

# ClipWise Setup Guide

## Quick Start Installation

GitHub Repository

## Prerequisites

Before starting, make sure you have these installed on your system:

Software	Required Version	Installation
Python	3.10 or higher	<a href="https://python.org/downloads">python.org/downloads</a>
FFmpeg	Latest version	See installation guide below
Git	Any recent version	<a href="https://git-scm.com/downloads">git-scm.com/downloads</a>

## FFmpeg Installation

### Windows:

- 1. Download from [ffmpeg.org](https://ffmpeg.org)
- 2. Extract to `C:\ffmpeg`
- 3. Add `C:\ffmpeg\bin` to system PATH

### macOS:

```
brew install ffmpeg
```

### Linux:

```
sudo apt update  
sudo apt install ffmpeg
```

### Verify Installation:

```
python --version  
ffmpeg -version
```

## Installation Steps

### 1 Clone the Repository

```
git clone https://github.com/AtaGn/ClipWise.git  
cd ClipWise
```

### 2 Create Virtual Environment

#### Windows:

```
python -m venv venv  
venv\Scripts\activate
```

#### macOS/Linux:

```
python -m venv venv  
source venv/bin/activate
```

When activated, you'll see `(venv)` at the start of your command prompt

### 3 Install Dependencies

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

This may take 10-20 minutes depending on your internet speed

### 4 Get Groq API Key

1. Visit [console.groq.com/keys](https://console.groq.com/keys)
2. Sign up for a free account
3. Create a new API key
4. Copy and save the key securely

### 5 Start the Application

```
python app.py
```

You should see:

```
=====
YouTube RAG Backend Server - Enhanced
=====
Server running on: http://localhost:5000
Whisper model: tiny
Embedding model: all-MiniLM-L6-v2
=====
```

### 6 Open Your Browser

Navigate to:

```
http://localhost:5000
```

**That's it!** ClipWise is now running on your system.

## First-Time Usage

1. **Enter API Key:** Paste your Groq API key in the sidebar
2. **Add Video:** Click "Add New Video" and paste a YouTube URL
3. **Wait for Processing:** The video will be transcribed (time varies by length)
4. **Start Learning:** Ask questions, generate quizzes, or create flashcards

**Tip:** Once a video is processed, it's cached. Next time you select it, it loads instantly!

## Troubleshooting

### Port Already in Use

Change the port in `app.py` (last line):

```
app.run(debug=True, host='0.0.0.0', port=5001)
```

### FFmpeg Not Found

- Verify installation: `ffmpeg -version`
- Check PATH configuration
- Restart terminal after installation

### Slow Transcription

The default "tiny" model is fast but less accurate. For better accuracy, change line 17 in `app.py` :

```
whisper_model = whisper.load_model("base", device="cpu")
```

Installation Errors

- Ensure Python 3.10+ is installed
- Try upgrading pip: `pip install --upgrade pip`
- On Windows, you may need Visual C++ Build Tools

Features Overview

Feature	Description
AI Chat	Ask questions about video content and get contextual answers
Quiz Generator	Create multiple-choice quizzes to test your knowledge
Flashcards	Generate flashcards for key concepts and definitions
Study Notes	Get comprehensive, structured notes from video content
Transcript Search	Search through the entire video transcript with timestamps

System Requirements

Minimum Specifications

- **RAM:** 8 GB (16 GB recommended)
- **Storage:** 5 GB free space
- **Processor:** Intel Core i5 or equivalent

- **Internet:** Stable broadband connection

## Supported Platforms

- Windows 10/11
- macOS 10.15 or higher
- Linux (Ubuntu 20.04+)

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