

CAS3106 Software Engineering - Cheating Sheet Generator

블력을 무너뜨리는 라이언

16 December 2025

1 Introduction

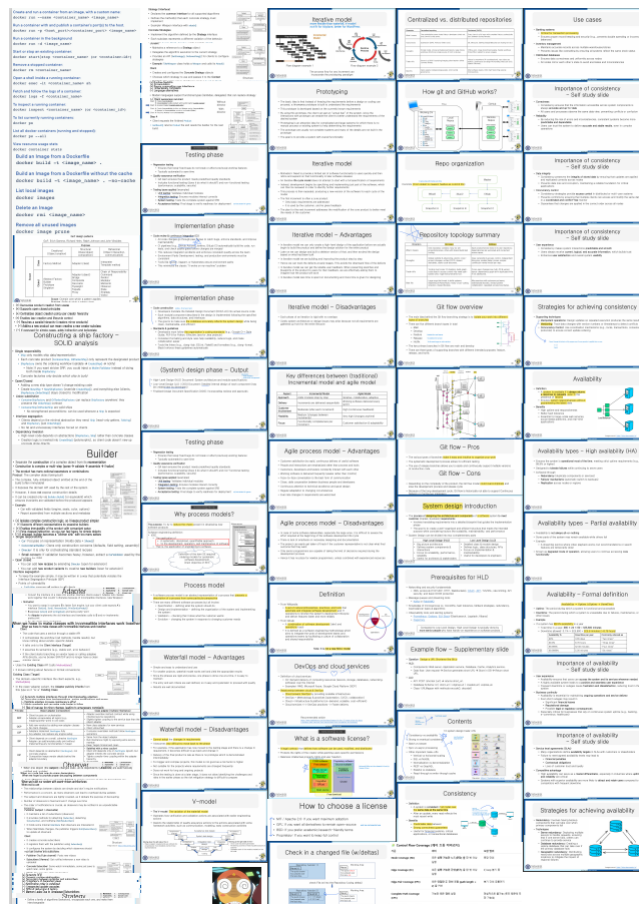
I made the cheating sheet generator to

- ease your hard work of pasting our course PPT pages onto the paper.
- make it easy to put more information on limited A4 pages.

If you use this program, you

- don't need to paste images into pdf editor one by one, you just put images in one folder and run the generate and you have quite nice cheating sheet

This program is made for Python 3.12 and will generate a PDF file with a compressed collection of images on two A4 pages.



The resulting PDF looks like above. The single page usually holds up to $W \times H = 5 * 13$ images with 16 : 9 ratio.

2 What's In Repository?

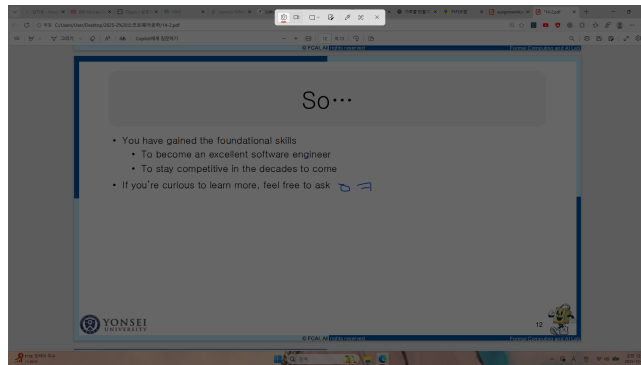
Folder/

```
|—— main.py # Run with python3 main.py
|—— images/
|   |—— #This is where you put images
|   |—— README.md
```

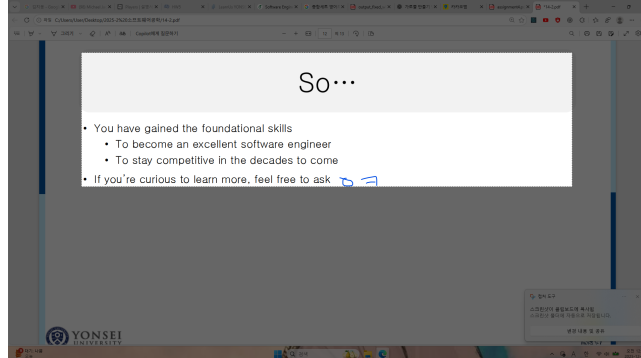
3 How To Use

3.1 Capture Images First

First, you have to capture the images needed for your cheat sheet. For Windows users, it is **strongly recommended to capture part of the image** using the **Win + Shift + S / Print Screen** shortcut as we have limited space.



▲ When you press the shortcut (Win + Shift + S)

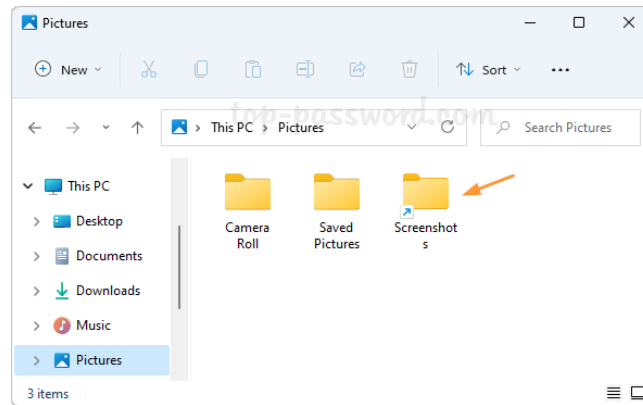


▲ It is recommended to exclude unnecessary margins

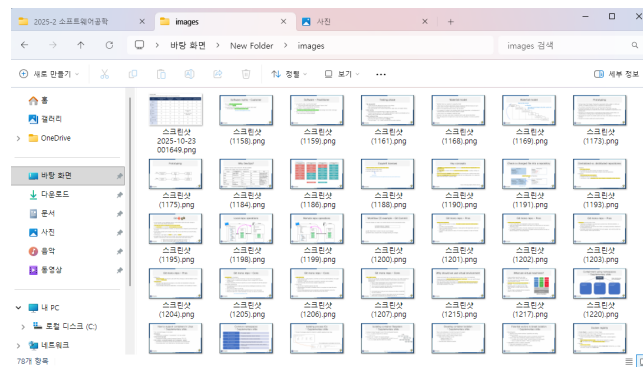


- You have gained the foundational skills
 - To become an excellent software engineer
 - To stay competitive in the decades to come
- If you're curious to learn more, feel free to ask [🔗](#) [🔗](#)

▲ Captured image, put it in images folder



Move the images you want to put in the images folder in our repository.



▲ Should look like this

3.2 Organize Captured Images / Configure

Oldest image goes first. It is recommended to take captures as you review the chapters from the oldest to latest.

And then, you can proceed to generating PDF, but before that, you can configure your PDF in main.py.

You can configure

- # of columns
- margin
- Folder where the images are stored
- output file name

```

terminal Help
main.py
main.py > ...

1 #!/usr/bin/env python3
2 """
3 main.py
4
5 Will generate PDF file from set of images with each image
6 being vertically ordered and its width being 1/5 of
7 the width of A4 paper.
8 You can edit configurations (what is right under '# Config')
9
10 How To Use
11 python3 main.py
12 """
13
14 import os
15 import sys
16 from PIL import Image
17 from reportlab.pdfgen import canvas
18 from reportlab.lib.pagesizes import A4
19 from reportlab.lib.utils import ImageReader
20
21 # Config
22 COLS = 5 # Number of columns
23 MARGIN_MM = 0.5 # Margin (in millimeters)
24 folder, output = "images", "output.pdf" # Folder where images are located / output file name

```

And then please run the following command which will install required packages.
pip install reportlab pillow

3.3 Generate PDF

Then, run 'python3 main.py', and the output PDF file will be generated in the repository folder.
And that's all!

4 Closing Remarks

Please feel free to use this cheating sheet generator if you think this generator fits well to your study. There are other ways to prepare cheating sheet, but I thought somebody would need this kind of help. Though there may be some flaw in this program, I hope this will ease some burden.