جامعة الشقراء
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TEXT TO SPEECH

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INTRODACTION

Text to speech converters convert text into speech using various algorithms. They have multiple applications Generally, python Text to speech converters operate via CLI only if you have an active internet connection, but for this project, we will create a GUI python Text to speech converter which you can operate from your computer offline as well.

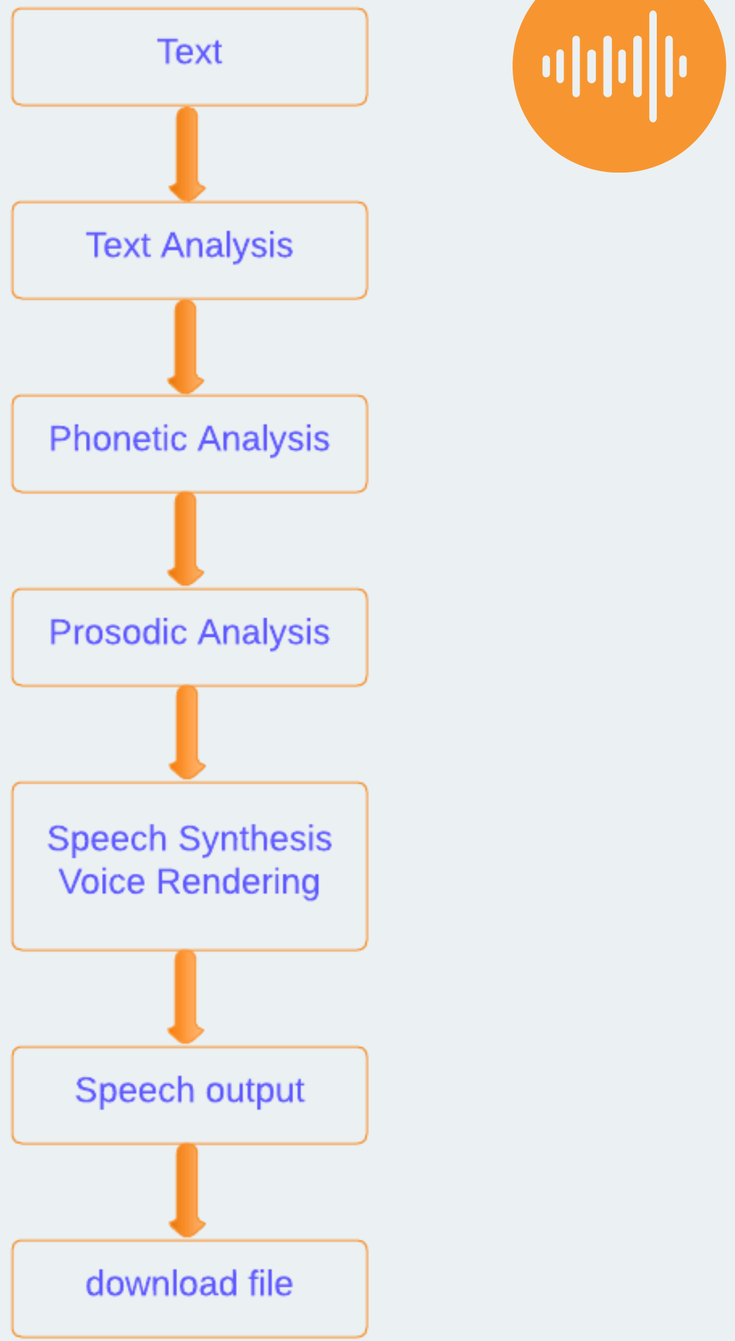
PROJECT PREREQUISITES

Tkinter –
To create a GUI for the project

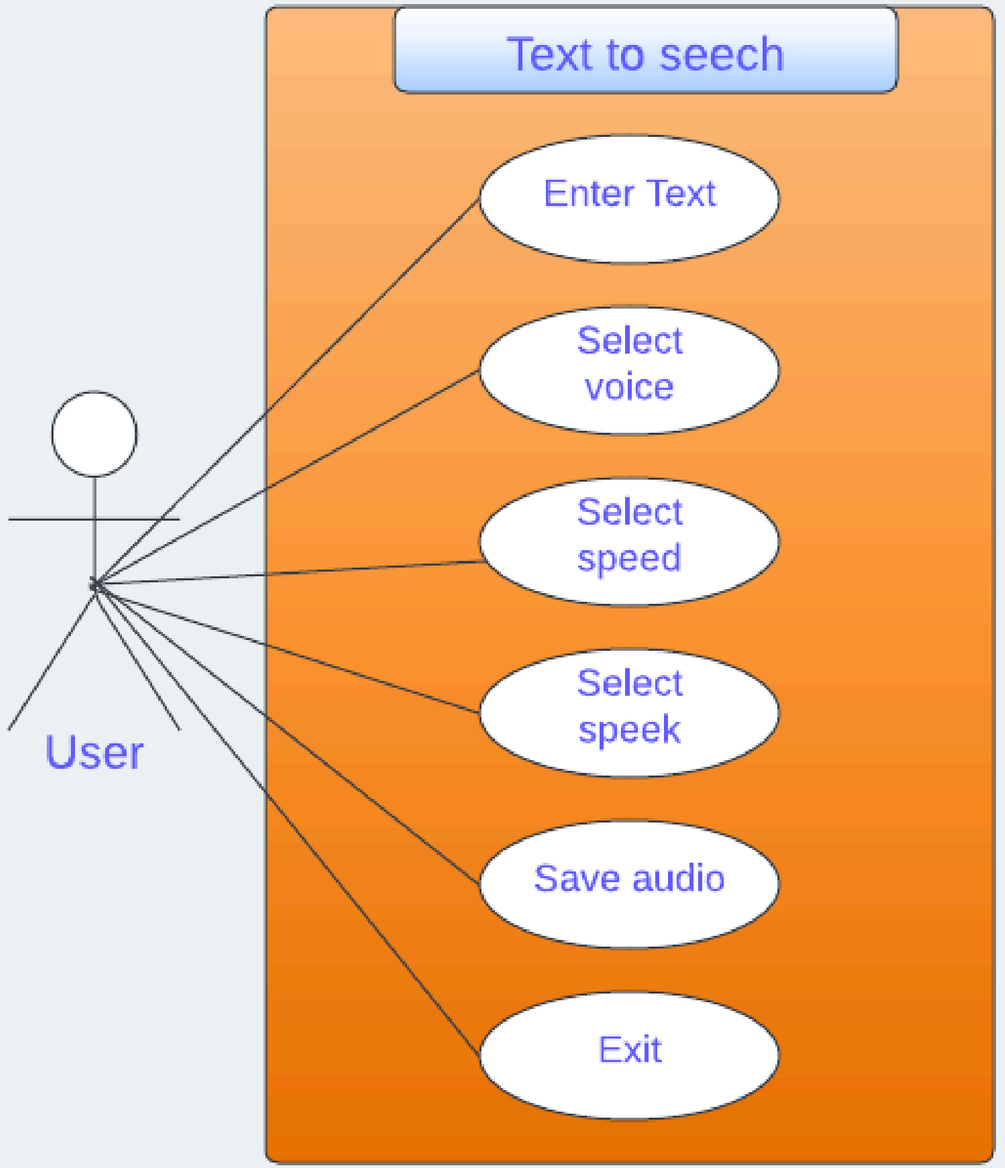
pyttsx3 –
To convert text to speech; it will be used as TTS Conversion engine.

FLOWCHART

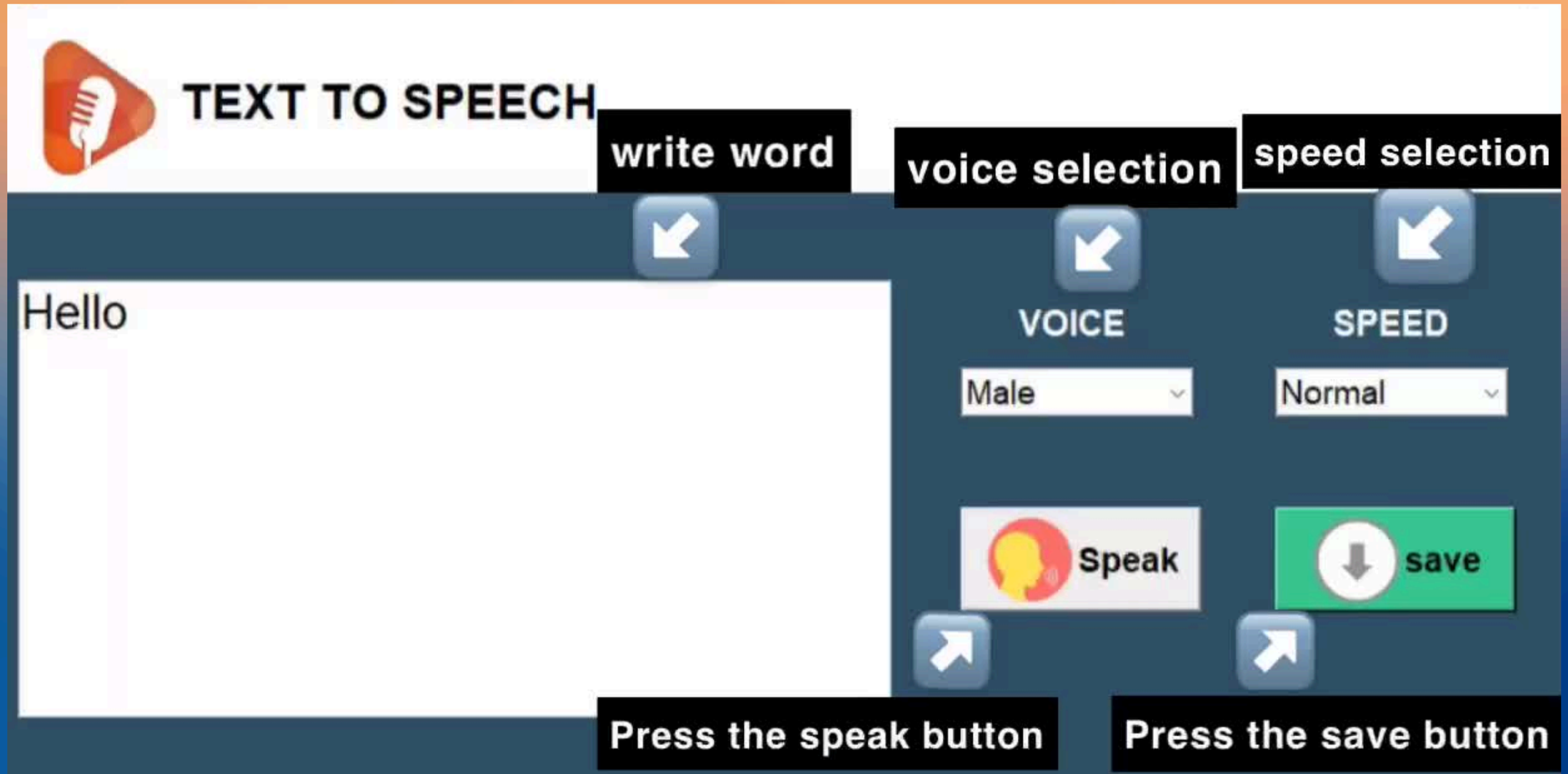
separate steps of a process in sequential order.



DESIGN PHASE

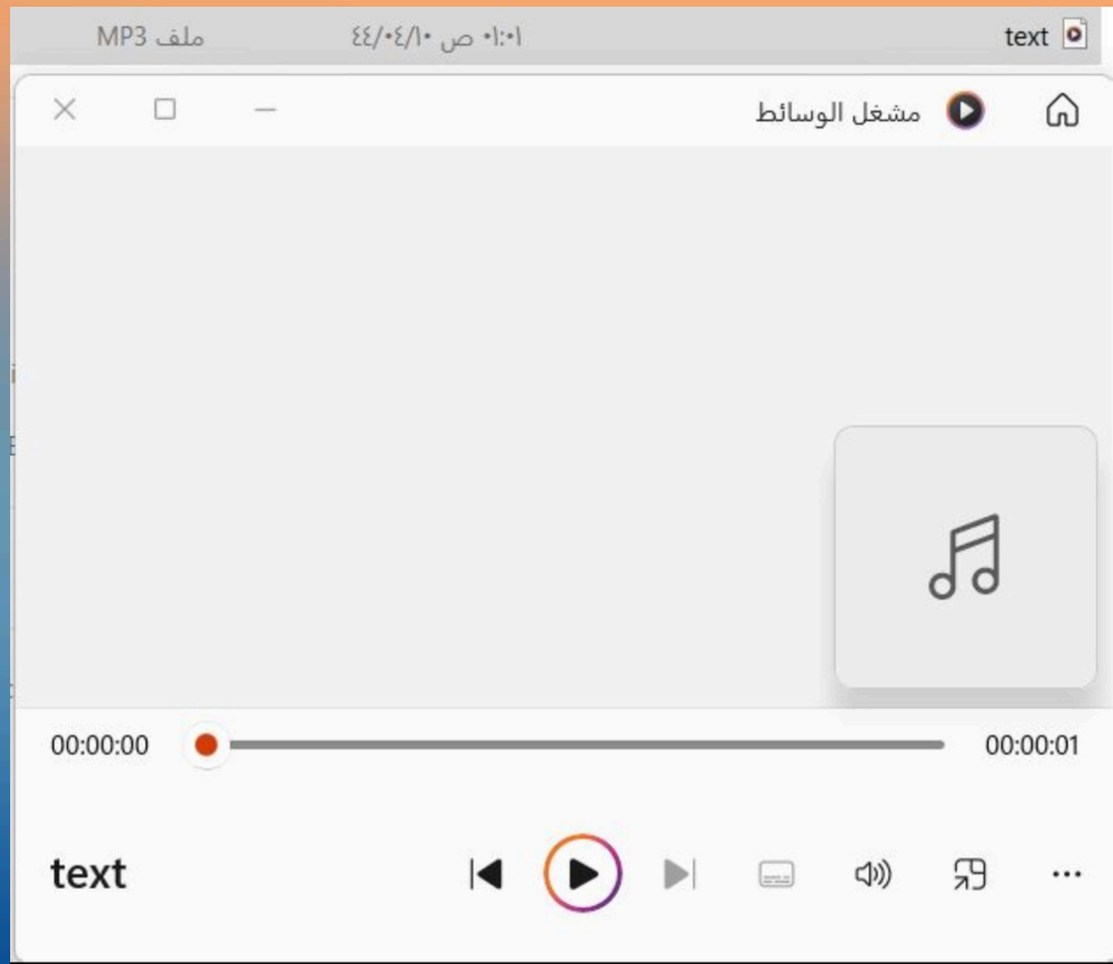


COMPONENT OF GUI



DOWNLOAD

In any place in your device



TESING

```
File  Edit  Format  Run  Options  Window  Help
import tkinter as tk
from tkinter import *
from tkinter import filedialog
from tkinter.ttk import Combobox
import pyttsx3
import os

root=Tk()
root.title("text to speech with N&N")
root.geometry("900x450+200+200")
root.resizable(False,False)
root.configure(bg="#305065")

engine=pyttsx3.init()

def speaknow():
    text=text_area.get(1.0,END)
    gender=gender_combobox.get()
    speed=speed_combobox.get()
    voices=engine.getProperty('voice')
    def setvoice():
        #start conditions
        if(gender=='Male'):
            voices = engine.getProperty('voices')#byR
            engine.setProperty('voice',voices[0].id)
            engine.say(text)
            engine.runAndWait()
        else:
            voices = engine.getProperty('voices')#byR
            engine.setProperty('voice',voices[1].id)
            engine.say(text)
            engine.runAndWait()
    if(text):
        if(speed=="Normal"):
            engine.setProperty('rate',150)
            setvoice()
        else:
            engine.setProperty('rate',60)
            setvoice()
```

NOW

WILL BE TRY IT TOGETHER

```
def download():
    text=text_area.get(1.0,END)
    gender=gender_combobox.get()
    speed=speed_combobox.get()
    voices=engine.getProperty('voice')
    def setvoice():
        if(gender=='Male'):
            voices = engine.getProperty('voices')
            engine.setProperty('voice',voices[0].id)
            path=filedialog.askdirectory()
            os.chdir(path)
            engine.save_to_file(text,'text.mp3')
            engine.runAndWait()
        else:
            voices = engine.getProperty('voices')
            engine.setProperty('voice',voices[1].id)
            path=filedialog.askdirectory()
            os.chdir(path)
            engine.save_to_file(text,'text.mp3')
            engine.runAndWait()
    if(text):
        if(speed=="Normal"):
            engine.setProperty('rate',150)
            setvoice()
        else:
            engine.setProperty('rate',60)
            setvoice()

image_icon=PhotoImage(file="C:\\Users\\win\\\Downloads\\speak.png.png")
root.iconphoto(False ,image_icon)
Top_frame=Frame(root,bg="white",width=900,height=100)
Top_frame.place(x=0,y=0)

Logo=PhotoImage(file="C:\\Users\\win\\Downloads\\speaker logo.png")
Label(Top_frame,image=Logo,bg="white").place(x=10,y=5)
Label(Top_frame,text="TEXT TO SPEECH",font="arial 20 bold",bg="white",fg="black").place(x=100,y=30)
text_area=Text(root,font="Roboter 20",bg="white",relief=GROOVE,wrap=WORD)
text_area.place(x=10,y=150,width=500,height=250)
Label(root,text="VOICE",font="arial 15 bold",bg="#305065",fg="white").place(x=580,y=160)
Label(root,text="SPEED",font="arial 15 bold",bg="#305065",fg="white").place(x=760,y=160)
gender_combobox=Combobox(root,values=['Male','Female'],font="arial 14",state='r',width=10)
gender_combobox.place(x=550,y=200)
gender_combobox.set('Male')
speed_combobox=Combobox(root,values=['Normal','Slow'],font="arial 14",state='r',width=10)
speed_combobox.place(x=730,y=200)
speed_combobox.set('Normal')
imageicon=PhotoImage(file="C:\\Users\\win\\\Downloads\\speak.png.png")
```

THANK YOU