Python Screenshot Project

Automated Screenshot Taking and Markdown Generation

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Project Overview

- The goal of this project was to automate the process of taking screenshots while watching a video or in an online class.
- The project consists of three files: `screenshot.py` , `markdown.py` and `gallery.sh`.
- The first file takes screenshots at regular intervals and saves them in a new directory named `IMG`.
- The second file generates a Markdown file containing links to all the screenshots in the `IMG` directory.
- The project uses the Python imaging library (PIL) and the subprocess module in Python.

Screenshot.py

- The `screenshot.py` file uses the PIL and numpy modules to capture and compare screenshots.
- It takes a command line argument that specifies the image change factor, which is the amount of change between the previous and current screenshots required to trigger a new screenshot.
- It saves each new screenshot in the `IMG` directory with a filename based on the current date and time.

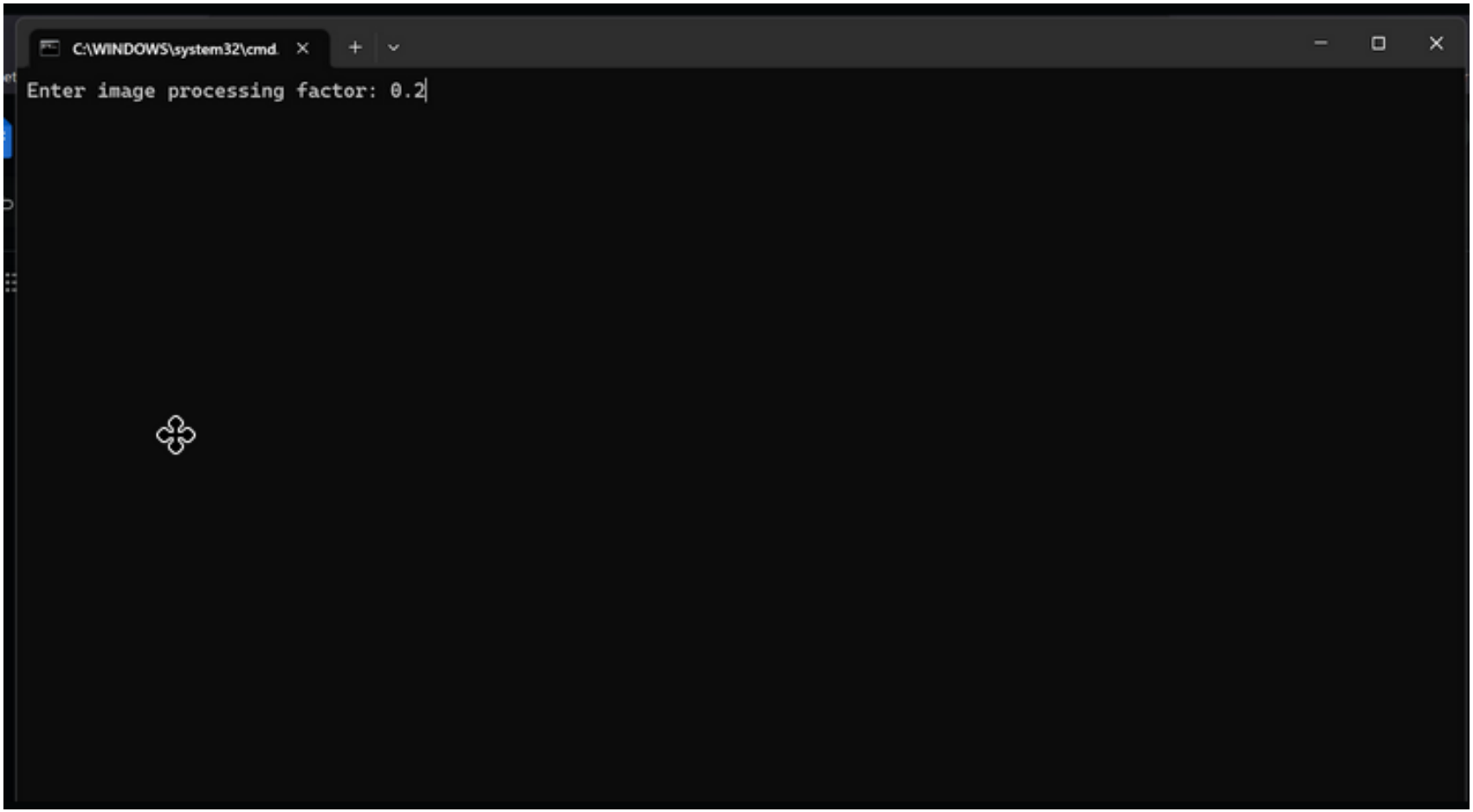
Gallery.sh

- The `gallery.sh` file generates a Markdown file that contains links to all the screenshots in the `IMG` directory.
- It uses a combination of Bash commands and Python code to create the Markdown file.

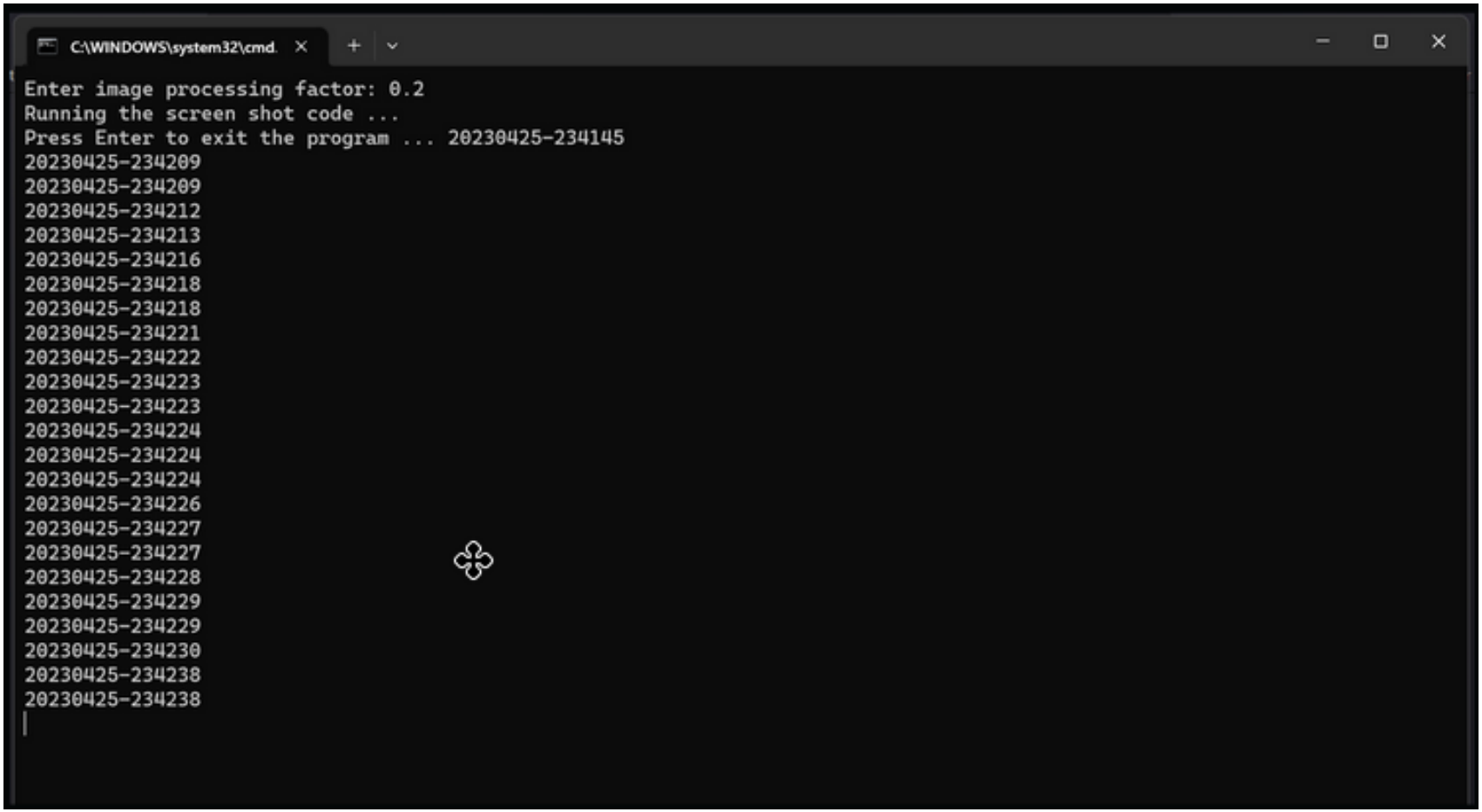
Demo

- Here is a demo of the project in action.
- We will run the `screenshot.py` file with an image change factor of 0.05, which means that a new screenshot will be taken if there is a 5% change between the previous and current screenshots.
- We will then run the `gallery.sh` file to generate the Markdown file.

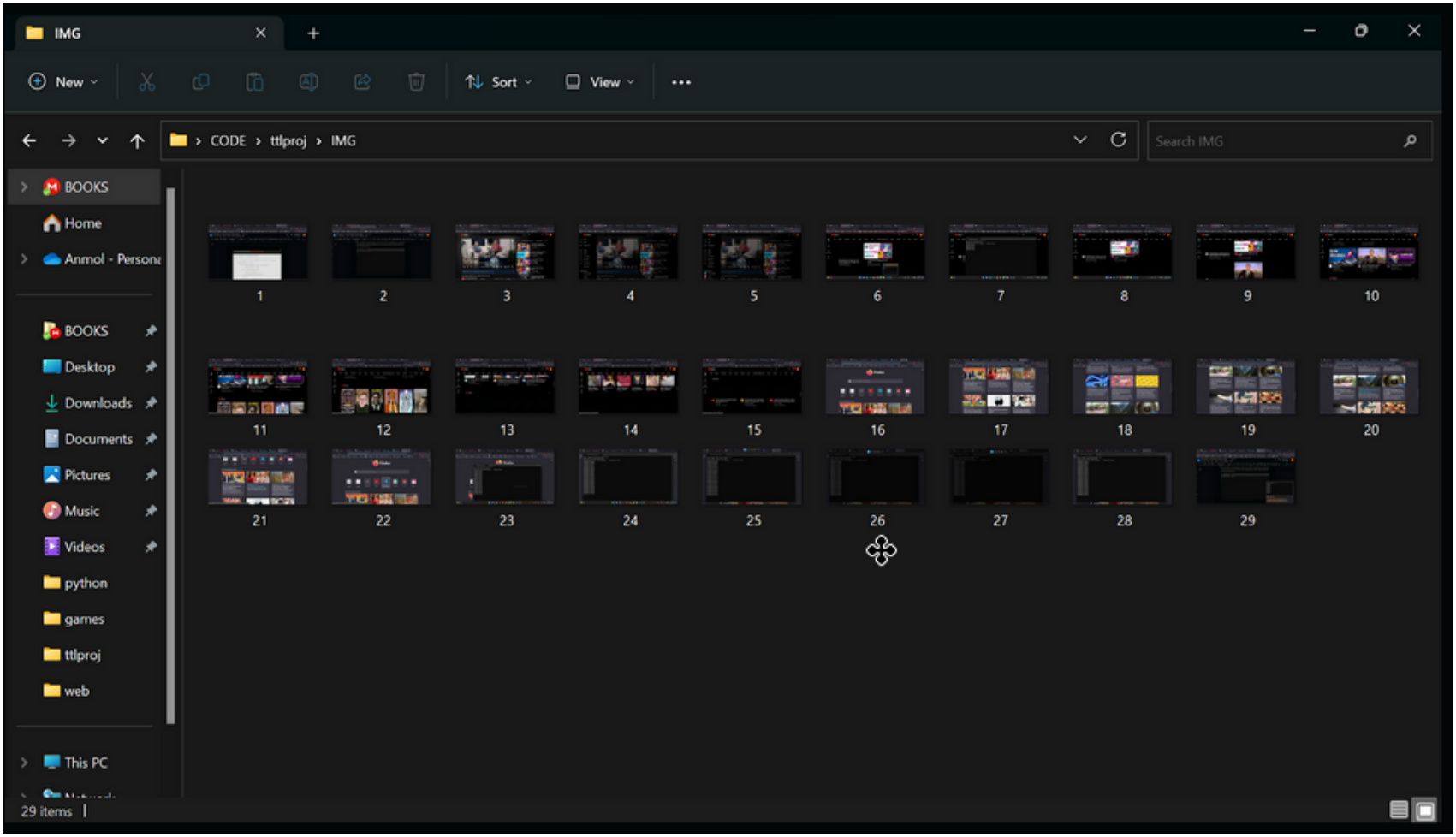
Running The bat file



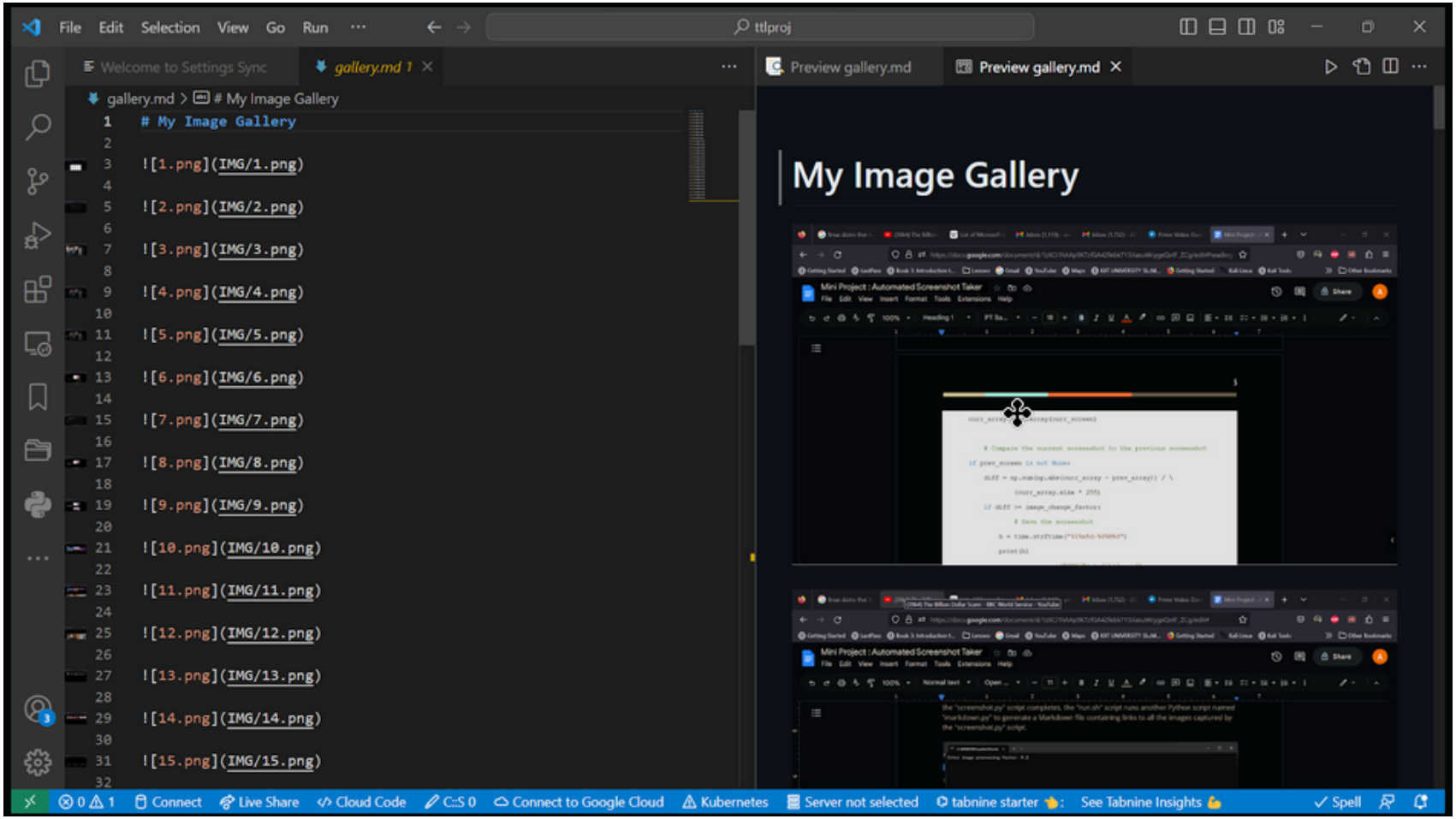
Pressing Enter to exit



The images stored in a folder



Images linked together in markdown file



Tesseract OCR

- Texts from the screenshots will be converted to text
- This feature help in converting the lecture videos content from presentation to simple texts

Conclusion

- The Python screenshot project provides an easy and automated way to take screenshots while watching a video or in an online class.
- The project can be customized by changing the image change factor and the directory name for the screenshots.
- The project can be improved by adding more features, such as the ability to take screenshots only when a specific program is running or to automatically upload the screenshots to a cloud storage service.