

## Python project: Artificial Intelligence



CS-2121 Python

# F.R.D.A.Y.

November 2022 Arman Alpar

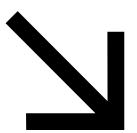


F.R.I.D.A.Y. (Female Replacement Intelligent Digital Assistant Youth) is a fictional artificial intelligence appearing in comic books published by Marvel Comics, usually depicted as the personal assistant and ally of the superhero Iron Man (Tony Stark).



pyttsx3 is a text-to-speech conversion library in Python. Unlike alternative libraries, it works offline, and is compatible with both Python 2 and 3.

```
engine = pyttsx3.init('sapi5')
voices = engine.getProperty('voices')
engine.setProperty('voice', voices[1].id)
engine.setProperty('rate', 150)
def speak(audio):
    engine.say(audio)
    engine.runAndWait()
```



SpeechRecognition is a library for performing speech recognition, with support for several engines and APIs, online and offline.

Speech recognition engine/API support:

- CMU Sphinx (works offline)
- Google Speech Recognition
- Google Cloud Speech API
- Wit.ai
- Microsoft Bing Voice Recognition
- Houndify API
- IBM Speech to Text

```
def takeCommand(self):
    r = sr.Recognizer()
    with sr.Microphone() as source:
        print("I'm Listening...")
        r.pause_threshold = 1
        audio = r.listen(source)
    try:
        print("Recognizing...")
        query = r.recognize_google(audio, language = 'en-in')
        print(f"User said: {query}\n")
    except Exception as e:
        print("Repeat please...")
        return "None"
    return query
```

FRIDAY Python project



Tell

a joke

Shut

Down the computer

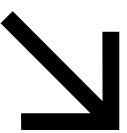


```
def TaskExecution(self):
   wishMe()
   while True:
       self.query = self.takeCommand().lower()
       if 'wikipedia' in self.query:
           speak('Searching Wikipedia...')
            self.query = self.query.replace("wikipedia", "")
           results = wikipedia.summary(self.query, sentences=2)
           speak("According to Wikipedia")
           print(results)
            speak(results)
        elif 'open chrome' in self.query:
           os.startfile('C:\Program Files\Google\Chrome\Application\chrome.exe')
       elif 'close chrome' in self.query:
           os.system("taskkill /f /im chrome.exe")
       elif 'open new window' in self.query:
           pyautogui.hotkey('ctrl', 'n')
        elif 'open incognito window' in self.query:
           pyautogui.hotkey('ctrl', 'shift', 'n')
```

## Pyjokes

One line jokes for programmers

```
elif "tell me a joke" in self.query:
    jokes = pyjokes.get_joke()
    speak(jokes)
```



Shutting down the computer FRIDAY

```
elif "shut down the system" in self.query:
    os.system("shutdown /s /t 5")
elif "restart the system" in self.query:
    os.system("shutdown /r /t 5")
elif "Lock the system" in self.query:
    os.system("rundll32.exe powrprof.dll,SetSuspendState 0,1,0")
```



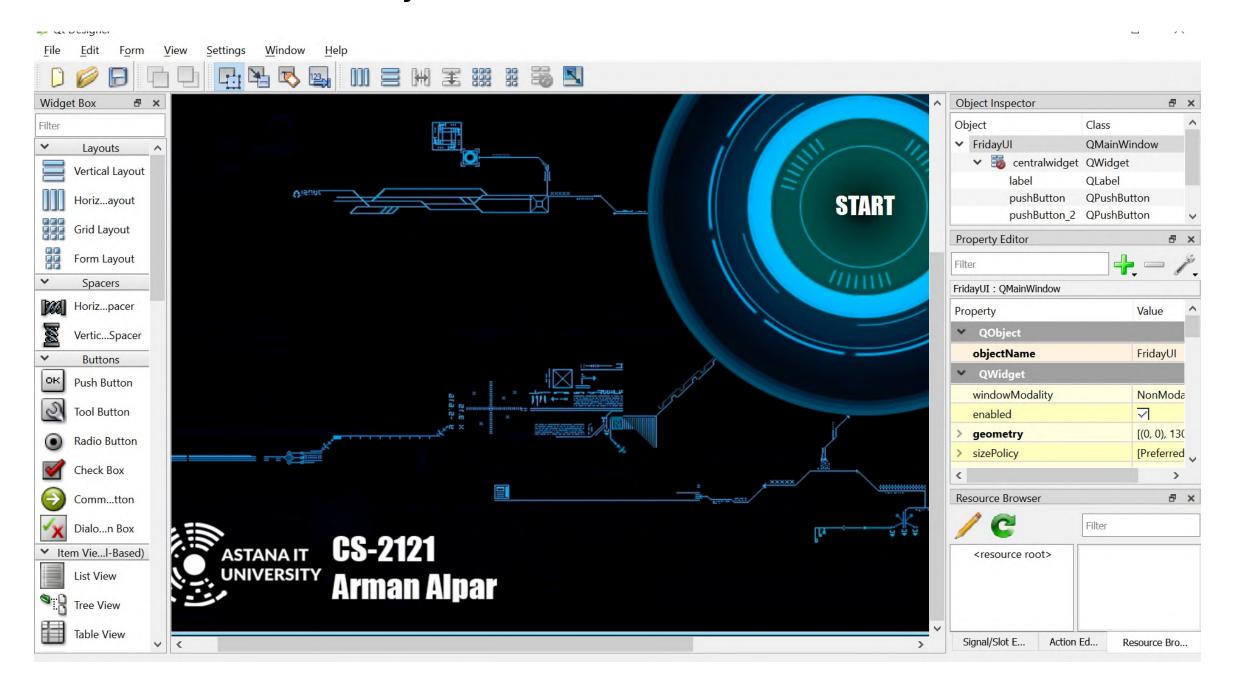
#### Creation of

# 

FRIDAY

### What is Qt Designer?

Qt Designer is a tool for quickly building graphical user interfaces with widgets from the Qt GUI framework. It gives you a simple drag-and-drop interface for laying out components such as buttons, text fields, combo boxes and more.





#### Converting into py

```
class Ui_FridayUI(object):
   def setupUi(self, FridayUI):
       FridayUI.setObjectName("FridayUI")
       FridayUI.resize(1301, 701)
        self.centralwidget = QtWidgets.QWidget(FridayUI)
       self.centralwidget.setObjectName("centralwidget")
       self.label = QtWidgets.QLabel(self.centralwidget)
        self.label.setGeometry(QtCore.QRect(0, 0, 1301, 701))
       self.label.setText("")
       self.label.setPixmap(QtGui.QPixmap("../Friday.png"))
       self.label.setScaledContents(True)
       self.label.setObjectName("label")
        self.pushButton = QtWidgets.QPushButton(self.centralwidget)
       self.pushButton.setGeometry(QtCore.QRect(610, 320, 81, 61))
       self.pushButton.setStyleSheet("font: 15pt \"Impact\"; \n"
"background-color: transparent;\n"
"color: rgb(255, 255, 255);")
       self.pushButton.setObjectName("pushButton")
       self.pushButton_2 = QtWidgets.QPushButton(self.centralwidget)
       self.pushButton_2.setGeometry(QtCore.QRect(1050, 610, 71, 21))
        self.pushButton_2.setStyleSheet("font: 10pt \"Impact\"; \n"
"background-color: rgb(0, 188, 253);\n"
  Jon: pgh(255 255 255).")
```

### Putting Everything Together

```
🌣 🗕 指 FridayUI.py
                                     🛵 Friday.py
                                                                                                                                             A 5 A 32 ★ 45 ^
                               class Main(QMainWindow):
     Friday.py
                                   def __init__(self):
    FridayUI.py
                                       super().__init__()
    🚚 FridayUI.ui
                                       self.ui = Ui_FridayUI()
> III External Libraries
                                       self.ui.setupUi(self)
> Scratches and Consoles
                                       self.ui.pushButton.clicked.connect(self.startTask)
                                       self.ui.pushButton_2.clicked.connect(self.close)
                                   def startTask(self):
                                       timer = QTimer(self)
                                       timer.timeout.connect(self.showTime)
                                       timer.start(1000)
                                       startExecution.start()
                                   def showTime(self):
                                       current_time = QTime.currentTime()
                                       current_date = QDate.currentDate()
                                       label_time = current_time.toString('hh:mm:ss')
                                       label_date = current_date.toString(Qt.ISODate)
                                       self.ui.textBrowser.setText(label_date)
                                       self.ui.textBrowser_2.setText(label_time)
```

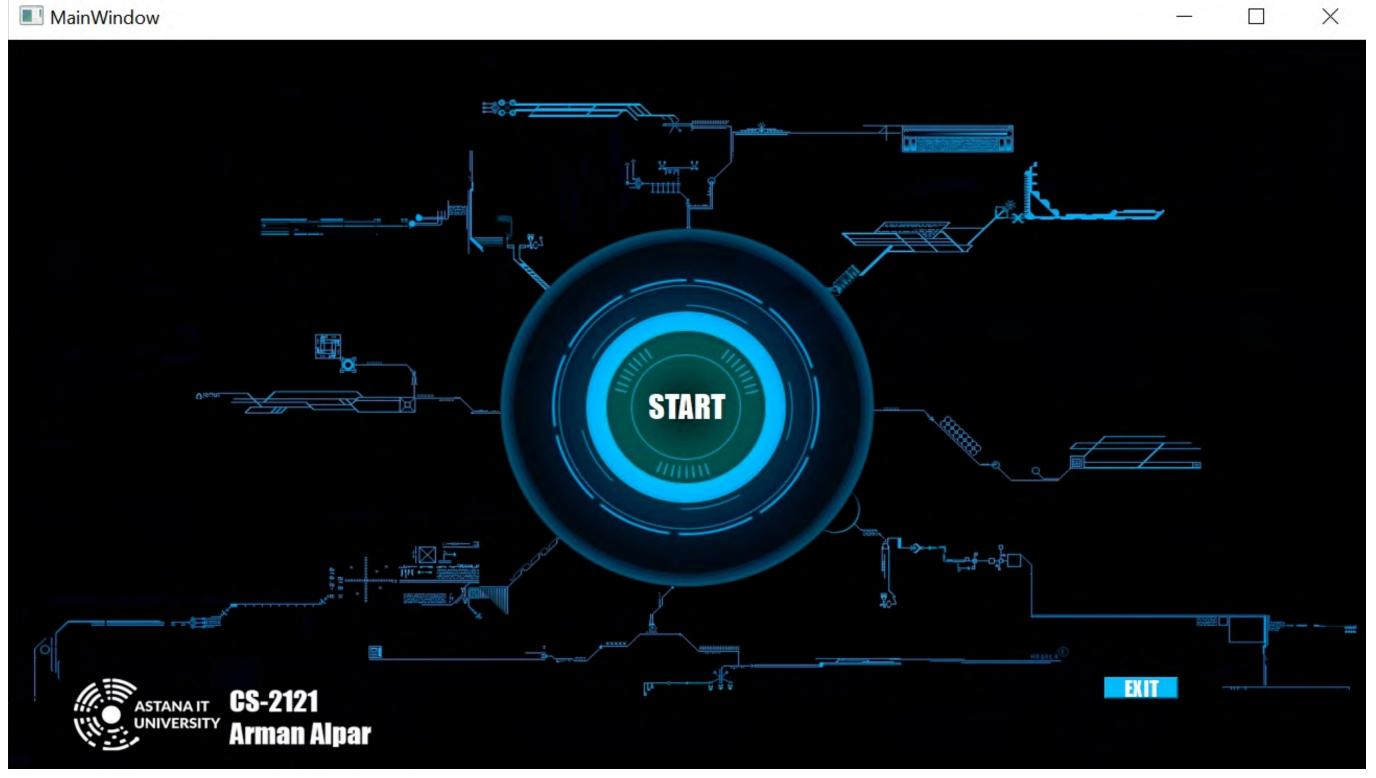


FRIDAY

# Final product



Friday Python



Final Project



FRIDAY CS-2121 Arman Alpar

# 

Thanks for your attention



