

# Voice Commend Database Creation User Manual

- 211805048-Recep Sami Özdemir
- 211805031-İbrahim Mert Günay
- 211805013-Muhammet Melikan Atalay
- 211805049-Merve Adalı

## GitHub Link:

<https://github.com/RecepSamiOzdemir/software-engineering-project/raw/refs/heads/VoiceCommendDatabaseCreation/softwareLogin.zip>

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# 1 Introduction

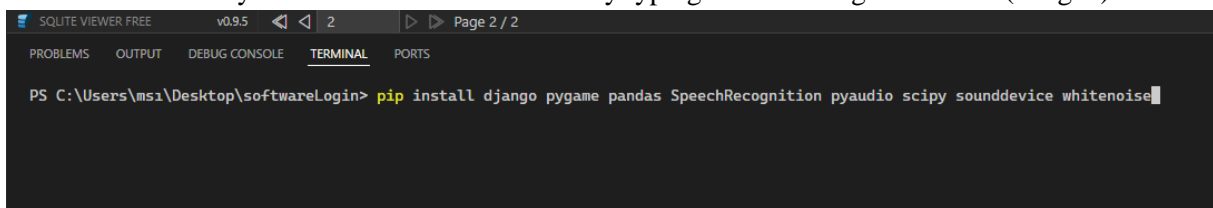
- **Brief Overview:** This project focuses on creating a database to store and manage voice commands. It includes functionalities such as recording, searching, and playing audio commands in both Turkish and English.
- **Objectives and Goals:** The goal is to provide an efficient interface for users to record and retrieve audio commands using voice recognition technology.
- **Scope:** The system facilitates audio storage, search capabilities, and playback features within a user-friendly web application.

## 2 System Requirements

- Software Requirements
  - Operating System: Windows 10 or later, macOS 10.15 or later, Linux.
  - Development Tools: Visual Studio Code (or any preferred IDE).
  - Libraries:
    - Python 3.7 or later.
    - pip for Python package management.
  - Install the following packages using pip:
    - `pip install django pygame pandas SpeechRecognition pyaudio scipy sounddevice whitenoise`

## 3 Installation Guide

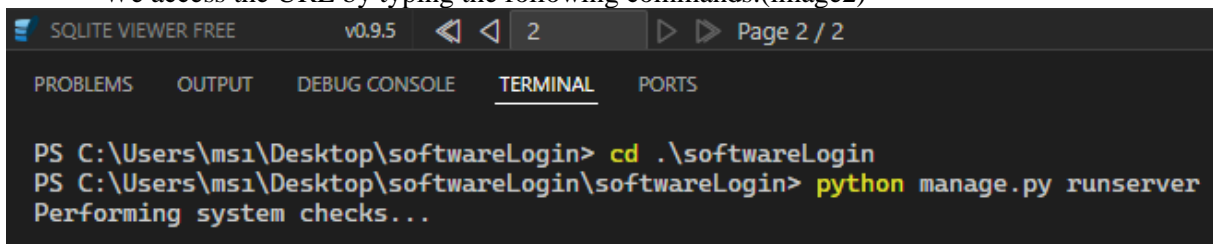
- Download the project:
  - From GitHub, select "Download ZIP" from the "Code" section or use the [DOWNLOAD](#)
  - We use an IDE like Visual Studio Code. From the File menu, we select "Open Folder." We open the "softwareLogin" folder inside the downloaded file
- The necessary libraries should be installed by typing the following command. (image1)



```
SQLITE VIEWER FREE v0.9.5 2 Page 2 / 2
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\msi\Desktop\softwareLogin> pip install django pygame pandas SpeechRecognition pyaudio scipy sounddevice whitenoise
```

- Image:1

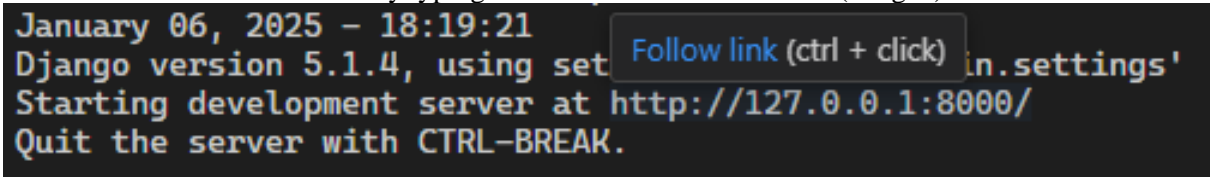
- We access the URL by typing the following commands.(image2)



```
SQLITE VIEWER FREE v0.9.5 2 Page 2 / 2
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\msi\Desktop\softwareLogin> cd .\softwareLogin
PS C:\Users\msi\Desktop\softwareLogin\softwareLogin> python manage.py runserver
Performing system checks...
```

- Image:2

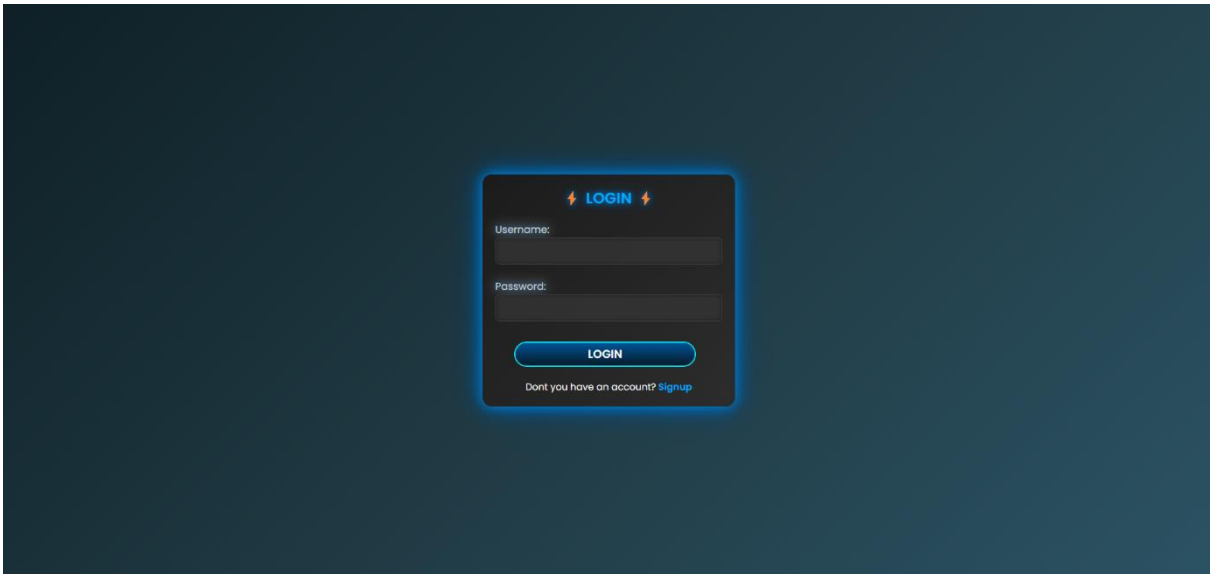
- We access our website by typing the URL into the address bar.(image3)



- Image:3

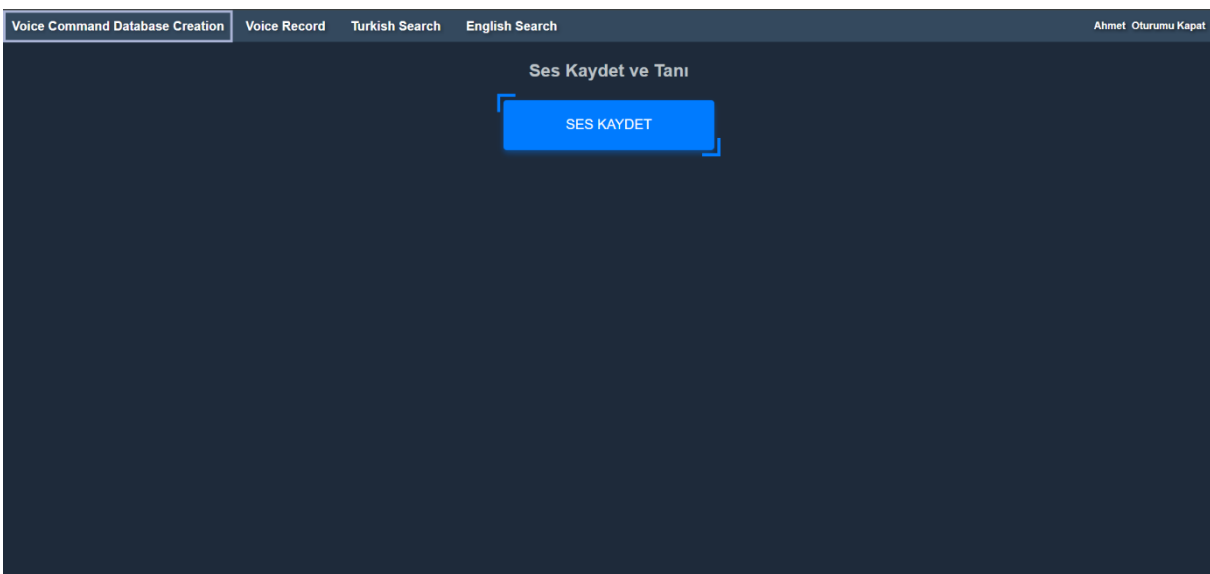
## 4 User Interface Overview

- **Main Screens:**
  - **Login Screen:** Allows user registration or login.(image4)



- Image:4

- **Dashboard:** Displays options for recording, searching, and playing audio.(image5)



- Image:5

- **Navigation Structure:**

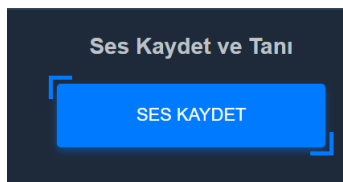
- Clear buttons for each primary action, such as "Record Audio," "Search," and "Logout."(image6)



- Image:6

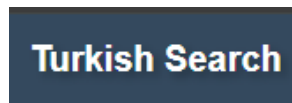
- **Key Buttons:**

- **"Record Audio" / "Ses Kaydet"**: Records a 3-second audio clip.(image7)



- Image:7

**"Turkish Search" / "SESLİ KOMUTLA ARAMA YAP"**: Search database in Turkish.(image8)



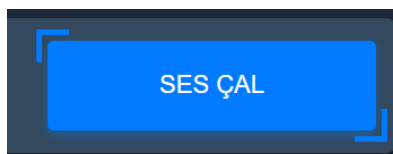
- Image:8

- **"English Search" / "Search with Voice Command"**: Search database in English.



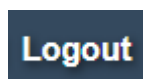
- Image:9

- **"SES ÇAL"**: Plays the retrieved audio clip.

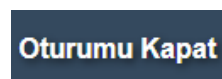


- Image:10

- **"Logout" / "Oturumu Kapat"**: Logs out of the application.(image11,12)



- Image:11



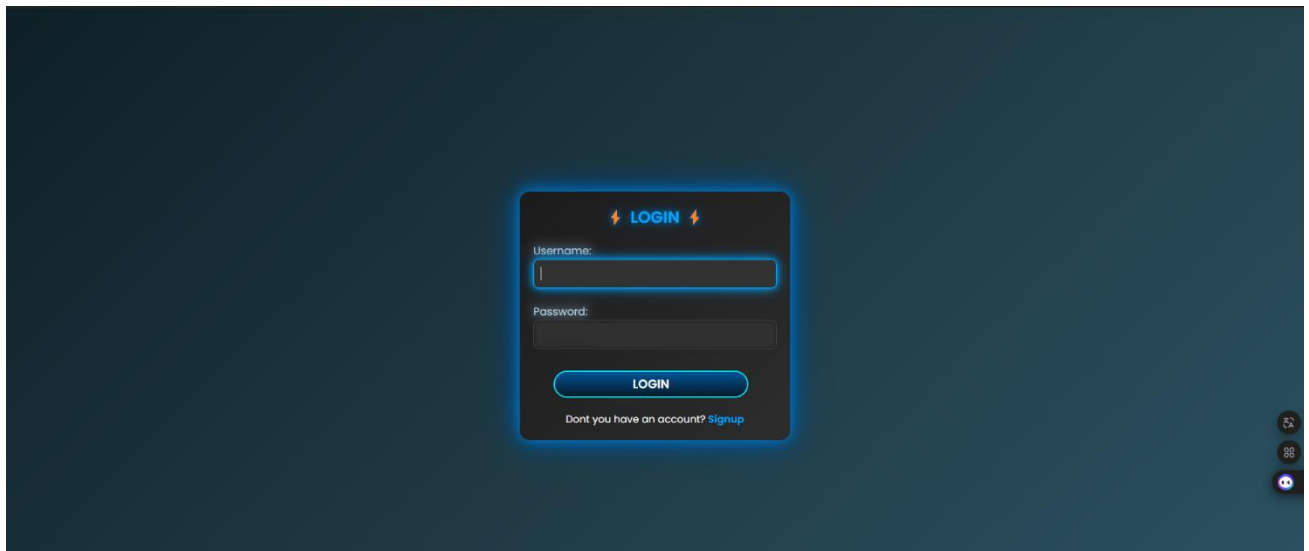
- Image:12

## 5 Features and Functionalities

- **Primary Features:**
  - User authentication (registration and login).
  - Audio recording and database storage.
  - Voice-based search in multiple languages.
  - Audio playback functionality.
- **How Each Feature Works:**
  - After login, users can record their commands, search the database, and listen to stored audio clips.

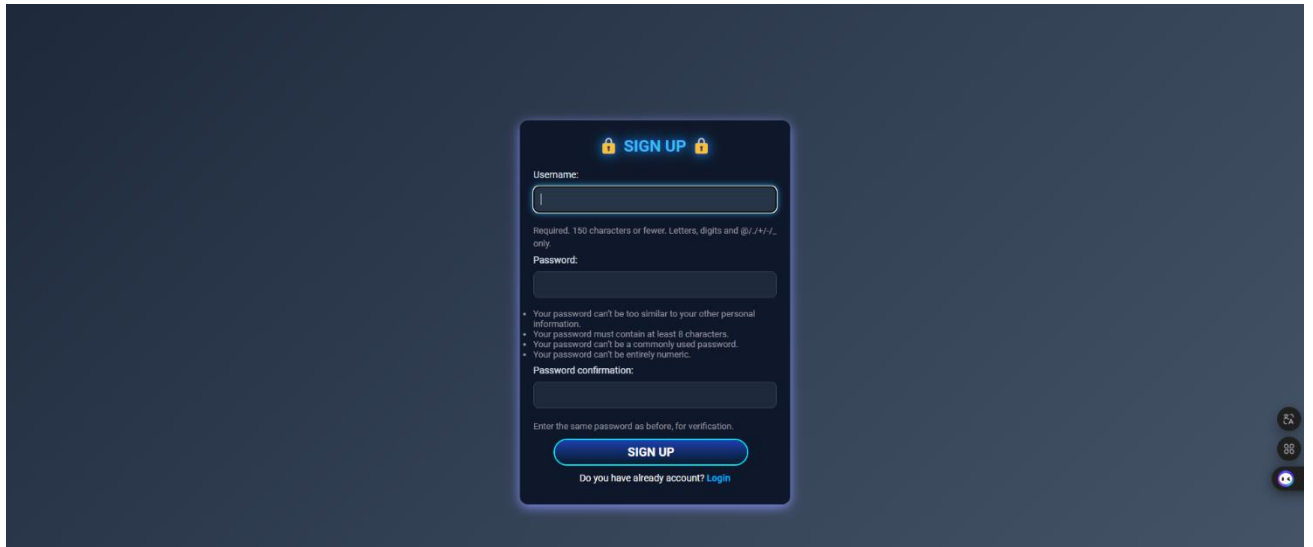
## 6 Usage Instructions

- When we visit the site, a login screen appears. If we don't have an account, we create one by clicking the signup button; if we already have an account, we log in directly.(image13)



• **Image:13**

- **Username:**
  - Required. 150 characters or fewer. Letters, digits and @/./+/\_ only.
- **Password:**
  - Your password can't be too similar to your other personal information.
  - Your password must contain at least 8 characters.
  - Your password can't be a commonly used password.
  - Your password can't be entirely numeric.
  - (image14)

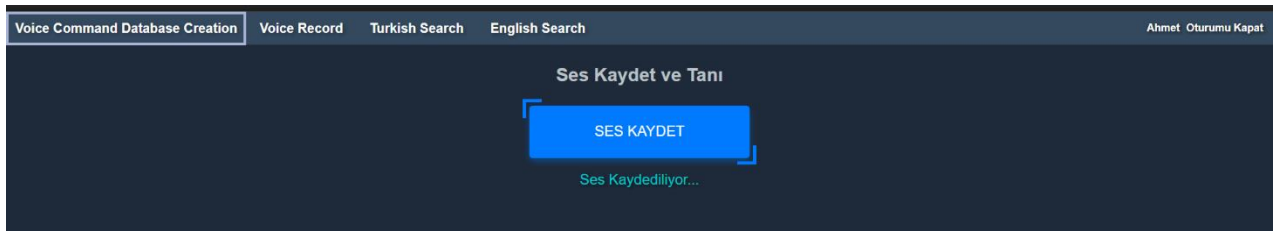
A dark-themed sign-up form with a central white box. At the top, it says "SIGN UP" with a lock icon. Below is a "Username:" label followed by a text input field. A note specifies: "Required. 180 characters or fewer. Letters, digits and @/./+/-/\_ only". Then, a "Password:" label followed by a text input field. A list of password requirements is shown: "Your password can't be too similar to your other personal information.", "Your password must contain at least 8 characters.", "Your password can't be a commonly used password.", and "Your password can't be entirely numeric.". Below that is a "Password confirmation:" label followed by another text input field. A note says: "Enter the same password as before, for verification.". At the bottom of the box is a blue "SIGN UP" button and a link: "Do you have already account? Login".

• Image:14

- After logging in, we are redirected to the page below.
- We can record a 3-second audio by pressing the “Record Audio” or “Ses Kaydet” button. The recorded audios are stored in the database.(image15,16,17)

A dark-themed page with a navigation bar at the top containing "Voice Command Database Creation", "Voice Record", "Turkish Search", and "English Search". On the right, it says "Username Oturumu Kapat". The main content area has the title "Ses Kaydet ve Tanı" and a large blue button labeled "SES KAYDET".

• Image:15

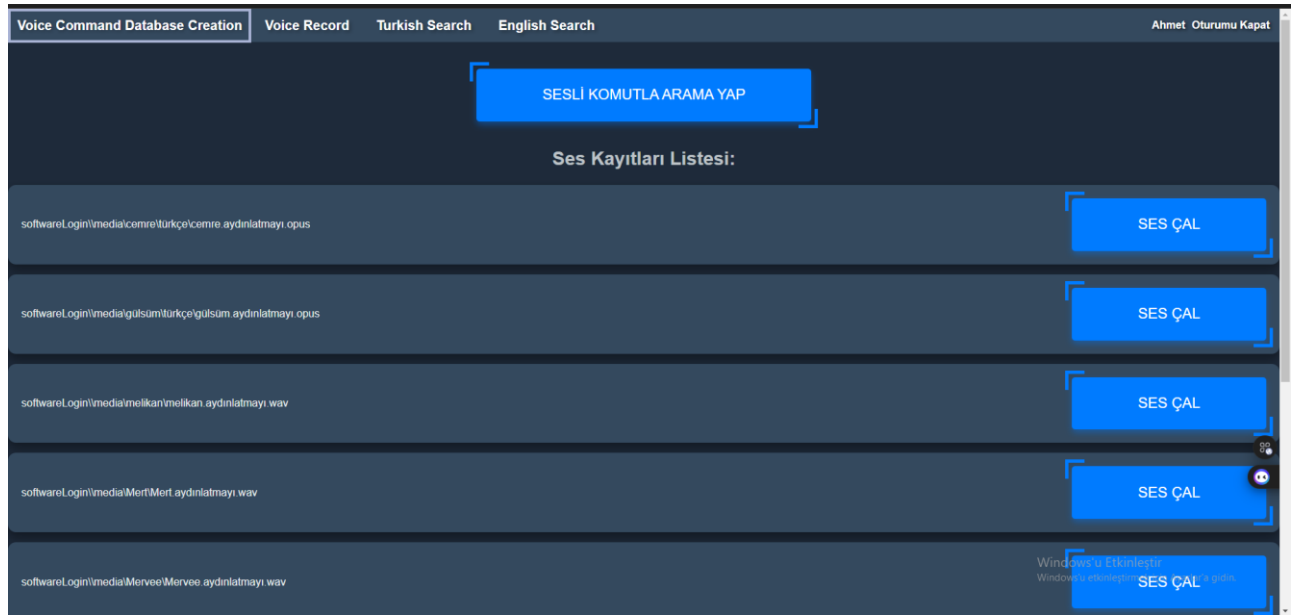
The same page as Image 15, but with a green progress bar below the "SES KAYDET" button and the text "Ses Kaydediliyor..." (Recording audio...) in green.

• Image:16

The same page as Image 15, but with a green message box below the button that says "Kaydın Tamamlandığına Dair Metin:" (Text about the completion of your recording:) and "Lambayı" (The light).

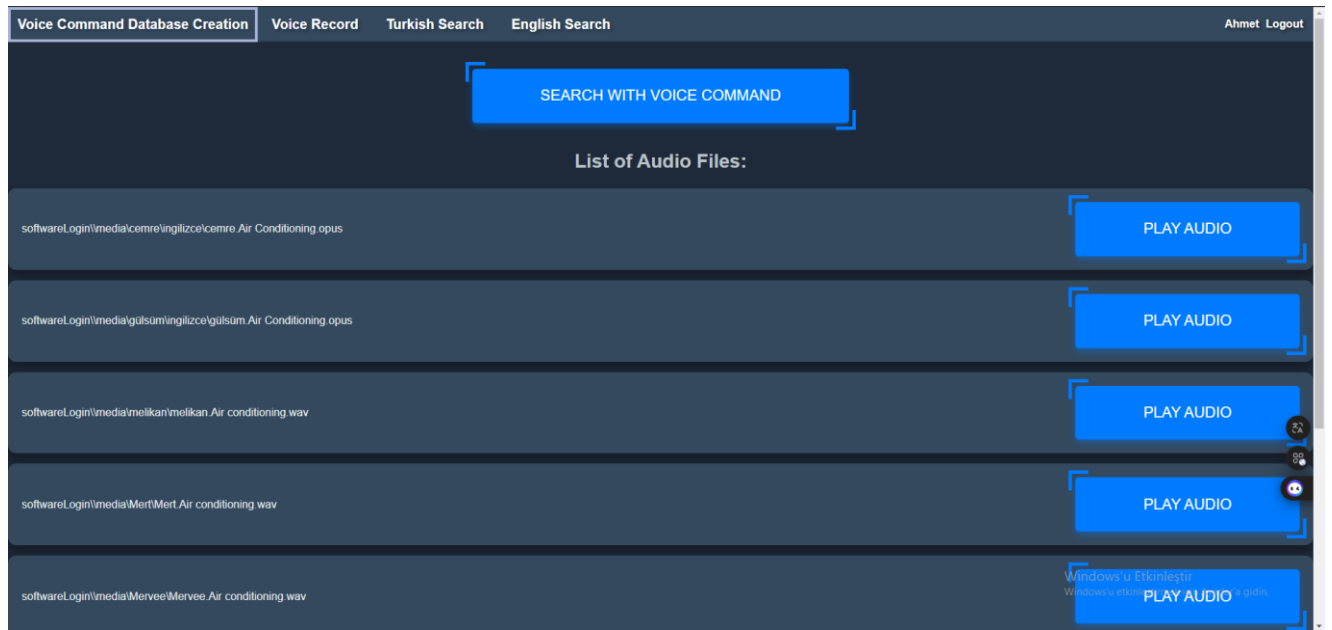
• Image:17

- When we click the "Turkish Search" button, we can search the database by speaking Turkish words after pressing the "SESLİ KOMUTLA ARAMA YAP" button.(image18)



• Image:18

- We can play the audios retrieved from the database by pressing the "SES ÇAL" button.
- When we click the "English Search" button, we can search the database by speaking English words after pressing the "Search with Voice Command" button.(image19)



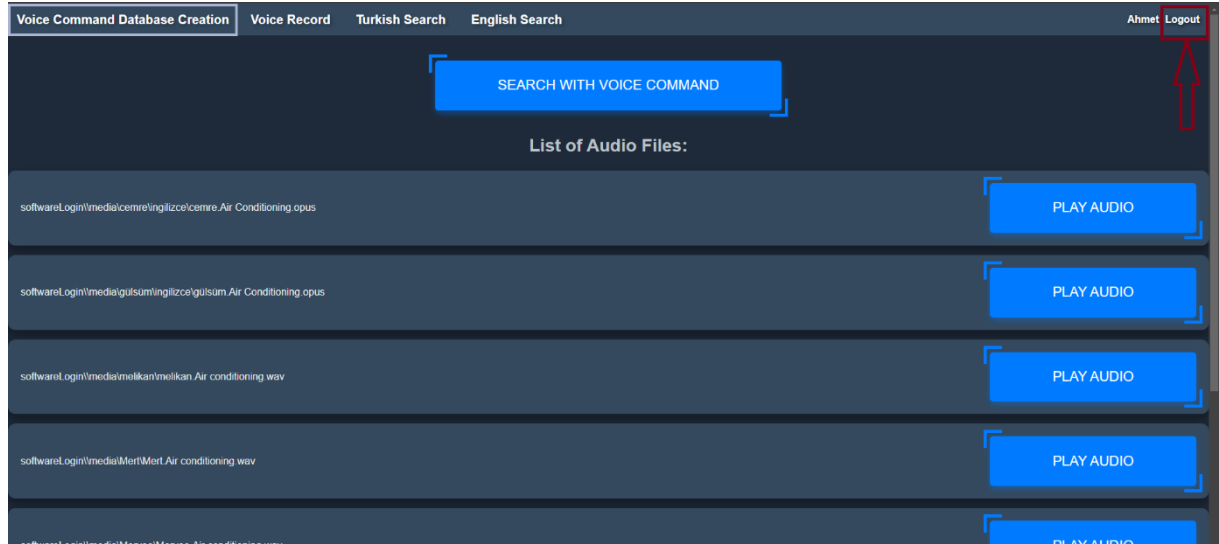
• Image:19

- We can log out by clicking the "Oturumu Kapat" or "Logout" button.(image20,21)





• Image:20



• Image:21

## 7 References

- <https://www.djangoproject.com/>