around 625 BC in the areas of ancient Italy known as Etruria and Latium. It is thought that the city-state of Rome was initially formed by Latium villagers joining together with settlers from the surrounding hills in response to an Etruscan invasion. It is unclear whether they came together in defense or as a result of being brought under Etruscan rule. Archaeological evidence indicates that a great deal of change and unification took place around 600 BC which likely led to the establishment of Rome as a true city.

Period of Kings (625-510 BC)
The first period in Roman history is known as the Period of Kings, and it lasted from Rome's founding until 510 BC. During this brief time Rome, led by no fewer than six kings, advanced both militaristically and economically with increases in physical boundaries, military might, and production and trade of goods including oil lamps. Politically, this period saw the early formation of the Roman constitution. The end of the Period of Kings came with the decline of Etruscan power, thus ushering in Rome's Republican Period.

Republican Rome (510-31 BC)
Rome entered its Republican Period in 510 BC. No longer ruled by kings, the Romans established a new form of government whereby the upper classes ruled, namely the senators and the equestrians, or knights. However, a dictator could be nominated in times of crisis. In 451 BC, the Romans established the "Twelve Tables," a standardized code of laws meant for public, private, and political matters.

Rome continued to expand through the Republican Period and gained control over the entire Italian peninsula by 338 BC. It was the Punic Wars from 264-146 BC, a

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The Code

- After reading the input based on its type (.pdf, .txt, text), the following module is called:

```python
def run_ai(input, length, root):
    length = length.split()[0].lower()

    with open('api_key.env', 'r') as env_file:
        for line in env_file:
            key, value = line.strip().split('=')
            os.environ[key] = value
    co = cohere.Client(os.environ['COHERE_API_KEY'])

    try:
        response = co.summarize(
            text=input,
            model='command',
            length=length,
            extractiveness='medium'
        )
        return response.summary
    except:
        CTkMessagebox(master=root, title="Error", message="You must submit at least 250 characters and can only make 5 summaries/min. ", icon="cancel", width=400, height=50, button_width=180, button_height=100, topmost=False)
```

- The function first reads the API key from **api_key.env** and then calls **.summarize()**, passing in the translated input text and the user's desired length of the summary

Prospects

- Although simple, the app's ability to conveniently upload common file types (pdf, txt) makes it a great tool for students, signees, and countless other groups:

    - Students: summarizing a difficult textbook page
    - Signees: summarizing a compex legal document
    - Employees: summarizing long work emails

Pricing

- Due to the heavy reliance on Cohere's API, we would charge $5 a month per user