## You

How can I integrate teh following into my code to make a textbox that can be scrolled down and across if the input overflows

Code to integrate:

# Python Program to make a scrollable frame using Tkinter

from tkinter import \*

class ScrollBar:

# constructor

def \_\_init\_\_(self):

# create root window

root = Tk()

# create a horizontal scrollbar by setting orient to horizontal

h = Scrollbar(root, orient = 'horizontal')

# attach Scrollbar to root window at the bootom

h.pack(side = BOTTOM, fill = X)

# create a vertical scrollbar-no need to write orient as it is by default vertical

v = Scrollbar(root)

# attach Scrollbar to root window on the side

v.pack(side = RIGHT, fill = Y)

# create a Text widget with 15 chars width and 15 lines height

# here xscrollcomannd is used to attach Text widget to the horizontal scrollbar

# here yscrollcomannd is used to attach Text widget to the vertical scrollbar

t = Text(root, width = 15, height = 15, wrap = NONE,

xscrollcommand = h.set, yscrollcommand = v.set)

# insert some text into the text widget

for i in range(20):

t.insert(END,"this is some text\n")

# attach Text widget to root window at top

t.pack(side=TOP, fill=X)

# here command represents the method to be executed

# xview is executed on object 't'

# Here t may represent any widget

h.config(command=t.xview)

# here command represents the method to be executed

# yview is executed on object 't'

# Here t may represent any widget

v.config(command=t.yview)

# the root window handles the mouse click event

root.mainloop()

# create an object to Scrollbar class

s = ScrollBar()

My code:

#Importing the modules

import vertexai from vertexai.generative\_models

import GenerativeModel

import google.auth

from tkinter import \*

credentials, project\_id = google.auth.default()

vertexai.init(project="generalpurposeai", location="us-central1")

model = GenerativeModel(model\_name="gemini-1.0-pro")

class ChatbotWindow(Tk):

def \_\_init\_\_(self):

super().\_\_init\_\_()

self.title('AI Cover Letter Writer')

# Create text widget for conversation

self.conversation = Text(self, state='disabled')

self.conversation.pack(expand=True, fill='both')

# Create entry widget for user input

self.user\_input = Entry(self)

self.user\_input.pack(side='left', expand=True, fill='x')

# Create send button

self.send\_button = Button(self, text='Send', command=self.send\_message)

self.send\_button.pack(side='right')

def send\_message(self):

prompt = self.user\_input.get()

if prompt:

# Add user message to conversation

self.conversation.configure(state='normal')

plaintext\_prompt = f"""Given the contents of my CV (Resume) and the job description which are below:

\nMy Resume/CV is as follows: {prompt}

The job description is as follows: {prompt} \

nPlease generate an appropriate cover letter."""

responses = model.generate\_content(plaintext\_prompt, stream=True)

for response in responses:

self.conversation.insert('end', response.text)

self.conversation.insert('end', '\n')

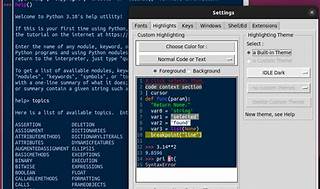
self.conversation.configure(state='disabled')

if \_\_name\_\_ == "\_\_main\_\_":

window = ChatbotWindow()

window.mainloop()

## Copilot



To integrate a scrollable textbox into your existing code, you can use the ScrolledText widget from the tkinter.scrolledtext module. This widget simplifies the process of adding both vertical and horizontal scrollbars to a Text widget. Here's how you can modify your ChatbotWindow class to include a scrollable textbox:

# Importing the modules

import vertexai

from vertexai.generative\_models import GenerativeModel

import google.auth

from tkinter import \*

from tkinter.scrolledtext import ScrolledText

credentials, project\_id = google.auth.default()

vertexai.init(project="generalpurposeai", location="us-central1")

model = GenerativeModel(model\_name="gemini-1.0-pro")

class ChatbotWindow(Tk):

def \_\_init\_\_(self):

super().\_\_init\_\_()

self.title('AI Cover Letter Writer')

# Create scrolled text widget for conversation

self.conversation = ScrolledText(self, wrap=NONE)

self.conversation.pack(expand=True, fill='both')

# Create entry widget for user input

self.user\_input = Entry(self)

self.user\_input.pack(side='left', expand=True, fill='x')

# Create send button

self.send\_button = Button(self, text='Send', command=self.send\_message)

self.send\_button.pack(side='right')

def send\_message(self):

prompt = self.user\_input.get()

if prompt:

# Add user message to conversation

self.conversation.configure(state='normal')

plaintext\_prompt = f"""Given the contents of my CV (Resume) and the job description which are below:

\nMy Resume/CV is as follows: {prompt}

The job description is as follows: {prompt}

\nPlease generate an appropriate cover letter."""

responses = model.generate\_content(plaintext\_prompt, stream=True)

for response in responses:

self.conversation.insert('end', response.text)

self.conversation.insert('end', '\n')

self.conversation.configure(state='disabled')

if \_\_name\_\_ == "\_\_main\_\_":

window = ChatbotWindow()

window.mainloop()

This modification uses the ScrolledText widget, which automatically includes both vertical and horizontal scrollbars when the text overflows[^1^](https://www.geeksforgeeks.org/python-tkinter-scrolledtext-widget/)[^2^](https://www.askpython.com/python-modules/tkinter/tkinter-text-widget-tkinter-scrollbar). This should make your ChatbotWindow more user-friendly by allowing users to scroll through the conversation easily.

[^1^](https://www.geeksforgeeks.org/python-tkinter-scrolledtext-widget/): [GeeksforGeeks - Python Tkinter ScrolledText Widget](https://www.geeksforgeeks.org/python-tkinter-scrolledtext-widget/) [^2^](https://www.askpython.com/python-modules/tkinter/tkinter-text-widget-tkinter-scrollbar): [Python Documentation - tkinter.scrolledtext](https://docs.python.org/3/library/tkinter.scrolledtext.html)

Feel free to ask if you need further assistance!

### Learn more:

1. [www.geeksforgeeks.org](http://www.geeksforgeeks.org)
2. [www.askpython.com](http://www.askpython.com)
3. [stackoverflow.com](https://stackoverflow.com/questions/49207769/how-to-get-text-box-to-horizontally-scroll-over-inserted-widgets)
4. [customtkinter.tomschimansky.com](https://customtkinter.tomschimansky.com/documentation/widgets/scrollbar/)
5. [docs.python.org](http://docs.python.org)
6. [www.pythontutorial.net](http://www.pythontutorial.net)
7. [www.w3resource.com](http://www.w3resource.com)
8. [getdocs.org](https://getdocs.org/Python/docs/3.7/library/tkinter.scrolledtext)
9. [en.wikipedia.org](https://en.wikipedia.org/wiki/Tkinter)