**利用ChatGPT开发词云软件**

**一、提示语**

Task: Please write a Python script with a graphical user interface (GUI) to create a word cloud from a corpus of text files.

Input: One or multiple text files encoded in UTF-8.

Output: A word cloud image.

Functionality:

1. Word Frequency Analysis: The script should analyze the frequency of each word in the text files and generate a word cloud where the size of each word corresponds to its frequency.

2. File Selection: The GUI should enable users to select one or multiple text files.

3. Button Controls: The GUI should include two buttons:

 Open Files: Allows users to upload text files.

 Generate Word Cloud: Generates and displays the word cloud image based on the uploaded text files.

4. Progress Bar: Add a progress bar to indicate the progress of the word cloud generation process.

**二、大模型生成的Python代码**

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| import tkinter as tkfrom tkinter import filedialog, messageboxfrom tkinter.ttk import Progressbarfrom wordcloud import WordCloudimport matplotlib.pyplot as pltimport osclass WordCloudApp: def \_\_init\_\_(self, root): self.root = root self.root.title("Word Cloud Generator") self.root.geometry("400x200") self.file\_paths = [] self.open\_button = tk.Button(root, text="Open Files", command=self.open\_files) self.open\_button.pack(pady=10) self.generate\_button = tk.Button(root, text="Generate Word Cloud", command=self.generate\_word\_cloud) self.generate\_button.pack(pady=10) self.progress = Progressbar(root, orient=tk.HORIZONTAL, length=200, mode='determinate') self.progress.pack(pady=10) def open\_files(self): self.file\_paths = filedialog.askopenfilenames(filetypes=[("Text files", "\*.txt")]) if self.file\_paths: messagebox.showinfo("Selected Files", f"{len(self.file\_paths)} files selected.") else: messagebox.showwarning("No Files", "No files were selected.") def generate\_word\_cloud(self): if not self.file\_paths: messagebox.showwarning("No Files", "Please select text files first.") return self.progress['value'] = 0 self.root.update\_idletasks() text = "" for i, file\_path in enumerate(self.file\_paths): with open(file\_path, 'r', encoding='utf-8') as file: text += file.read() + " " self.progress['value'] = (i + 1) / len(self.file\_paths) \* 100 self.root.update\_idletasks() wordcloud = WordCloud(width=1600, height=800, background\_color='white').generate(text) plt.figure(figsize=(10, 5)) plt.imshow(wordcloud, interpolation='bilinear') plt.axis('off') plt.show() self.progress['value'] = 100 self.root.update\_idletasks() messagebox.showinfo("Completed", "Word cloud generated successfully.")if \_\_name\_\_ == "\_\_main\_\_": root = tk.Tk() app = WordCloudApp(root) root.mainloop() |

三、在桌面单击右键，新建“文本文档”，命名为Wordcloud。将大模型生成的代码粘贴到文本文档中，并另存为Wordcloud.py。

四、在桌面双击“此电脑”，点击左侧“桌面”。然后，在顶部地址栏输入cmd，回车。

五、拷贝以下代码并粘贴到cmd窗口中，回车。

pip install wordcloud matplotlib pyinstaller

六、拷贝以下代码并粘贴到cmd窗口中，回车。

pyinstaller --onefile --windowed Wordcloud.py

七、在桌面找到dist文件夹，双击Wordcloud.exe运行词云软件。