

# YouTube Transcript Summarizer

## Mac Setup Guide

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## What You're Setting Up

This app has two parts that work together:

1. **A small server** that runs locally on your Mac (not on the internet -- only you can access it). It downloads YouTube audio and talks to Google's Gemini AI.
2. **A webpage** that the server hosts in your browser at `http://localhost:3001`.

**Nothing is uploaded anywhere. Everything runs on your machine.**

## Where to Save the Project

The `youtube-summarizer` folder you downloaded can live anywhere, but the standard Mac convention for projects like this is:

```
~/Projects/youtube-summarizer
```

The `~` means your home folder (e.g., `/Users/grant`). If you don't have a `Projects` folder yet, you'll create one below.

**To move the files there:**

1. Open **Finder**
2. Go to your home folder (press **Cmd + Shift + H**)
3. Create a new folder called **Projects** if you don't have one
4. Drag the `youtube-summarizer` folder from your Cowork downloads into **Projects**

You should end up with this structure:

```
~/Projects/youtube-summarizer/  
|-- public/  
|   +-- index.html  
|-- server/  
|   |-- index.js
```

```
|   +-- package.json
|-- setup.sh
|-- Start Summarizer.command  <-- double-click to launch!
+-- GET-STARTED.pdf          <-- this file
```

# Step 1: Install Node.js and yt-dlp

You need two things installed: Node.js (runs the server) and yt-dlp (downloads YouTube audio). The easiest way to install both is with Homebrew.

**If you don't have Homebrew yet:**

1. Open **Terminal** (press **Cmd + Space**, type "Terminal", hit Enter)

2. Paste this and press Enter:

```
/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
```

3. Follow the prompts (it may ask for your Mac password)

**Then install Node.js and yt-dlp:**

```
brew install node yt-dlp
```

Verify they're installed:

```
node --version  
yt-dlp --version
```

You should see version numbers for both. If so, you're ready for the next step.

# Step 2: Install Server Dependencies

This is a one-time step. In Terminal, run:

```
cd ~/Projects/youtube-summarizer/server  
npm install
```

This downloads the JavaScript libraries the server needs. You'll see some output scroll by -- when it finishes and shows you a new prompt, you're done.

# Step 3: Add Your Gemini API Key

The app needs a Google Gemini API key to transcribe and analyze videos.

**Get a free key:**

1. Go to <https://aistudio.google.com/apikey>
2. Sign in with your Google account
3. Click "Create API Key"

4. Copy the key -- you'll paste it in the app after launching

## Step 4: Launch the App

This is the fun part. You have two ways to launch:

### Option A: Double-click (recommended)

Find `Start Summarizer.command` in your project folder and double-click it.

The first time, macOS may say the file can't be opened because it's from an unidentified developer. If this happens: right-click the file, choose **Open**, then click **Open** in the dialog. You only need to do this once.

A Terminal window will open, the server will start, and your browser will automatically open to the app. That's it!

### Option B: Terminal

If you prefer the command line:

```
cd ~/Projects/youtube-summarizer/server
npm start
```

Then open <http://localhost:3001> in your browser.

## Step 5: Summarize a Video

1. In the app, click "**Gemini API Settings**" and paste your API key
2. Paste a YouTube URL into the main input
3. Click **Summarize**
4. Watch the 3-step pipeline: Download audio -> Transcribe -> Analyze topics
5. Click any topic section to expand the full transcript with clickable timestamps

Your API key is saved in your browser so you don't have to re-enter it each time.

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## Day-to-Day Usage

After the one-time setup above, here's all you need to do each time:

1. Double-click `Start Summarizer.command`
2. Your browser opens automatically -- paste a YouTube link and go
3. When done, close the Terminal window that opened (this stops the server)

**That's it. One double-click.**

# Troubleshooting

## macOS won't open `Start Summarizer.command`

Right-click the file, choose **Open**, then click **Open** in the security dialog. This only happens the first time.

## "Cannot connect to backend at localhost:3001"

The server isn't running. Double-click `Start Summarizer.command` again.

## "yt-dlp not installed"

Run `brew install yt-dlp` in Terminal, then relaunch the app.

## Download fails or hangs

yt-dlp might be outdated. Click the "Update now" button in the app, or run `brew upgrade yt-dlp` in Terminal.

## "Gemini API error: 403" or "401"

Your API key is invalid or expired. Get a new one from <https://aistudio.google.com/apikey>

## Long videos take a while

Normal. A 1-hour video takes ~30 seconds to download, 30-60 seconds for Gemini to transcribe, then 10-20 seconds for topic analysis. The app shows live progress.