

YouTube Automation Tool Checklist

Steps to build and implement your own YouTube content automation pipeline.

Based on [I Built A Full Youtube Automation Tool With Cursor Ai Auto Upload Shorts Descriptions](#)
[More](#) by Casey Builds It

1. Core Automation Pipeline Setup

Establish the foundational elements for automating your YouTube content workflow.

- Set up a Python-based automation pipeline.
- Integrate transcript generation from local video files.
- Implement AI for generating video descriptions.
- Automate the creation of the first comment for each video.
- Configure YouTube Data API for video upload automation.
- Develop Shorts generation capabilities from long-form video.
- Ensure Shorts are cropped and formatted for vertical playback.

2. Transcription Integration

Incorporate a reliable method for generating video transcripts.

- Choose and integrate a transcription tool (e.g., faster-whisper).
- Configure the tool to process local video files.
- Verify transcript accuracy and completeness.
- Ensure transcripts are accessible to the AI content generation step.

3. AI Content Generation

Leverage AI to create engaging and SEO-friendly metadata.

- Select an AI model for content generation (e.g., Claude).
- Train or prompt the AI to write SEO-friendly descriptions.
- Configure the AI to generate relevant first comments.
- Set up AI to create unique descriptions for each Short.
- Develop AI prompts for generating Shorts thumbnails.

4. Shorts Creation and Formatting

Automate the process of creating and preparing YouTube Shorts.

- Integrate FFmpeg and FFprobe for video manipulation.
- Develop logic to slice long-form videos into multiple Shorts.
- Implement intelligent cropping to follow on-screen action.
- Add blurred backgrounds to Shorts clips.
- Ensure Shorts are formatted in vertical aspect ratio.

5. Upload and Publishing Automation

Streamline the process of getting your videos live on YouTube.

- Connect to the YouTube Data API.
- Automate the video upload process.
- Schedule video publishing.
- Automate the posting of generated Shorts.
- Verify successful upload and publishing of all content.

6. User Interface and Management

Build user-friendly interfaces for managing your content pipeline.

- Develop a Graphical User Interface (GUI) for the Python script.
- Create a video management dashboard.
- Enable pulling up existing YouTube videos within the dashboard.
- Add functionality to edit video titles.
- Implement the ability to swap thumbnails.
- Include an option to regenerate content (descriptions, comments) after upload.

7. Advanced Features & Future Development

Explore and plan for additional automation capabilities.

- Research and implement smart cropping techniques.
- Begin development of blog integration for auto-publishing videos.
- Test and refine the entire automation pipeline.
- Continuously monitor and improve AI content generation quality.
- Explore options for auto-generating video chapters.

Resources & Further Reading

Use these pages while working through the checklist:

■ Casey Builds It

<https://caseybuildsit.com/the-files/>

■ Casey Builds It

<https://caseybuildsit.com/make-contact/>

■ Casey Builds It

<https://caseybuildsit.com/>

■ Downloads

<https://caseybuildsit.com/downloads/>

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Automate your YouTube workflow to save time and focus on content creation.