

Code:

```
import customtkinter as ctk
import tkinter.messagebox as tkmb
import os

# Selecting GUI theme - dark, light , system (for system default)
ctk.set_appearance_mode("dark")

# Selecting color theme - blue, green, dark-blue
ctk.set_default_color_theme("blue")

app = ctk.CTk()
app.geometry("300x520")
app.title("Smart Notes Maker")

def login():

    username = "Geeks"
    #password = "12345"
    filename=user_entry.get()

    if os.path.exists(filename):

        new_window = ctk.CTkToplevel(app)

        new_window.title("Result")
        new_window.geometry("300x520")

        #print('hello')
        with open(filename,'r') as file:
            text = file.read()
        original=len(text)
        import spacy
        from spacy.lang.en.stop_words import STOP_WORDS
        from string import punctuation

        stopwords = list(STOP_WORDS)
        stopwords

        nlp = spacy.load('en_core_web_sm')
        doc = nlp(text)

        tokens = [token.text for token in doc]
        punctuation = punctuation + '\n'

        word_freq = { }
        for word in doc:
            if word.text.lower() not in stopwords:
```

```

if word.text.lower() not in punctuation:
    if word.text not in word_freq.keys():
        word_freq[word.text] = 1
    else:
        word_freq[word.text] = +1

```

```

max_freq = max(word_freq.values())
for word in word_freq.keys():
    word_freq[word] = word_freq[word]/max_freq

```

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sen_token = [sent for sent in doc.sents]

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```

sen_score = {}
for sent in sen_token:
    for word in sent:
        if word.text.lower() in word_freq.keys():
            if sent not in sen_score.keys():
                sen_score[sent] = word_freq[word.text.lower()]
            else:
                sen_score[sent] += word_freq[word.text.lower()]

```

```

from heapq import nlargest
select_length = int(len(sen_token)* 0.3)

```

```

summary = nlargest(select_length, sen_score, key = sen_score.get)
final_summary = [word.text for word in summary]

```

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summary = ' '.join(final_summary)

```

```

newfilename="abc"
file = open(newfilename, "w")
file.write(summary)
file.close()
inlength=original
outlength=len(summary)
print(inlength,outlength)
newfilename="abc"+"x"

```

```

ctk.CTkLabel(new_window,text="Your Summarized file is saved into same
directory").pack()

```

```

label1 = ctk.CTkLabel(new_window,text=' ')
label1.pack(pady=2,padx=4)
label1 = ctk.CTkLabel(new_window,text='Name of Old File')
label1.pack(pady=2,padx=4)
label1 = ctk.CTkLabel(new_window,text=filename)
label1.pack(pady=2,padx=4)
label1 = ctk.CTkLabel(new_window,text="")
label1.pack(pady=2,padx=4)
label1 = ctk.CTkLabel(new_window,text='Name of New File')
label1.pack(pady=2,padx=4)
label1 = ctk.CTkLabel(new_window,text=newfilename+".txt")

```

```

label1.pack(pady=2,padx=4)
label1 = ctk.CTkLabel(new_window,text="")
label1.pack(pady=2,padx=4)
label1 = ctk.CTkLabel(new_window,text='Length of Original File')
label1.pack(pady=2,padx=4)
label1 = ctk.CTkLabel(new_window,text=inlength)
label1.pack(pady=2,padx=4)
label1 = ctk.CTkLabel(new_window,text="")
label1.pack(pady=2,padx=4)
label1 = ctk.CTkLabel(new_window,text='Length of New File')
label1.pack(pady=2,padx=4)
label1 = ctk.CTkLabel(new_window,text=outlength)
label1.pack(pady=2,padx=4)
label1 = ctk.CTkLabel(new_window,text="")
label1.pack(pady=2,padx=4)
button = ctk.CTkButton(new_window,text='Back')
button.pack(pady=12,padx=10)

```

else:

```

tkmb.showerror(title="Login Failed",message="Invalid FileName")

```

```

label = ctk.CTkLabel(app,text="SMART NOTES MAKER")

```

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label.pack(pady=20)

```

```

frame = ctk.CTkFrame(master=app)
frame.pack(pady=20,padx=40,fill='both',expand=True)

```

```

label = ctk.CTkLabel(master=frame,text='1. Enter File Name')
label.pack(pady=10,padx=10)
label = ctk.CTkLabel(master=frame,text='2. Click on Submit')
label.pack(pady=10,padx=10)
label = ctk.CTkLabel(master=frame,text='3. Summarized File')
label.pack(pady=10,padx=10)
label = ctk.CTkLabel(master=frame,text="")
label.pack(pady=10,padx=10)

```

```

user_entry= ctk.CTkEntry(master=frame,placeholder_text="File Name with .txt")
user_entry.pack(pady=12,padx=10)
button = ctk.CTkButton(master=frame,text='Submit',command=login)
button.pack(pady=12,padx=10)

```

```

app.mainloop()

```

Output:

Input file:

Concept

Information isn't worth much if it doesn't serve a purpose. MIS students learn how businesses use the information to improve the company's operations. Students also learn how to manage various information systems so that they best serve the needs of managers, staff and customers. MIS students learn how to create systems for finding and storing data, and they learn about computer databases, networks, computer security, and lots more. The component of an information system includes: a hardware which is used for input/output process and storage of data, software used to process data and also to instruct the hardware component, databases which is the location in the system where all the organization data will be automated and procedures which is a set of documents that explain the structure of that management information system.

Concept

There are various driving factors of management information system for example- Technological revolutions in all sectors make new managers need to have access to

a large amount of particular information for the complex tasks and decisions. The lifespan of most product has continued getting shorter and shorter, and therefore

the challenge to the manager is to design product that will take a longer shelf life, and in order to do this, the manager must be able to keep abreast of the factors that influence the organization product and services thus, management information system comes in handy in supporting the process.

Processing:

Enter the name of the file with .txt extension:text.txt

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tokens in the input text:

```
['Concept', '\n\n\n', 'Information', 'is', 'n\'t', 'worth', 'much', 'if', 'it', 'does', 'n\'t', 'serve', 'a', 'purpose', '.', 'MIS', 'students', 'learn', 'how', '\n', 'businesses', 'use', 'the', 'information', 'to', 'improve', 'the', 'company', 's', 'operations', '.', 'Students', 'also', '\n', 'learn', 'how', 'to', 'manage', 'various', 'information', 'systems', 'so', 'that', 'they', 'best', 'serve', 'the', 'needs', '\n', 'of', 'managers', ',', 'staff', 'and', 'customers', '.', 'MIS', 'students', 'learn', 'how', 'to', 'create', 'systems', 'for', '\n', 'finding', 'and', 'storing', 'data', ',', 'and', 'they', 'learn', 'about', 'computer', 'databases', ',', 'networks', ',', '\n', 'computer', 'security', ',', 'and', 'lots', 'more', '.', 'The', 'component', 'of', 'an', 'information', 'system', 'includes', ':', '\n', 'a', 'hardware', 'which', 'is', 'used', 'for', 'input', '/', 'output', 'process', 'and', 'storage', 'of', 'data', ',', 'software', 'used', '\n', 'to', 'process', 'data', 'and', 'also', 'to', 'instruct', 'the', 'hand', '-ware', 'component', ',', 'databases', 'which', 'is', '\n', 'the', 'location', 'in', 'the', 'system', 'where', 'all', 'the', 'organization', 'data', 'will', 'be', 'automated', 'and', '\n', 'procedures', 'which', 'is', 'a', 'set', 'of', 'documents', 'that', 'e
```

explain', 'the', 'structure', 'of', 'that', '\n', 'management', 'information', 'system',
'.', '\n\n', 'Concept', '\n\n \n\n', 'There', 'are', 'various', 'driving', 'factors', '
of', 'management', 'information', 'system', 'for', 'example-', '\n', 'Technological', '
revolutions', 'in', 'all', 'sectors', 'make', 'new', 'managers', 'need', 'to', 'have',
'access', 'to', '\n\n', 'a', 'large', 'amount', 'of', 'particular', 'information', 'for
'the', 'complex', 'tasks', 'and', 'decisions', '.', 'The', '\n', 'lifespan', 'of', '
most', 'product', 'has', 'continued', 'getting', 'shorter', 'and', 'shorter', ',', 'and
'therefore', '\n\n', 'the', 'challenge', 'to', 'the', 'manager', 'is', 'to', 'design
'product', 'that', 'will', 'take', 'a', 'longer', 'shelf', 'life', ',', 'and', '\n',
'in', 'order', 'to', 'do', 'this', ',', 'the', 'manager', 'must', 'be', 'able', 'to', '
keep', 'abreast', 'of', 'the', 'factors', 'that', '\n', 'influence', 'the', 'organizati
on', 'product', 'and', 'services', 'thus', ',', 'management', 'information', 'system',
'\n', 'comes', 'in', 'handy', 'in', 'supporting', 'the', 'process', '.']

Frequent Words:

```
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'sectors': 1.0, 'new': 1.0, 'need': 1.0, 'access': 1.0, 'large': 1.0, 'particular': 1.0  
, 'complex': 1.0, 'tasks': 1.0, 'decisions': 1.0, 'lifespan': 1.0, 'product': 1.0, 'con  
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' : 1.0, 'longer': 1.0, 'shelf': 1.0, 'life': 1.0, 'order': 1.0, 'able': 1.0, 'abreast':  
1.0, 'influence': 1.0, 'services': 1.0, 'comes': 1.0, 'handy': 1.0, 'supporting': 1.0}
```

Sentence Tokens:

[Concept

Information isn't worth much if it doesn't serve a purpose., MIS students learn how
businesses use the information to improve the company's operations., Students also
learn how to manage various information systems so that they best serve the needs
of managers, staff and customers., MIS students learn how to create systems for
finding and storing data, and they learn about computer databases, networks,
computer security, and lots more., The component of an information system includes:
a hardware which is used for input/output process and storage of data, software used
to process data and also to instruct the hand-ware component, databases which is
the location in the system where all the organization data will be automated and
procedures which is a set of documents that explain the structure of that
management information system.

, Concept

There are various driving factors of management information system for example- Technological revolutions in all sectors make new managers need to have access to a large amount of particular information for the complex tasks and decisions., The lifespan of most product has continued getting shorter and shorter, and therefore the challenge to the manager is to design product that will take a longer shelf life, and in order to do this, the manager must be able to keep abreast of the factors that influence the organization product and services thus, management information system comes in handy in supporting the process.]

Sen Score:
{Concept

Information isn't worth much if it doesn't serve a purpose.: 5.0, MIS students learn how businesses use the information to improve the company's operations.: 8.0, Students also learn how to manage various information systems so that they best serve the needs of managers, staff and customers.: 11.0, MIS students learn how to create systems for finding and storing data, and they learn about computer databases, networks, computer security, and lots more.: 14.0, The component of an information system includes:
a hardware which is used for input/output process and storage of data, software used to process data and also to instruct the hardware component, databases which is the location in the system where all the organization data will be automated and procedures which is a set of documents that explain the structure of that management information system.

: 32.0, Concept

There are various driving factors of management information system for example- Technological revolutions in all sectors make new managers need to have access to a large amount of particular information for the complex tasks and decisions.: 20.0, The lifespan of most product has continued getting shorter and shorter, and therefore the challenge to the manager is to design product that will take a longer shelf life, and in order to do this, the manager must be able to keep abreast of the factors that influence the organization product and services thus, management information system comes in handy in supporting the process.: 30.0}

Summary:

[The component of an information system includes:

a hardware which is used for input/output process and storage of data, software used to process data and also to instruct the hand-ware component, databases which is the location in the system where all the organization data will be automated and procedures which is a set of documents that explain the structure of that management information system.

, The

lifespan of most product has continued getting shorter and shorter, and therefore

the challenge to the manager is to design product that will take a longer shelf life, and

in order to do this, the manager must be able to keep abreast of the factors that influence the organization product and services thus, management information system comes in handy in supporting the process.]

Final Summary:

['The component of an information system includes:\na hardware which is used for input/output process and storage of data, software used\nto process data and also to instruct the hand-ware component, databases which is\nthe location in the system where all the organization data will be automated and\nprocedures which is a set of documents that explain the structure of that\nmanagement information system.\n\n', 'The\nlifespan of most product has continued getting shorter and shorter, and therefore\n\nthe challenge to the manager is to design product that will take a longer shelf life, and\n\nin order to do this, the manager must be able to keep abreast of the factors that\n\ninfluence the organization product and services thus, management information system\n\ncomes in handy in supporting the process.']

Output Summary:

The component of an information system includes:

a hardware which is used for input/output process and storage of data, software used to process data and also to instruct the hand-ware component, databases which is the location in the system where all the organization data will be automated and procedures which is a set of documents that explain the structure of that management information system.

The

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length of original file:

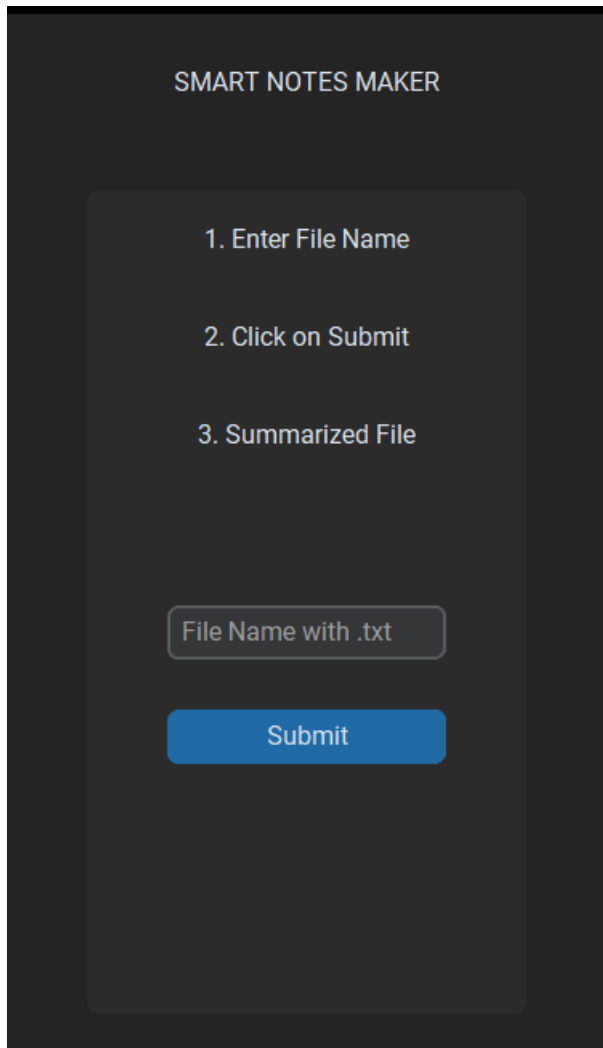
1486

length of summarized file:

786

Snapshots:

Home Screen



SMART NOTES MAKER

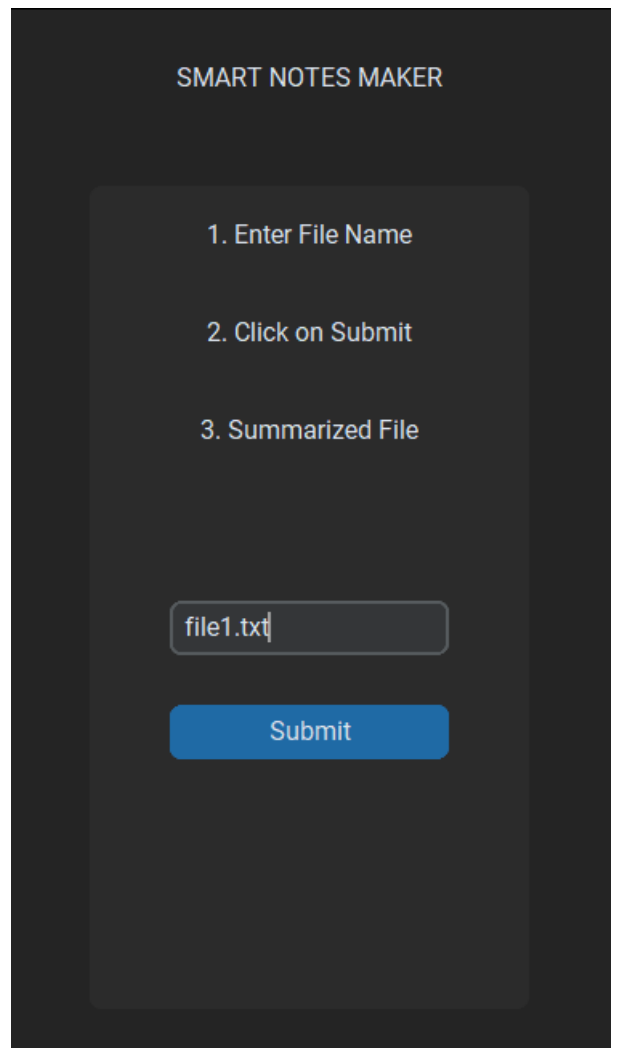
1. Enter File Name
2. Click on Submit
3. Summarized File

File Name with .txt

Submit

The Home Screen of the SMART NOTES MAKER app features a dark gray background. At the top, the title "SMART NOTES MAKER" is displayed in white. Below the title, a light gray rounded rectangle contains a list of three steps: "1. Enter File Name", "2. Click on Submit", and "3. Summarized File". Underneath this list, there is a text input field with the placeholder text "File Name with .txt" and a blue "Submit" button.

Entering filename



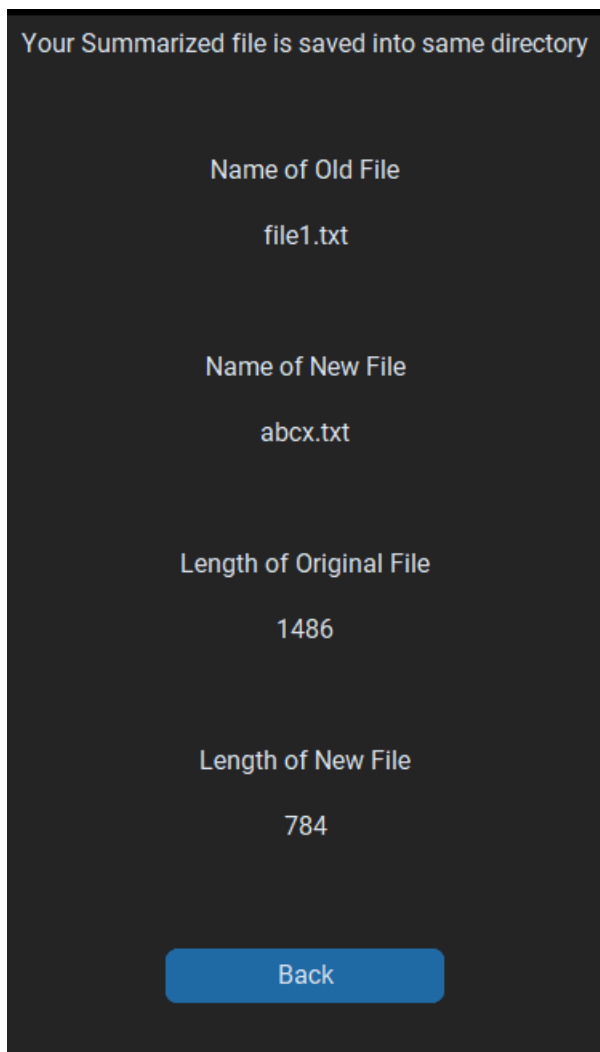
SMART NOTES MAKER

1. Enter File Name
2. Click on Submit
3. Summarized File

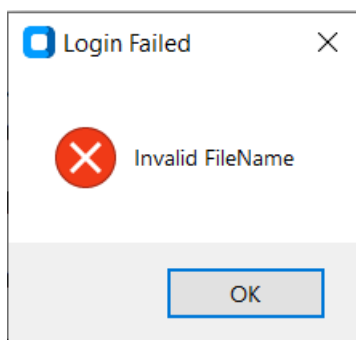
file1.txt

Submit

The "Entering filename" screen of the SMART NOTES MAKER app has a dark gray background. At the top, the title "SMART NOTES MAKER" is displayed in white. Below the title, a light gray rounded rectangle contains a list of three steps: "1. Enter File Name", "2. Click on Submit", and "3. Summarized File". Underneath this list, there is a text input field containing the text "file1.txt" and a blue "Submit" button.



If filename is correct



If filename is incorrect

Output file:

The component of an information system includes:

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