

Chatbot - Setup Guide for Windows

This guide will help you set up and run the Voice Notes application on your windows computer. Follow each step carefully.

Step 1: Install Required Software

1.1 Install Python (Version 3.10 or 3.11)

1. Go to python.org/downloads
2. Download **Python 3.11** (recommended)
3. **IMPORTANT:** When installing, check the box that says "**Add Python to PATH**"
4. Click "Install Now"
5. Wait for installation to complete
6. Verify installation:
 - o Press Windows Key + R
 - o Type `cmd` and press Enter
 - o Type: `python --version`
 - o You should see: `Python 3.11.x`

1.2 Install Node.js

1. Go to nodejs.org
2. Download the **LTS version** (recommended for most users)
3. Run the installer and click "Next" through all steps
4. Verify installation:
 - o Open Command Prompt (cmd)
 - o Type: `node --version`
 - o You should see: `v20.x.x` or similar

1.3 Install Git

1. Go to git-scm.com/download/win
2. Download and run the installer
3. Use all default options (just keep clicking "Next")
4. Verify installation:
 - o Open Command Prompt
 - o Type: `git --version`
 - o You should see: `git version 2.x.x`

1.4 Install FFmpeg (Required for Audio Processing)

1. Download FFmpeg:
 - o Go to github.com/BtbN/FFmpeg-Builds/releases
 - o Download: **ffmpeg-master-latest-win64-gpl.zip**
 2. Extract the ZIP file:
 - o Right-click the downloaded file → Extract All
 - o Extract to: C:\ffmpeg
 3. Add FFmpeg to PATH:
 - o Press Windows Key, search for "Environment Variables"
 - o Click "Edit the system environment variables"
 - o Click "Environment Variables" button
 - o Under "System variables", find and select "Path", then click "Edit"
 - o Click "New"
 - o Add: C:\ffmpeg\bin
 - o Click **OK** on all windows
 4. Verify installation:
 - o **Close and reopen** Command Prompt
 - o Type: `ffmpeg -version`
 - o You should see FFmpeg version information
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Step 2: Download the Project

1. **Create a folder** for your project:
 - o Open File Explorer
 - o Go to C:\Users\YourUsername\
 - o Create a new folder called ChatbotApp.
 2. **Open Command Prompt in this folder:**
 - o Open the VoiceNotesApp folder
 - o Type `cmd` in the address bar and press Enter
 3. **Download the project:**
 4. `git clone https://github.com/kthakkar2526/RAG_Based_Product_Chatbot`
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Step 3: Find Your Computer's IP Address

You need your computer's local IP address so other devices can connect to it.

1. Open Command Prompt
2. Type: `ipconfig`
3. Look for "IPv4 Address" under your active network connection
4. It will look like: 192.168.1.XXX

5. **Write this down** - you'll need it in the next step!

Example:

IPv4 Address. : 192.168.1.136

My IP is: **192.168.1.136** (your number will be different)

Step 4: Setup Backend (Server)

4.1 Navigate to Backend Folder

```
cd backend
```

4.2 Create Python Virtual Environment

```
python -m venv venv
```

4.3 Activate Virtual Environment

```
venv\Scripts\activate
```

You should see `(venv)` appear at the beginning of your command prompt.

4.4 Install Python Requirements

```
pip install -r requirements.txt
```

This will take 2-5 minutes. Wait for it to complete.

4.5 Create SSL Certificates (for HTTPS)

```
cd ..  
mkdir frontend  
cd frontend
```

Now create the certificate files:

```
openssl req -x509 -newkey rsa:4096 -nodes -keyout localhost+2-key.pem -out  
localhost+2.pem -days 365
```

When prompted, you can press Enter for all questions (or fill them in if you want).

Step 5: Setup Frontend (User Interface)

5.1 Navigate to Frontend Folder

```
cd frontend
```

5.2 Install Node Packages

```
npm install
```

This will take 2-5 minutes.

5.3 Configure Environment File

1. In the `frontend` folder, find or create a file named `.env`
2. Open it with Notepad
3. Add this line (replace `192.168.1.xxx` with YOUR IP from Step 3):

```
VITE_BACKEND_URL=https://192.168.1.xxx:8000
```

Example:

```
VITE_BACKEND_URL=https://192.168.1.136:8000
```

4. Save and close the file
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Step 6: Run the Application

You need **TWO Command Prompt windows** open - one for backend, one for frontend.

6.1 Start Backend Server

Command Prompt Window #1:

```
cd C:\Users\YourUsername\VoiceNotesApp\backend
venv\Scripts\activate
python -m uvicorn main:app --host 0.0.0.0 --port 8000 --ssl-keyfile
../frontend/localhost+2-key.pem --ssl-certfile ../frontend/localhost+2.pem
```

You should see:

```
INFO:      Uvicorn running on https://0.0.0.0:8000
```

Keep this window open!

6.2 Start Frontend Server

Command Prompt Window #2:

```
cd C:\Users\YourUsername\VoiceNotesApp\frontend  
npm run dev
```

You should see:

```
VITE ready in XXX ms  
Local:   https://localhost:5173/  
Network: https://192.168.1.XXX:5173/
```

Keep this window open!

Step 7: Access the Application

On Your Computer:

1. Open your browser (Chrome, Edge, or Brave recommended)
2. Go to: `https://localhost:5173`
3. You'll see a **security warning** about the certificate
4. Click "**Advanced**" → "**Proceed to localhost (unsafe)**"
5. Accept the microphone permission when asked

On Your Phone (iPhone/Android):

1. Make sure your phone is on the **same WiFi network** as your computer
2. Open Safari (iPhone) or Chrome (Android)
3. Go to: `https://192.168.1.XXX:5173` (use YOUR IP from Step 3)
4. Accept the certificate warning (click Advanced → Proceed)
5. Accept microphone permission

If you encounter issues:

1. Check that all software (Python, Node.js, Git, FFmpeg) is installed correctly
2. Make sure you're using the correct IP address in the `.env` file
3. Verify both backend and frontend servers are running
4. Check Windows Firewall settings