

Artificial Intelligence Assignment No. 1

We have implemented a GUI of English to Gujarati Translation on our Researched Case Study

Code:

```
import tkinter as tk
from tkinter import ttk
from tkinter import Text
from googletrans import Translator, LANGUAGES
import traceback

root = tk.Tk()
root.geometry('980x500')
root.resizable(0, 0)
root.title("Artificial Intelligence Assignment 1")
root.config(bg='#f6d2fc')

# YOUR TRANSLATOR

tk.Label(root, text="Artificial Intelligence Assignment 1",
font="arial 20 bold", fg='#000000', bg='#f6d2fc').pack()

tk.Label(root, text="Kapil Bhatia-05, Tejas Davada-09",
font='arial 16', fg='#000000', bg='#f6d2fc', height='5',
width='30').pack(side='bottom')

# INPUT AND OUTPUT TEXT

Input_text = Text(root, font='arial 14', height=11,
fg='#000000', bg='ffffff', wrap=tk.WORD, padx=5, pady=5,
width=30)

Input_text.place(x=50, y=100)

Output_text = Text(root, font='arial 14', height=11,
fg='#000000', bg='ffffff', wrap=tk.WORD, padx=3, pady=3,
width=30)
```

```
Output_text.place(x=600, y=100)

language = list(LANGUAGES.values())

src_lang = ttk.Combobox(root, values=language, width=22)
src_lang.place(x=20, y=60)
src_lang.set('choose input language')

dest_lang = ttk.Combobox(root, values=language, width=22)
dest_lang.place(x=810, y=60)
dest_lang.set('choose output language')

def Translate():
    translator = Translator()
    try:
        translated =
translator.translate(text=Input_text.get(1.0, tk.END),
src=src_lang.get(), dest=dest_lang.get())
        Output_text.delete(1.0, tk.END)
        Output_text.insert(tk.END, translated.text)
    except AttributeError as e:
        Output_text.delete(1.0, tk.END)
        Output_text.insert(tk.END, "Translation failed. Please
try again later.")
        traceback.print_exc()

trans_btn = tk.Button(root, text='Translate', font='arial 12
bold', pady=5, command=Translate, fg='black', bg='#ffffff',
activebackground='white')
trans_btn.place(x=455, y=180)

root.mainloop()
```

Output:

Artificial Intelligence Assignment 1

english ▼

Hi how are you

Translate

gujarati ▼

તમે કેમ છો

Kapil Bhatia-05, Tejas Davada-09

Artificial Intelligence Assignment 1

english ▼

My name is Tejas , What is your name ?

Translate

gujarati ▼

મારું નામ તેજસ છે, તમારું નામ શું છે?

Kapil Bhatia-05, Tejas Davada-09

Artificial Intelligence Assignment 1

english ▼

gujarati ▼

My name is Shyam . I stay in Pune .

મારું નામ શ્યામ છે.હું પૂણે રહે છે.

Translate

Kapil Bhatia-05, Tejas Davada-09

Artificial Intelligence Assignment 1

english ▼

gujarati ▼

My favourite food is Pizza

મારું પ્રિય ખોરાક પિઝા છે

Translate

Kapil Bhatia-05, Tejas Davada-09