

A person is seen from the side, sitting at a desk in a dimly lit room at night. They are working on a large computer monitor that displays a video editing software interface. The screen shows a street scene with a person walking away. To the right of the main video frame, there are three circular color calibration patches. Below the video frame, there are various controls and a timeline. On the desk, to the right of the monitor, there is a camera and a lens. A small lamp is visible behind the monitor, casting a warm glow. The background is dark, with some light coming from a window or another light source. The overall atmosphere is focused and creative.

Reddit To Reels Content Auto

Hardik B. Thanth

Content Automation

[Reddit To Reels]

Automate Content Creation

Hardik Thanth

19CEUBS082

Semester – 8

- Project Repo: github.com/hardik88t/ContentAuto

Internal Guide:

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External Guide

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- Training Co-ordinator
- Rapidops Inc., Ahmedabad



Introduction

- **Overview:**
- Content Auto is a powerful and user-friendly web application that simplifies the process of creating engaging social media videos. With Content Auto, users can easily source memes and top comments from Reddit to create videos for Instagram reels and YouTube shorts.
- Whether you're an influencer, content creator, or just looking to make fun videos to share with friends, Content Auto is the perfect tool for you. Try it out today and take your social media content to the next level!



Purpose: The Content Auto web application is a tool that allows users to create engaging videos for social media platforms such as Instagram and YouTube by sourcing memes and comments from Reddit and combining them with background music.



Features: Multiple Users can User The Content Auto simultaneously with proper Authorization & security.



Scope: With its easy-to-use interface and direct upload feature to YouTube, Content Auto is the perfect tool for anyone looking to quickly create videos to share on social media.



Content Auto: is an innovative web application that empowers users to create captivating social media videos with ease.

Objectives of Content Auto

- **Automate Video Creation:** Use Reddit content to automatically generate videos for social media platforms.
- **User-Friendly Interface:** Provide an easy-to-use web app for creating professional-looking videos.
- **Direct YouTube Upload:** Enable direct uploading of created videos to YouTube.
- **Enhance Social Media Presence:** Help users, including influencers and content creators, create engaging videos for social media.
- **Security:** Implement robust security measures to protect user data, privacy, and confidentiality

Methodology

Development Process

- The Content Auto web app was developed through planning, design, implementation, testing, and deployment stages, ensuring user-friendly video creation and direct YouTube upload functionalities.

Implementation

- Implemented using Flask (Python) for backend, Bootstrap for frontend, and key Python libraries for video editing and API integration, ensuring a seamless user experience and efficient functionality.

Technologies Used

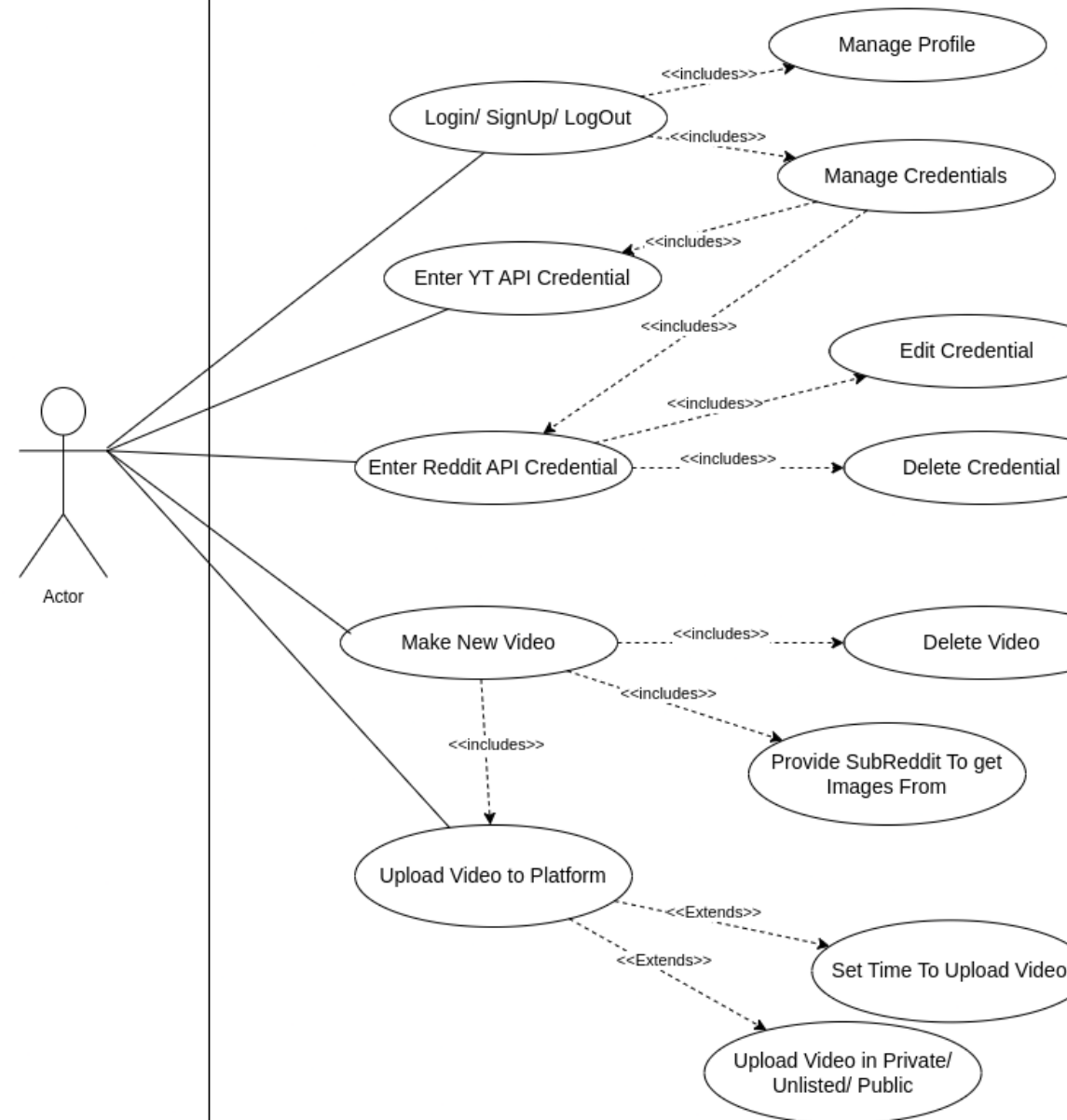
Front End

- HTML
- CSS
- Bootstrap
- JavaScript

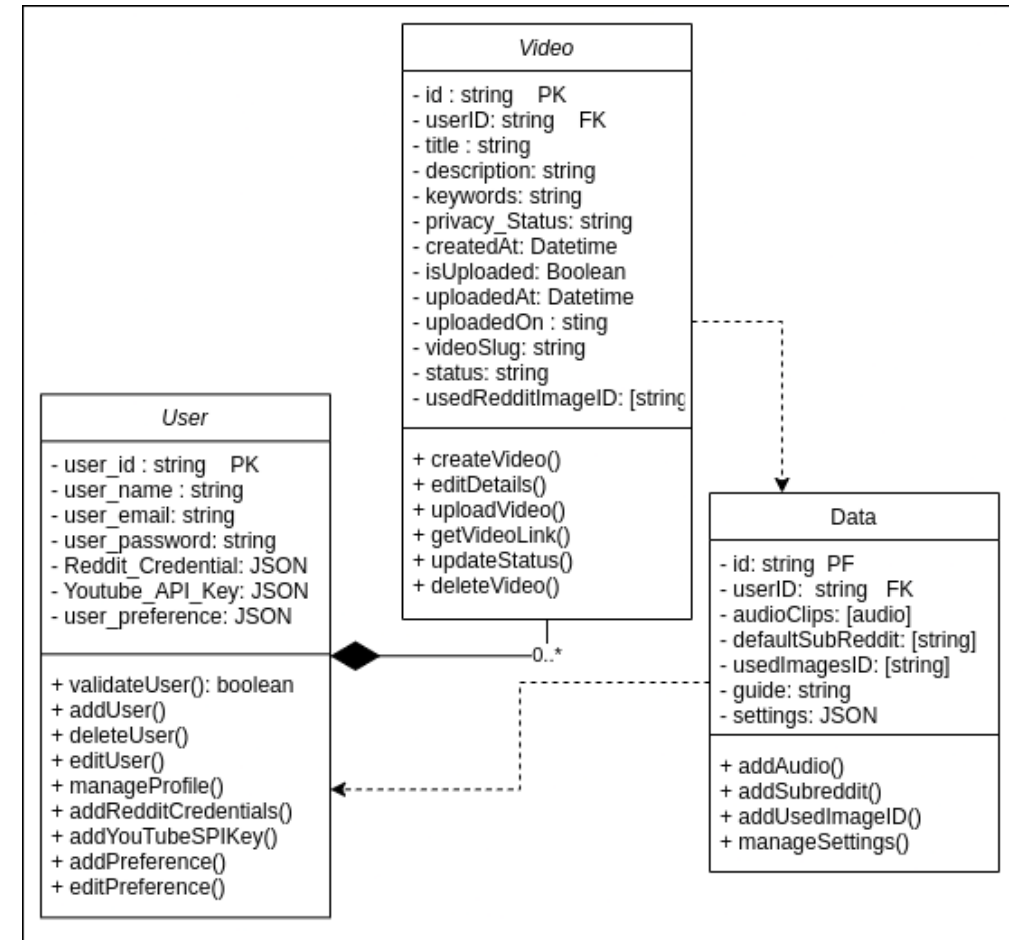
Back End

- Flask (Python)
- Python libraries
 - MoviePy
 - Praw
 - google-api-core
 - PIL

Use Case Diagram

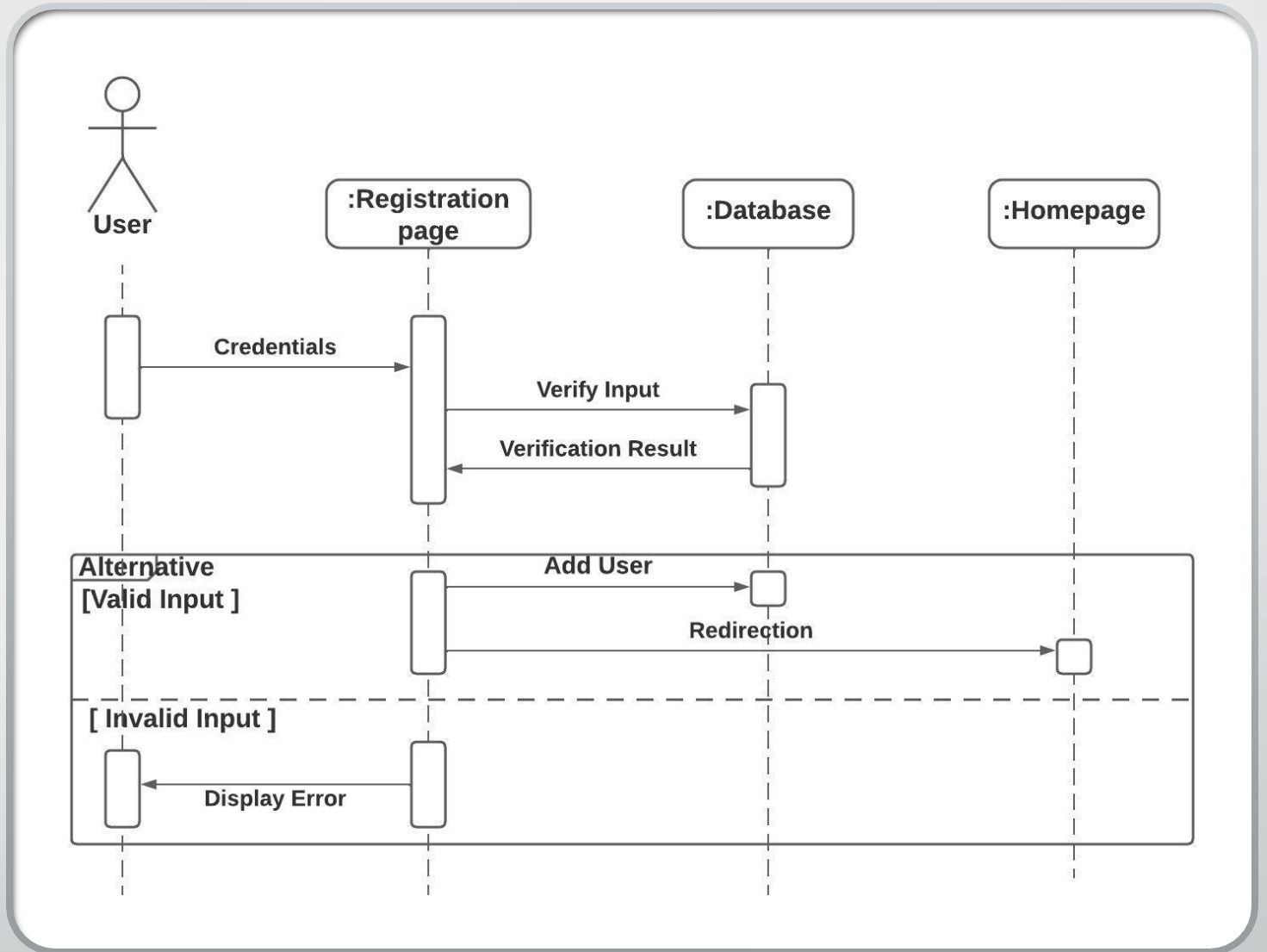


Class Diagram



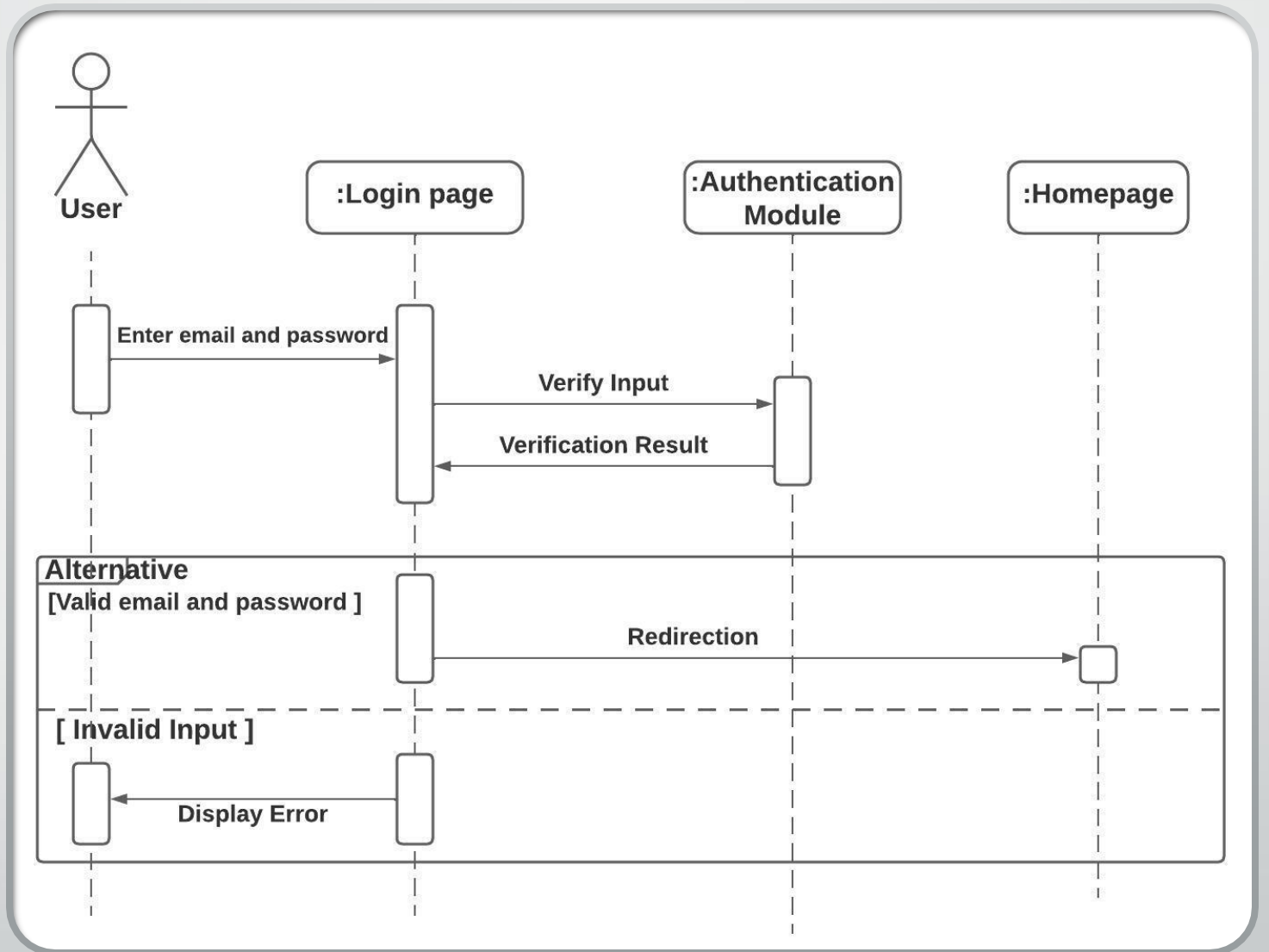
Sequence Diagram

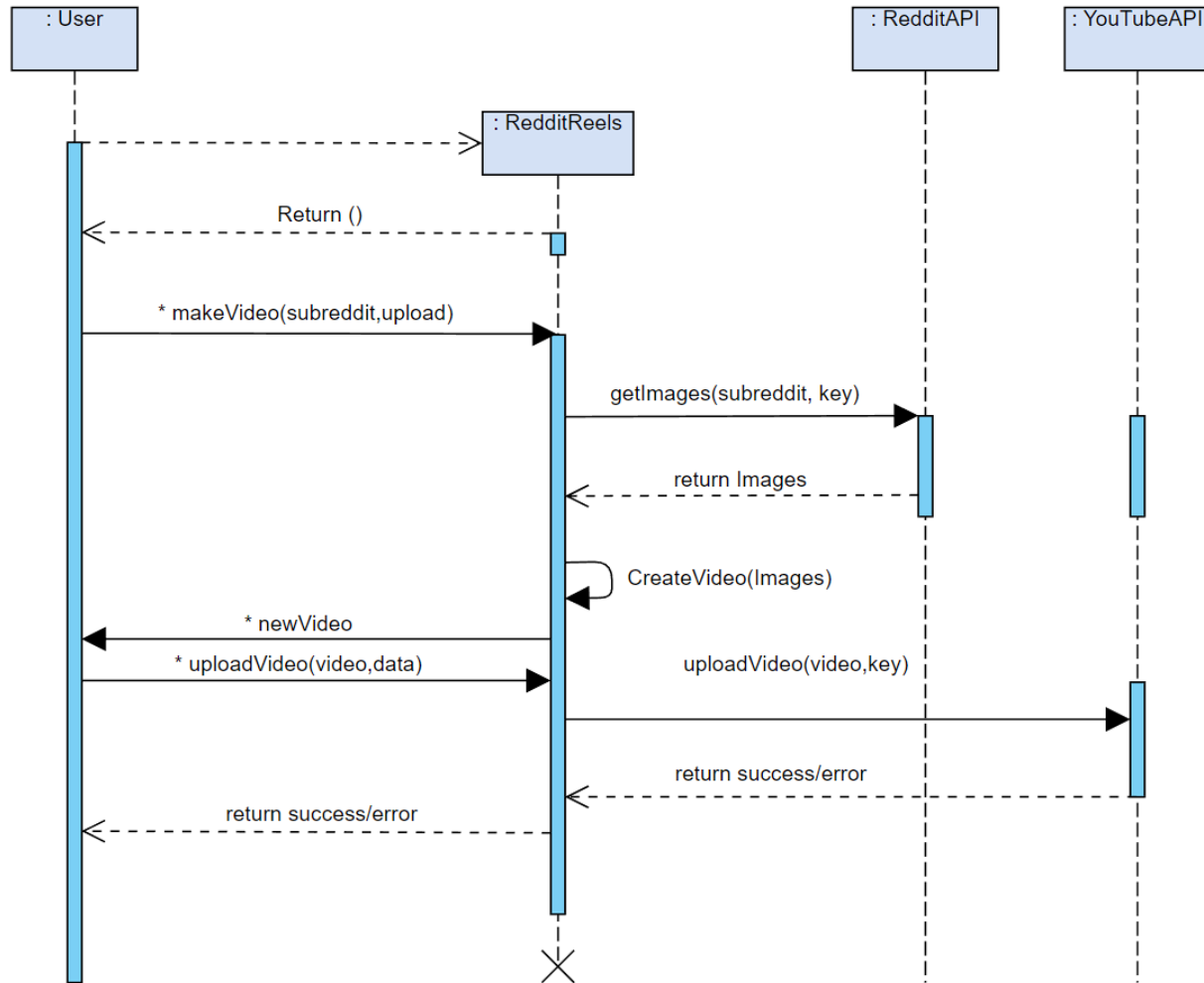
Registration



Sequence Diagram

Login

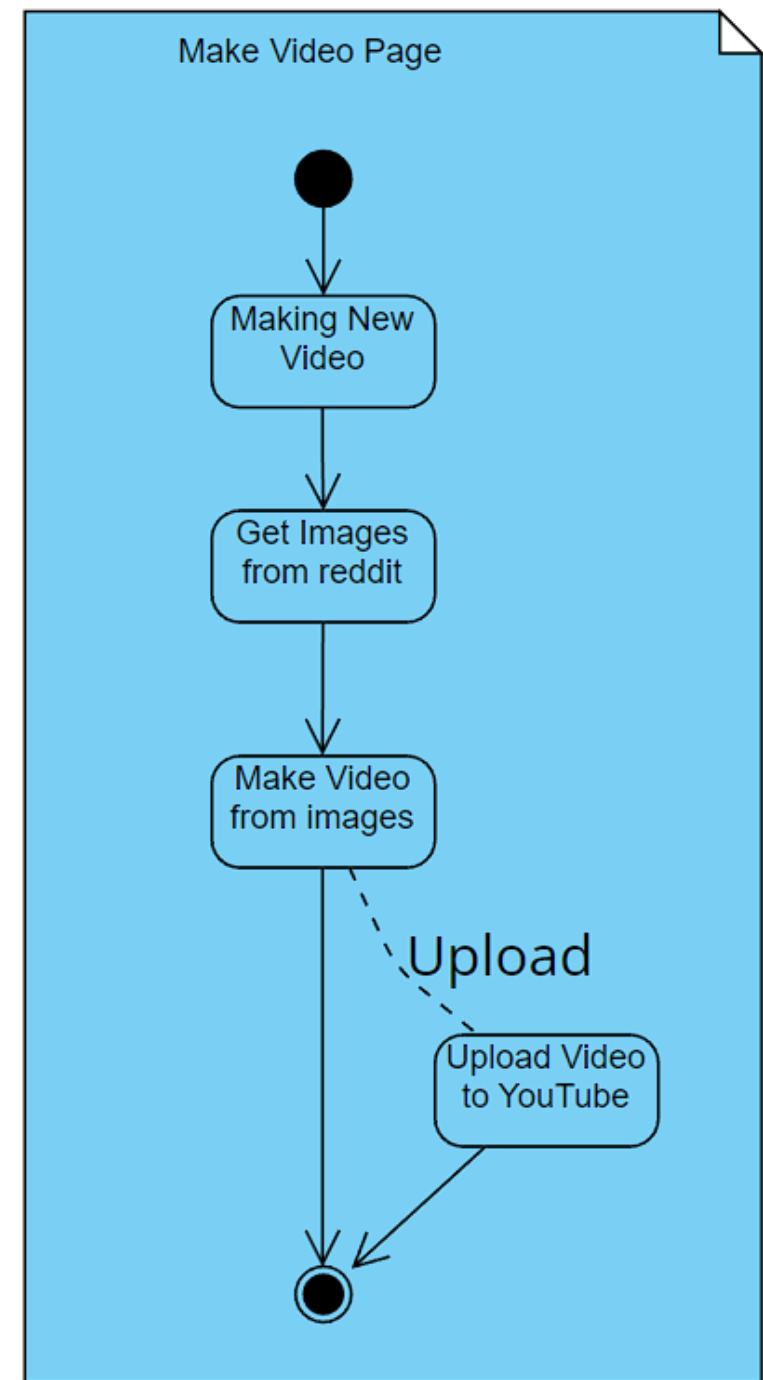


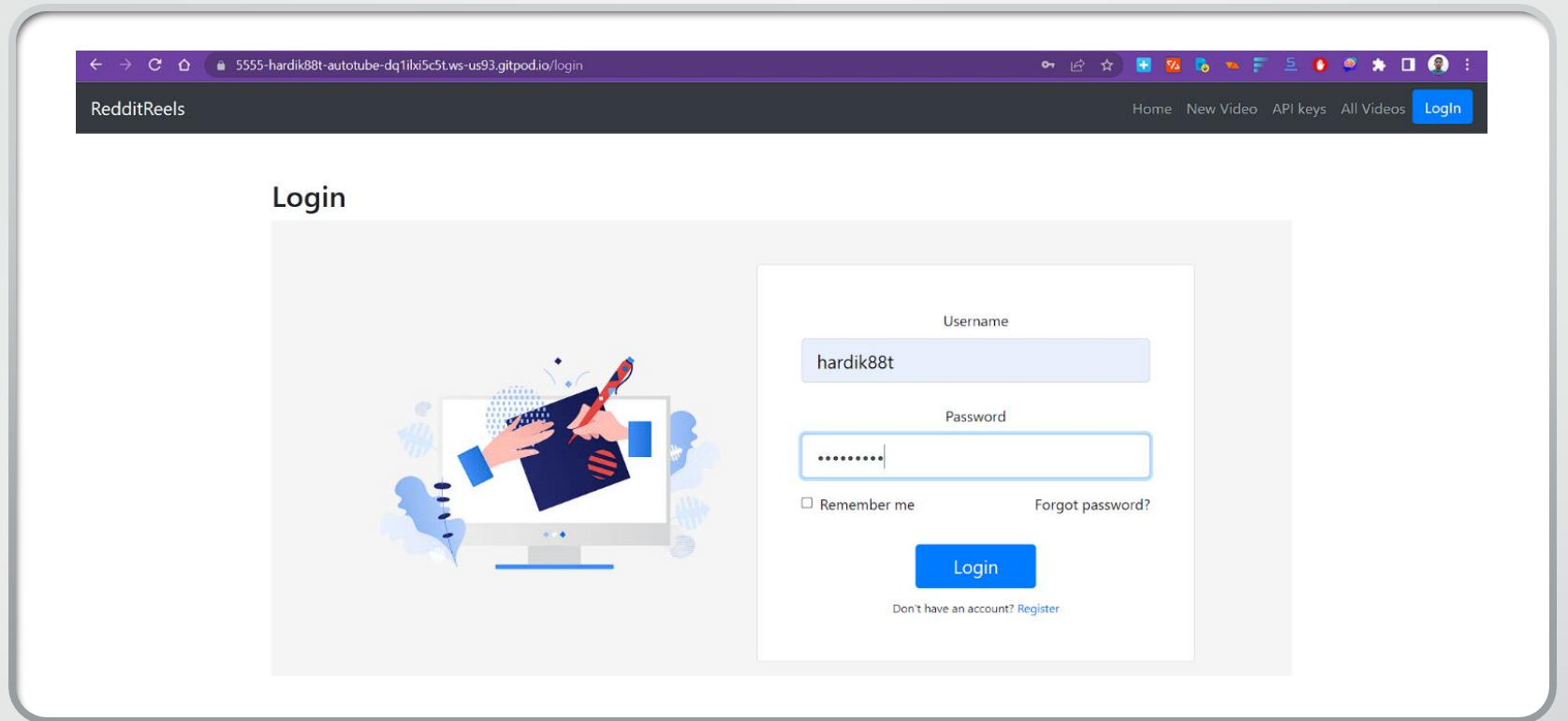


Sequence Diagram

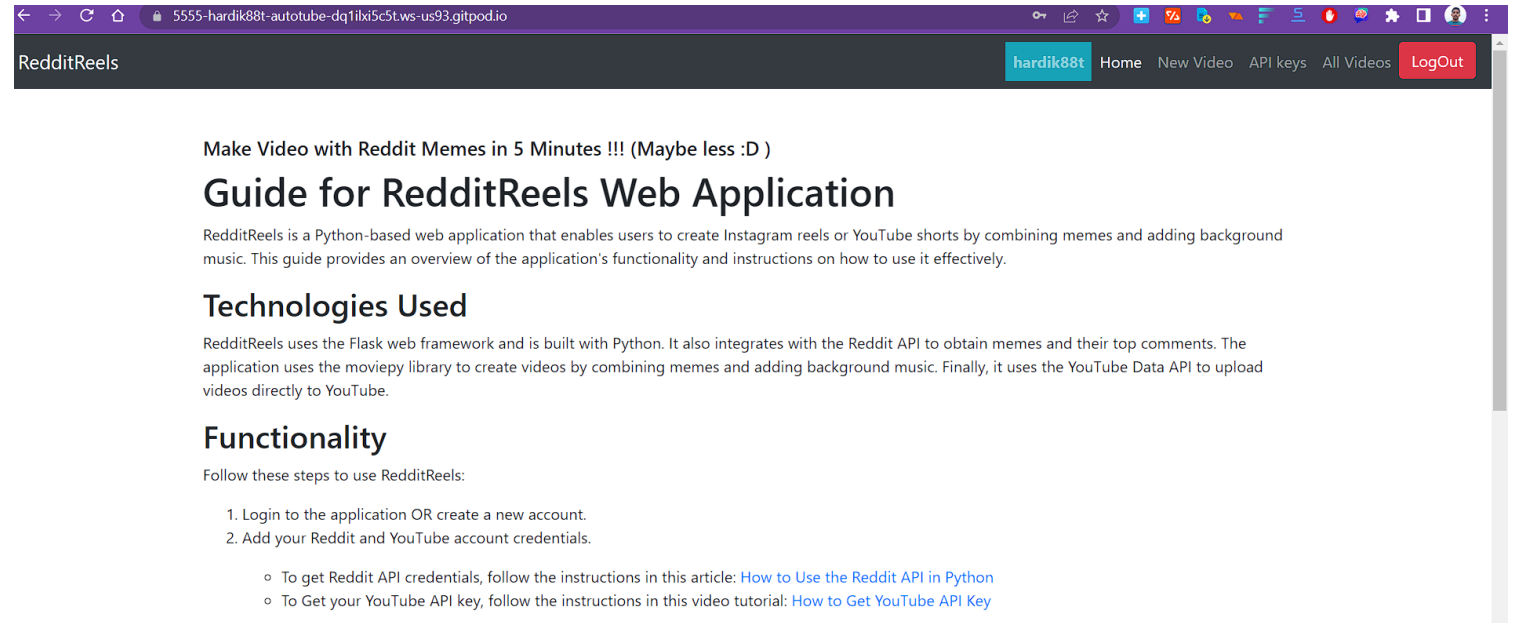
Make a Video

Activity Diagram

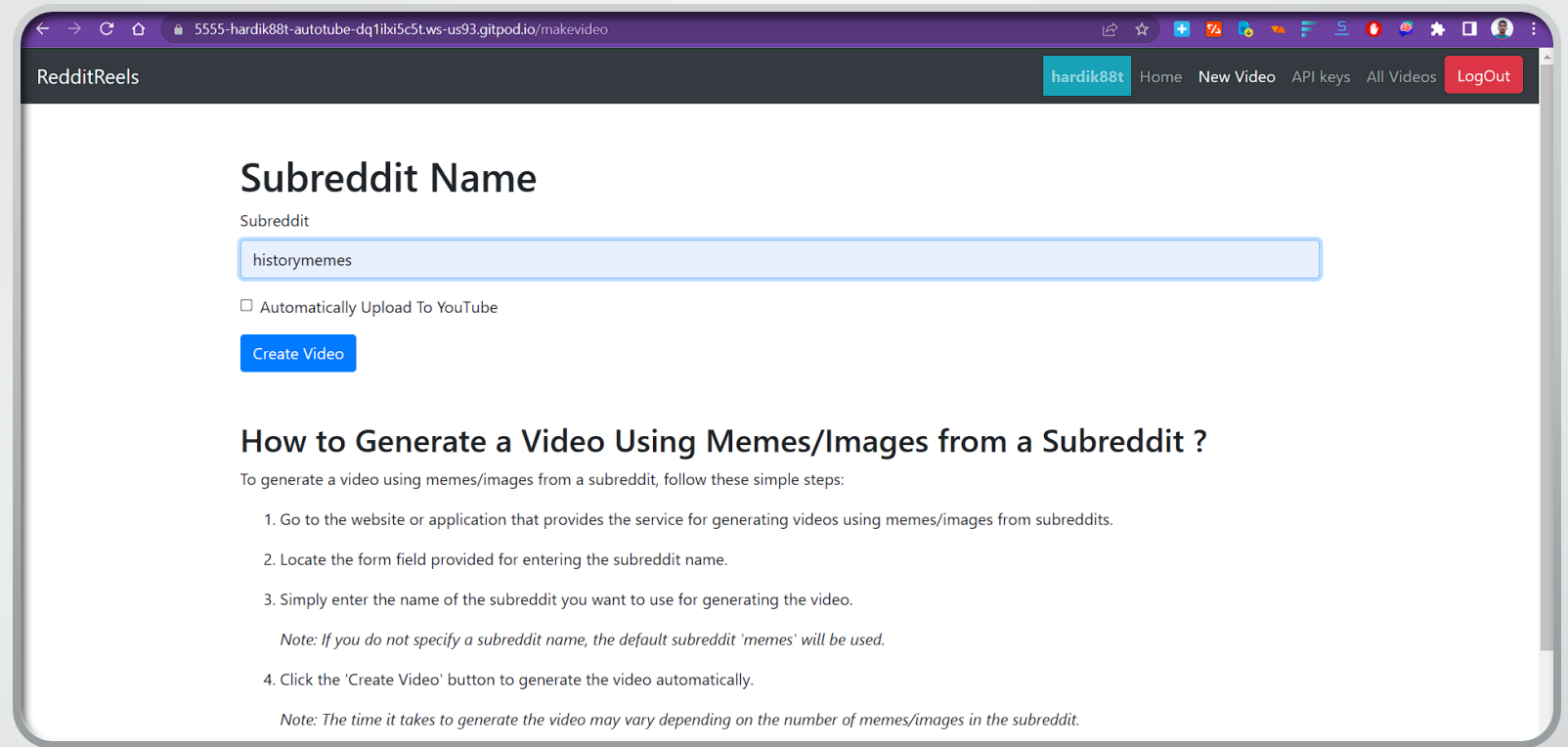




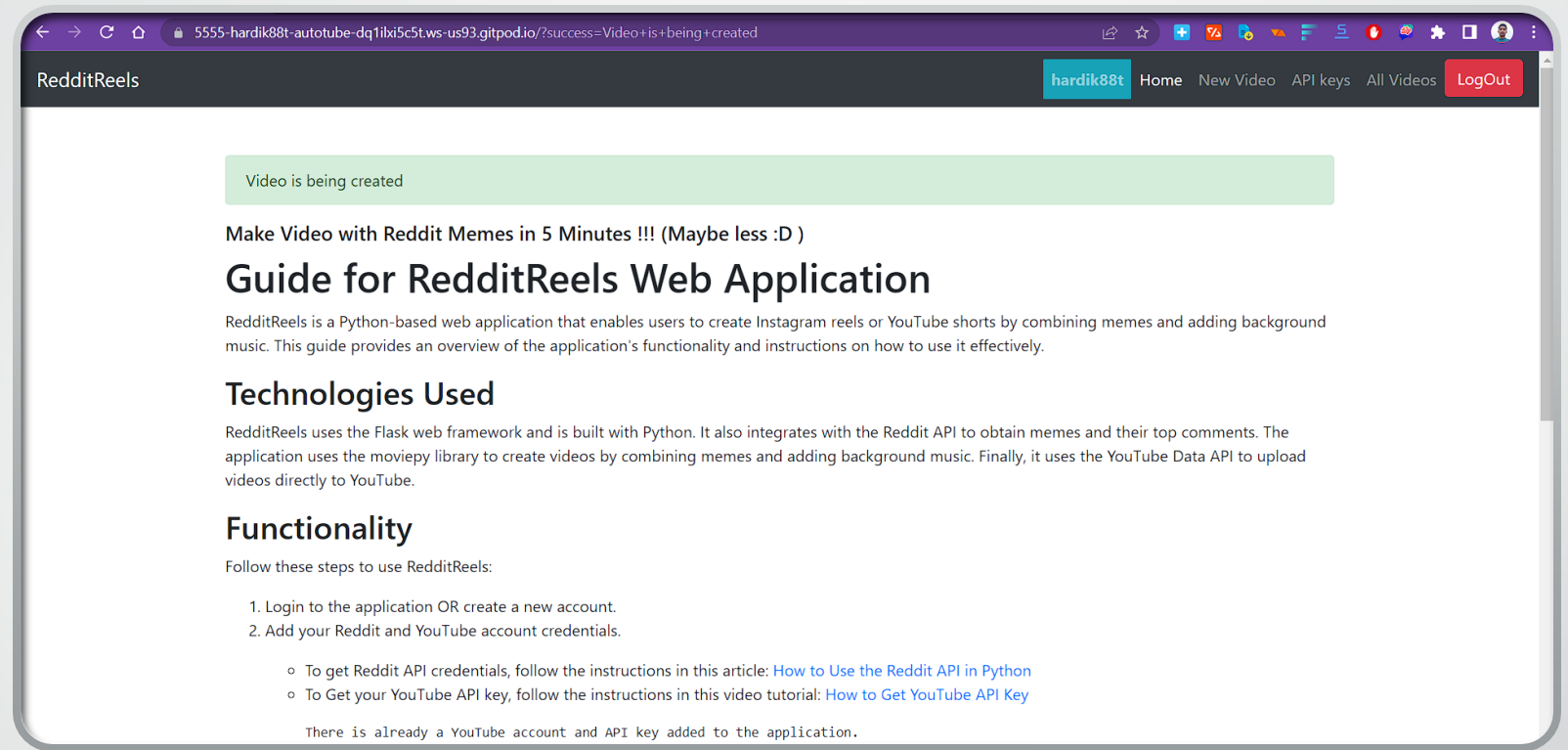
Login Page



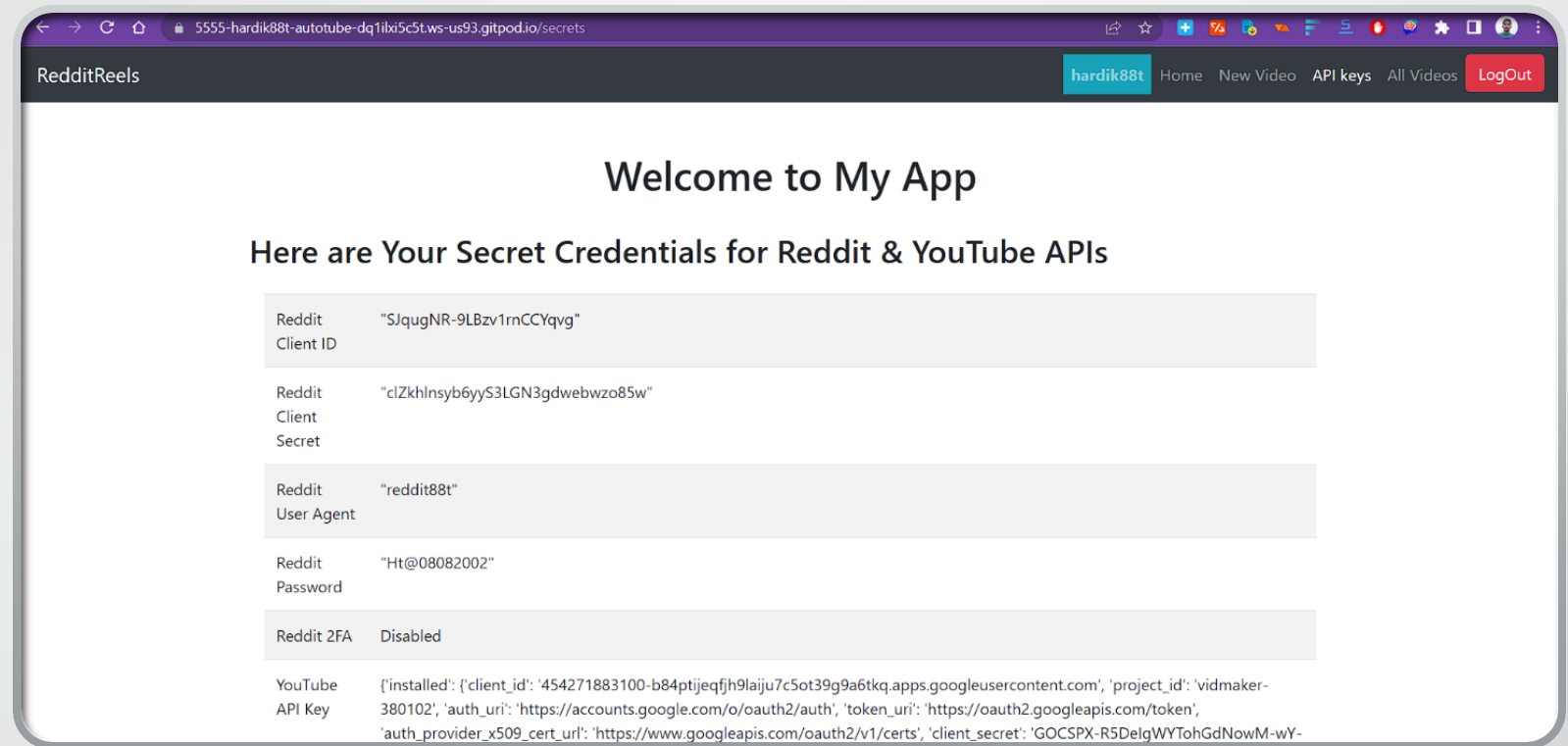
Home & Guide Page



Generate New Video + Guide



Video Progress Status



Edit Reddit & youTube Credentials

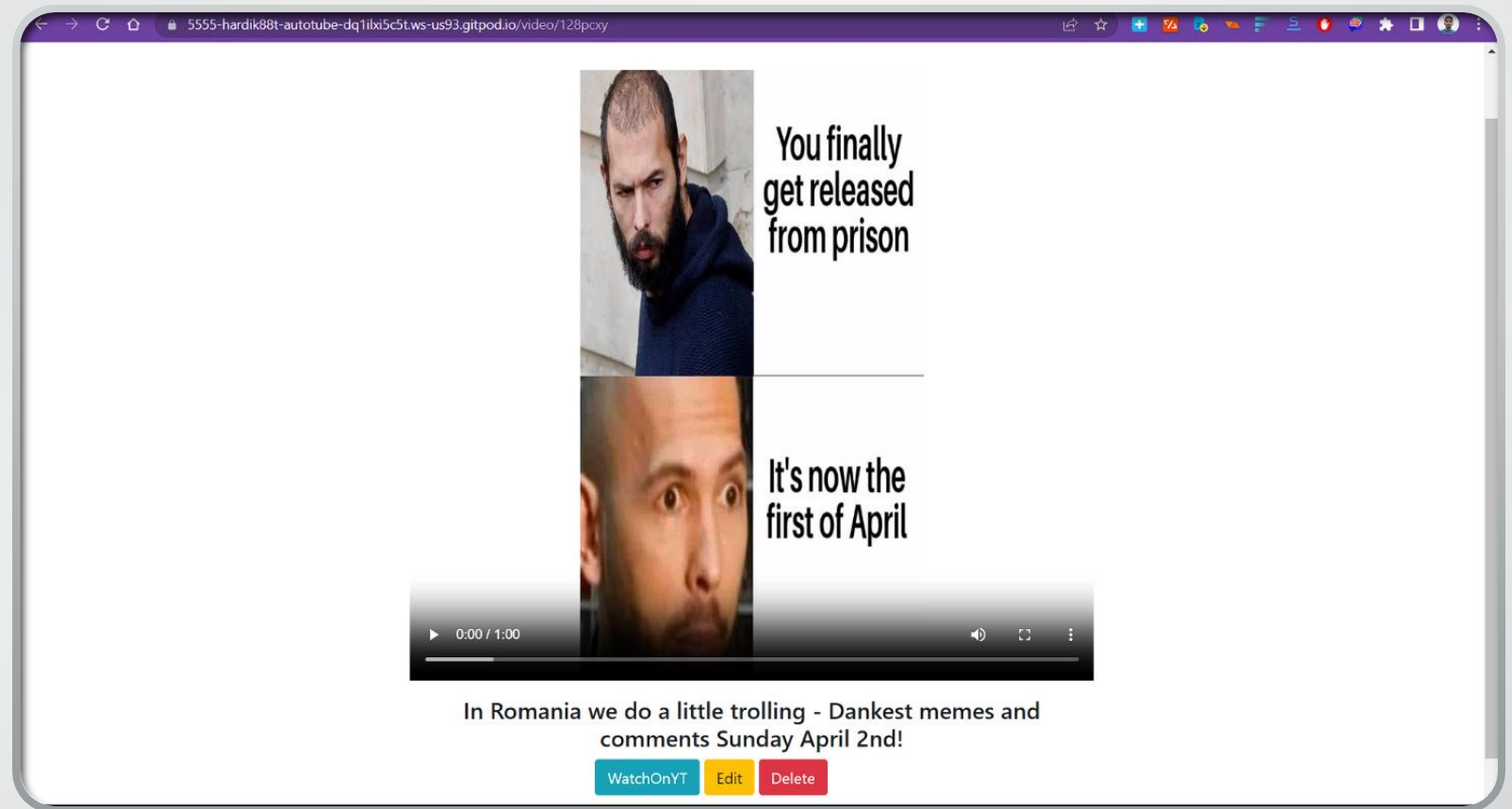
5555-hardik88t-autotube-dq1ibi5c5t.ws-us93.gitpod.io/videos

RedditReels **hardik88t** Home New Video API keys All Videos LogOut

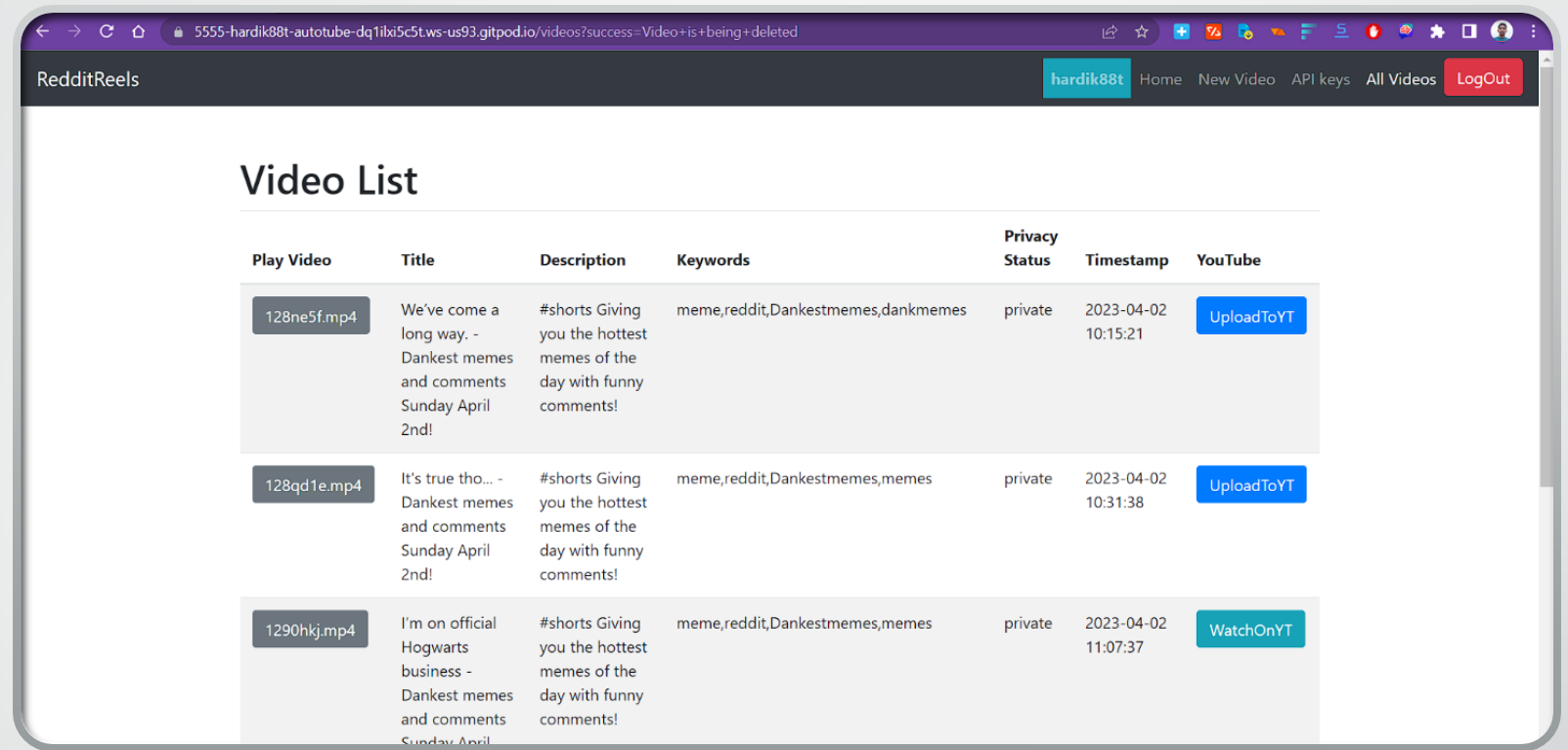
Video List

Play Video	Title	Description	Keywords	Privacy Status	Timestamp	YouTube
128pcxy.mp4	In Romania we do a little trolling - Dankest memes and comments Sunday April 2nd!	#is tate free	newmemes, bestmemesoftheday	private	2023-04-02 07:15:18	WatchOnYT
128ne5f.mp4	We've come a long way. - Dankest memes and comments Sunday April 2nd!	#shorts Giving you the hottest memes of the day with funny comments!	meme,reddit,Dankestmemes,dankmemes	private	2023-04-02 10:15:21	UploadToYT
128qd1e.mp4	It's true tho... - Dankest memes and comments Sunday April 2nd!	#shorts Giving you the hottest memes of the day with funny comments!	meme,reddit,Dankestmemes,memes	private	2023-04-02 10:31:38	UploadToYT

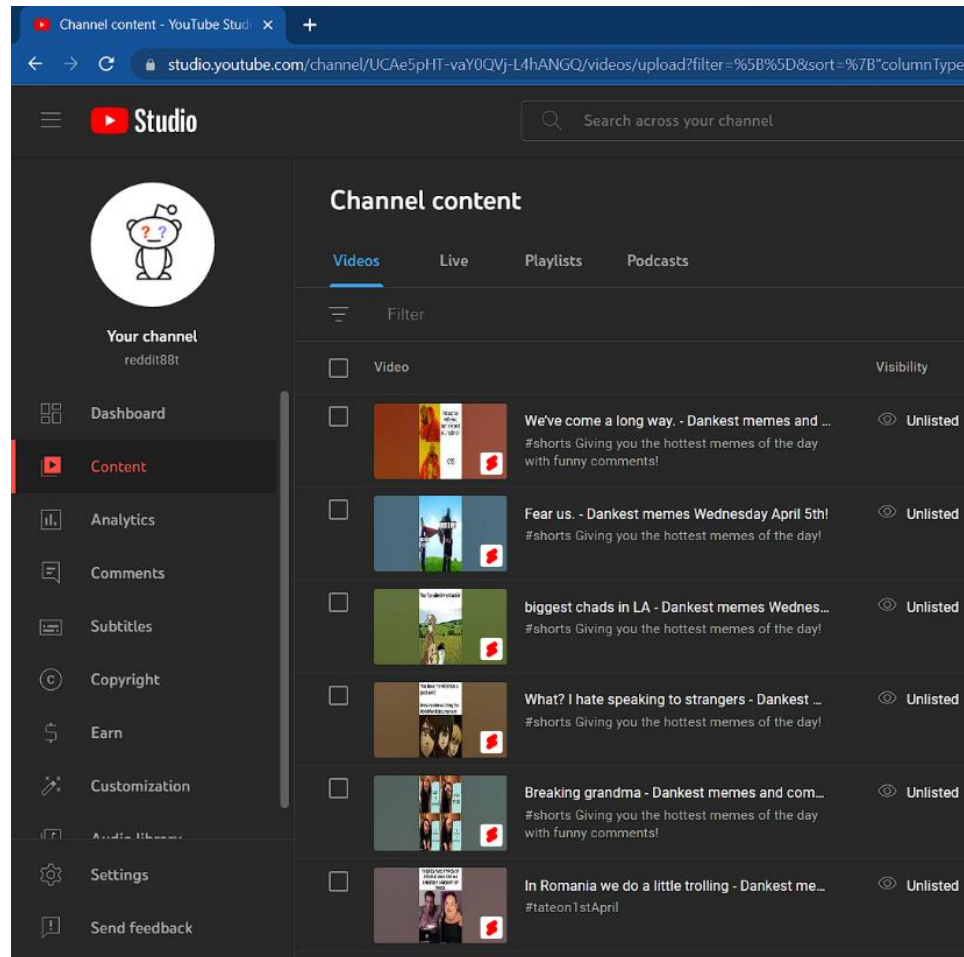
Video Made By user



See Video &
Watch/Upload/Edit/Delete



Video Deleted



Video Uploaded To YouTube Via API Key

Future Extensions

- **Content Expansion:** Integrate support for sourcing content from other social media platforms besides Reddit, broadening the range of available content for users.
- **Performance Optimization:** Improve application performance to handle longer videos and a larger number of memes, ensuring smooth operation even under heavy workloads.
- **Advanced Editing Features:** Enhance the video editing capabilities with more advanced features, empowering users to create more dynamic and engaging videos.
- **Machine Learning Integration:** Incorporate machine learning algorithms to suggest memes and comments that are likely to resonate with the user's target audience, enhancing content relevance.
- **Analytics and Insights:** Introduce analytics features to provide users with insights into their video performance, helping them optimize their content for maximum engagement.
- **Multi-Platform Support:** Extend support for direct video uploads to other social media platforms like TikTok, Snapchat, and Instagram, making the application more versatile for content creators.

Summary

- **Planning and Requirement Analysis:** Thorough analysis of functional and non-functional requirements, user interfaces, and technologies.
- **Design:** Creation of system design, including database design, user interface design, and overall architecture. Use of diagrams to visualize functionality.
- **Implementation:** Use of Flask (Python) for backend, Bootstrap for frontend, and Python libraries for video editing, Reddit API integration, and image processing.
- **Testing:** Manual testing to find and fix bugs. Creation of test cases to ensure all functionalities work as expected.
- **Deployment:** Deployment using GitHub for version control, GitPod for development environment, and Visual Studio Code as code editor.

Bibliography

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- GitHub. Version Control with Git. GitHub, <https://github.com/>
- Flask. Welcome to Flask — Flask Documentation (2.0.x). PalletsProjects, <https://flask.palletsprojects.com/en/2.0.x/>
- Microsoft. Visual Studio Code - Code Editing. Redefined. Microsoft, <https://code.visualstudio.com/>
- Gitpod, <https://gitpod.com/>



Thank You.