

```
import streamlit as st

from mtranslate import translate

import pandas as pd

from gtts import gTTS

import base64

import os


# read language dataset

df = pd.read_csv(r"C:/Users/Hanshu/Desktop/DATA_SCIENCE/excel data_ML/language.csv")

df.dropna(inplace=True)

lang = df['name'].to_list()

langlist=tuple(lang)

langcode = df['iso'].to_list()


# create dictionary of language and 2 letter langcode

lang_array = {lang[i]: langcode[i] for i in range(len(langcode))}


# layout

st.title("Language-Translation")

inputtext = st.text_area("Hi Please Enter text here to Translate",height=100)


choice = st.sidebar.radio('SELECT LANGUAGE', langlist)


speech_langs = {

    "af": "Afrikaans",

    "ar": "Arabic",

    "bg": "Bulgarian",

    "bn": "Bengali",

    "bs": "Bosnian",

    "ca": "Catalan",

    "cs": "Czech",
```

"cy": "Welsh",
"da": "Danish",
"de": "German",
"el": "Greek",
"en": "English",
"eo": "Esperanto",
"es": "Spanish",
"et": "Estonian",
"fi": "Finnish",
"fr": "French",
"gu": "Gujarati",
"od" : "odia",
"hi": "Hindi",
"hr": "Croatian",
"hu": "Hungarian",
"hy": "Armenian",
"id": "Indonesian",
"is": "Icelandic",
"it": "Italian",
"ja": "Japanese",
"jw": "Javanese",
"km": "Khmer",
"kn": "Kannada",
"ko": "Korean",
"la": "Latin",
"lv": "Latvian",
"mk": "Macedonian",
"ml": "Malayalam",
"mr": "Marathi",
"my": "Myanmar (Burmese)",
"ne": "Nepali",

```

"nl": "Dutch",
"no": "Norwegian",
"pl": "Polish",
"pt": "Portuguese",
"ro": "Romanian",
"ru": "Russian",
"si": "Sinhala",
"sk": "Slovak",
"sq": "Albanian",
"sr": "Serbian",
"su": "Sundanese",
"sv": "Swedish",
"sw": "Swahili",
"ta": "Tamil",
"te": "Telugu",
"th": "Thai",
"tl": "Filipino",
"tr": "Turkish",
"uk": "Ukrainian",
"ur": "Urdu",
"vi": "Vietnamese",
"zh-CN": "Chinese"
}

```

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# function to decode audio file for download

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```

def get_binary_file_downloader_html(bin_file, file_label='File'):
    with open(bin_file, 'rb') as f:
        data = f.read()
        bin_str = base64.b64encode(data).decode()

        href = f'<a href="data:application/octet-stream;base64,{bin_str}"
download="{os.path.basename(bin_file)}">Download {file_label}</a>'

```

```
return href
```

```
C1,C2 = st.columns([4,3])
```

```
#I/O
```

```
if len(inputtext) > 0 :
```

```
    try:
```

```
        output = translate(inputtext, lang_array[choice])
```

```
        with C1:
```

```
            st.text_area("TRANSLATED TEXT",output,height=200)
```

```
        # if speech support is available will render audio file
```

```
        if choice in speech_langs.values():
```

```
            with C2:
```

```
                aud_file = gTTS(text=output, lang=lang_array[choice], slow=False)
```

```
                aud_file.save("lang.mp3")
```

```
                audio_file_read = open('lang.mp3', 'rb')
```

```
                audio_bytes = audio_file_read.read()
```

```
                bin_str = base64.b64encode(audio_bytes).decode()
```

```
                st.audio(audio_bytes, format='audio/mp3')
```

```
                st.markdown(get_binary_file_downloader_html("lang.mp3", 'Audio File'),  
unsafe_allow_html=True)
```

```
            except Exception as e:
```

```
                st.error(e)
```