National University
of computer and emerging sciences

Semester Project

CY2002 Digital Forensics

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Introduction

The Cyber Triage Tool is designed for analyzing video files by extracting frames at custom intervals. It provides an interactive experience for reviewing and seeking specific moments in the video, ideal for forensic analysis or in-depth video review.

System Requirements

- Operating System: Compatible with Windows, macOS, or Linux
- Python: Version 3.x
- Required Libraries: Flask and OpenCV
- Browser supporting HTML5

Installation

Download the source files.

Install the necessary Python libraries by running:

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

Launching the Application

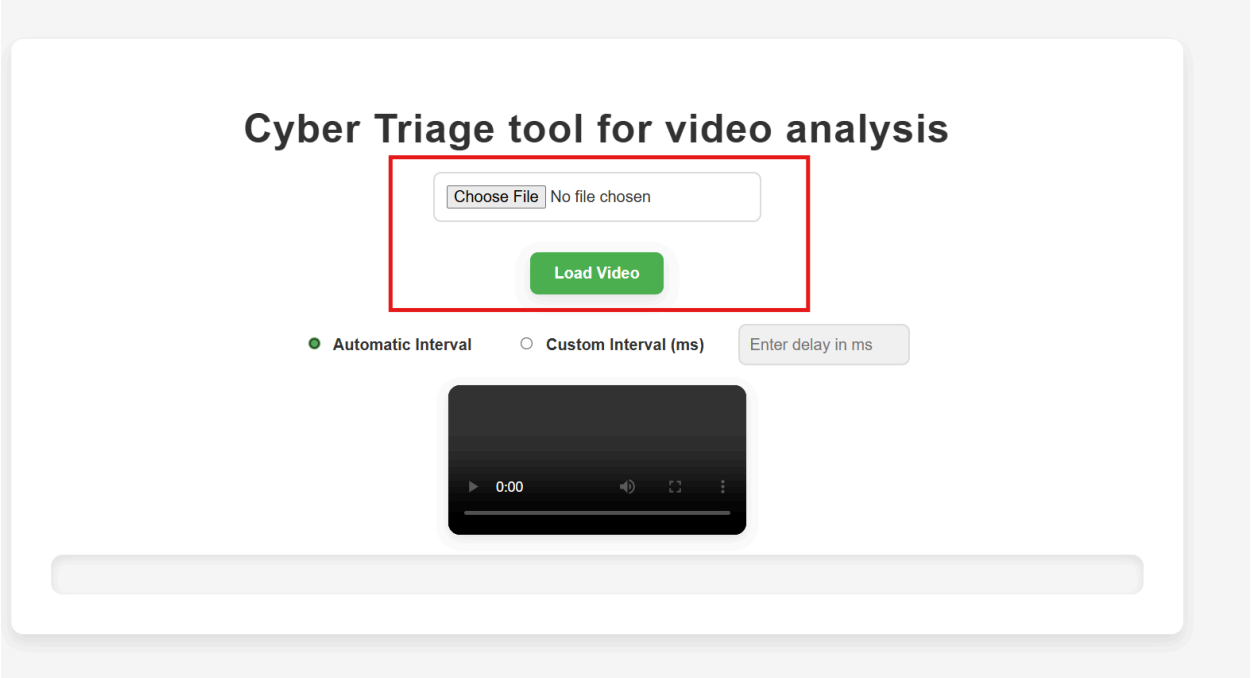
Navigate to the project folder in your terminal or command prompt and Start the application by running:

```
python app.py
```

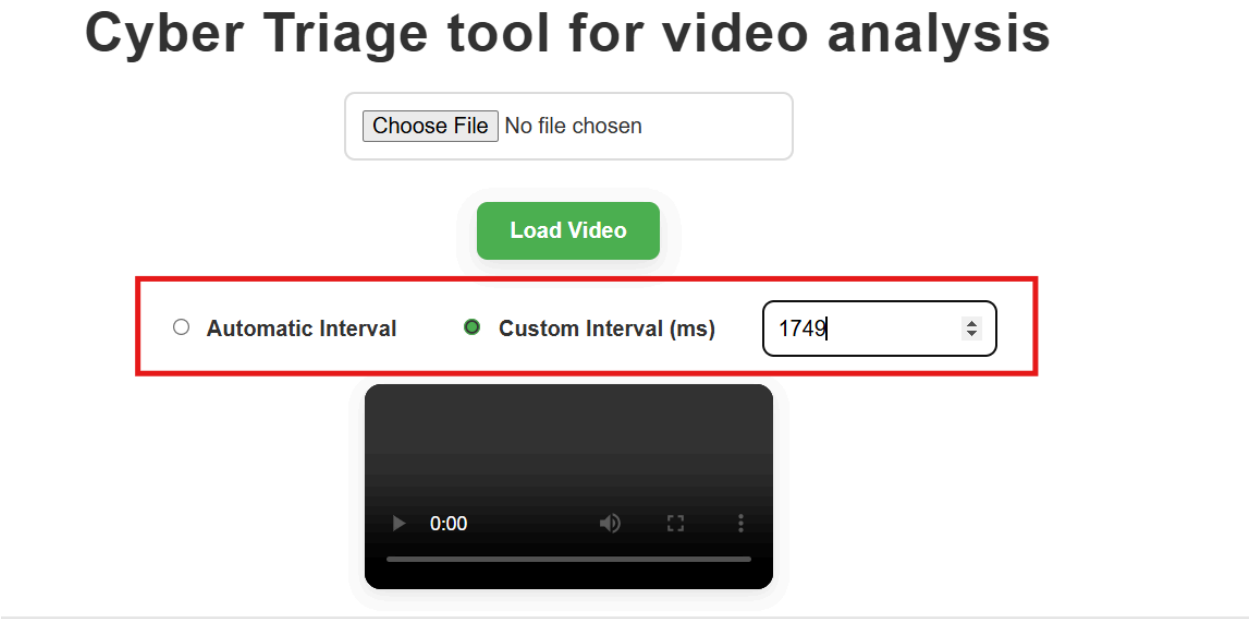
Open a web browser and go to http://127.0.0.1:5000.

Using the Cyber Triage Tool

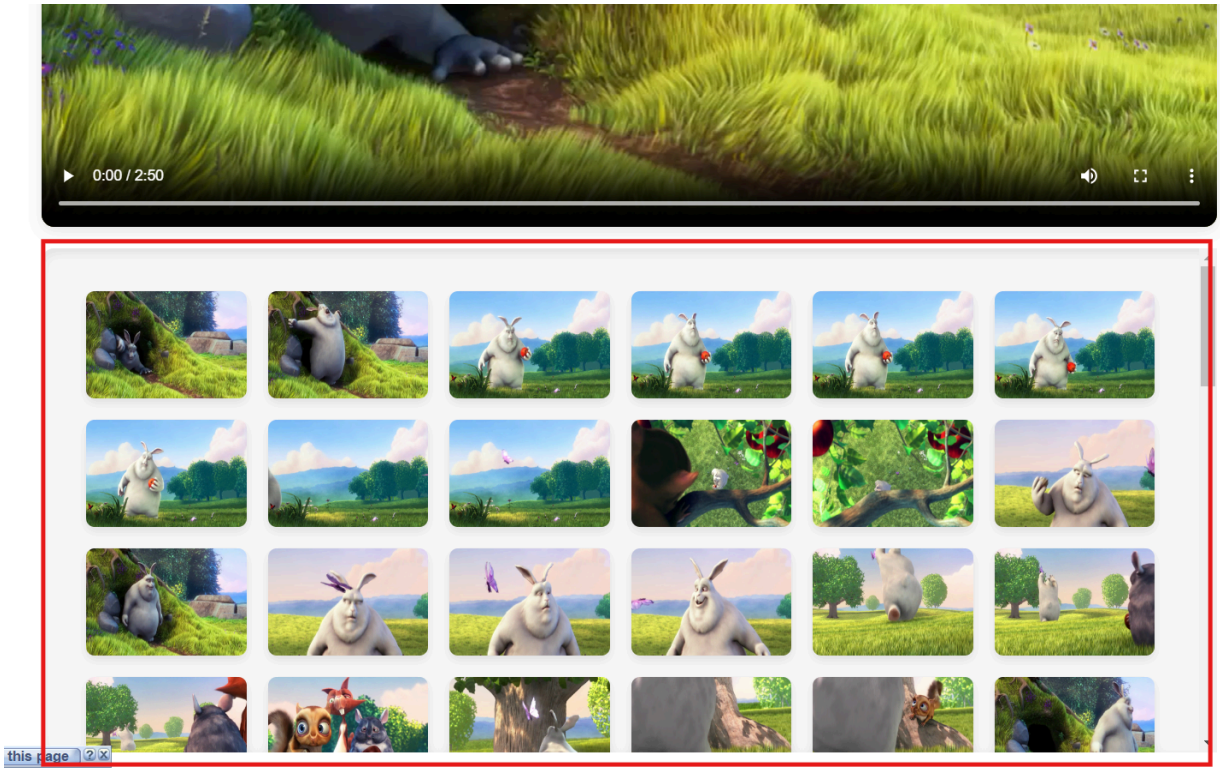
- **Uploading a Video**
    - Click on the "Choose File" button to select a video.
    - Click the "Load Video" button to upload and load the selected video.



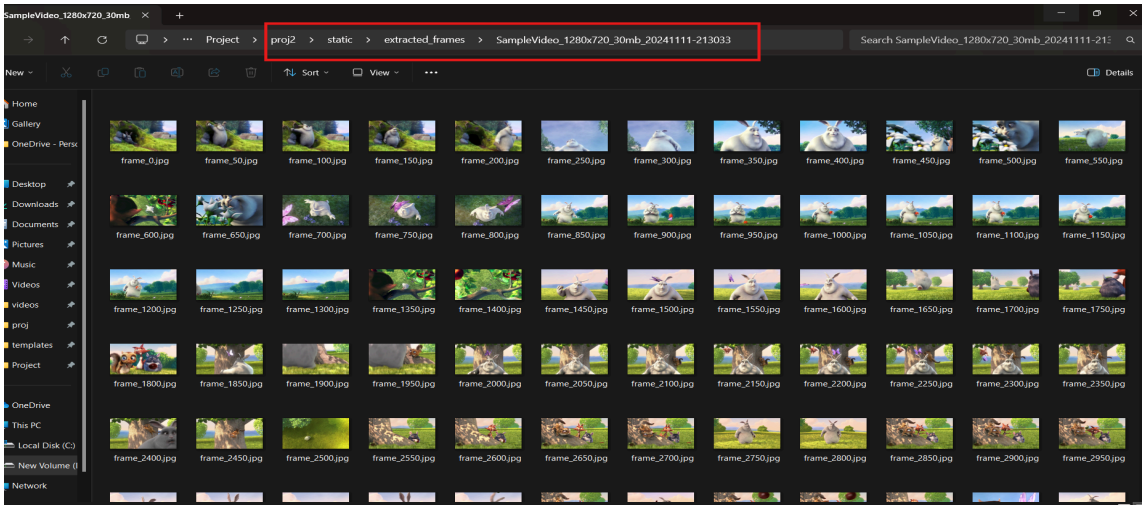
- **Setting Frame Extraction Interval**
  - Automatic Interval: Extracts frames every 2 seconds.
  - Custom Interval: Allows you to set a custom interval in milliseconds (minimum 100 ms).



- **Reviewing Extracted Frames**
    - Once extracted, frames appear in the gallery below the video player.
    - Click on a frame to seek the video to that moment.



- **Saving frames for later use**
    - Navigate to the Static folder
    - Then into extracted frames, then into your desired video



Troubleshooting

Issue: Frames are not displaying.

Solution: Verify that the video file format is supported. Refresh the page or restart the app if necessary.

Issue: Custom interval not working.

Solution: Ensure the custom interval is set to a minimum of 100 milliseconds.