

IT314 - Software Engineering

LAB 5 - Static Analysis

Name : Rathwa Jayraj

ID : 202001102

- Steps for installing mypy.
 1. First is referred to the mypy website for installing the software
 2. Then I entered a command given by them: `$ python3 -m pip install mypy`.
 3. This installed mypy tool.
 4. Then i tried to run one sample file on it in command prompt with command `$ mypy program.py`
 5. This command shows us how many errors are there in the file.
- Repository link that i referred:

<https://github.com/donnemartin/system-design-primer.git>

ASSIGNMENT

Call Center programme

```
C:\Windows\System32\cmd.exe

C:\Users\student\Downloads\system-design-primer-master\solutions\object_oriented_design\call_center>python -m mypy call_center.py
Success: no issues found in 1 source file

C:\Users\student\Downloads\system-design-primer-master\solutions\object_oriented_design\call_center>python -m mypy _init_.py
mypy: can't read file '_init_.py': No such file or directory

C:\Users\student\Downloads\system-design-primer-master\solutions\object_oriented_design\call_center>python -m mypy __init__.py
Success: no issues found in 1 source file

C:\Users\student\Downloads\system-design-primer-master\solutions\object_oriented_design\call_center>
```

Deck of cards

```
C:\Windows\System32\cmd.exe

Microsoft Windows [Version 10.0.19044.1826]
(c) Microsoft Corporation. All rights reserved.

C:\Users\student\Downloads\system-design-primer-master\solutions\object_oriented_design\deck_of_cards>python -m mypy deck_of_cards.py
Success: no issues found in 1 source file

C:\Users\student\Downloads\system-design-primer-master\solutions\object_oriented_design\deck_of_cards>python -m mypy __init__.py
Success: no issues found in 1 source file

C:\Users\student\Downloads\system-design-primer-master\solutions\object_oriented_design\deck_of_cards>
```

Hash Table

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19044.1826]
(c) Microsoft Corporation. All rights reserved.

C:\Users\student\Downloads\system-design-primer-master\solutions\object_oriented_design\hash_table>python -m mypy hash_map.py
Success: no issues found in 1 source file

C:\Users\student\Downloads\system-design-primer-master\solutions\object_oriented_design\hash_table>
C:\Users\student\Downloads\system-design-primer-master\solutions\object_oriented_design\hash_table>python -m mypy __init__.py
Success: no issues found in 1 source file

C:\Users\student\Downloads\system-design-primer-master\solutions\object_oriented_design\hash_table>
```

Mint

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19044.1826]
(c) Microsoft Corporation. All rights reserved.

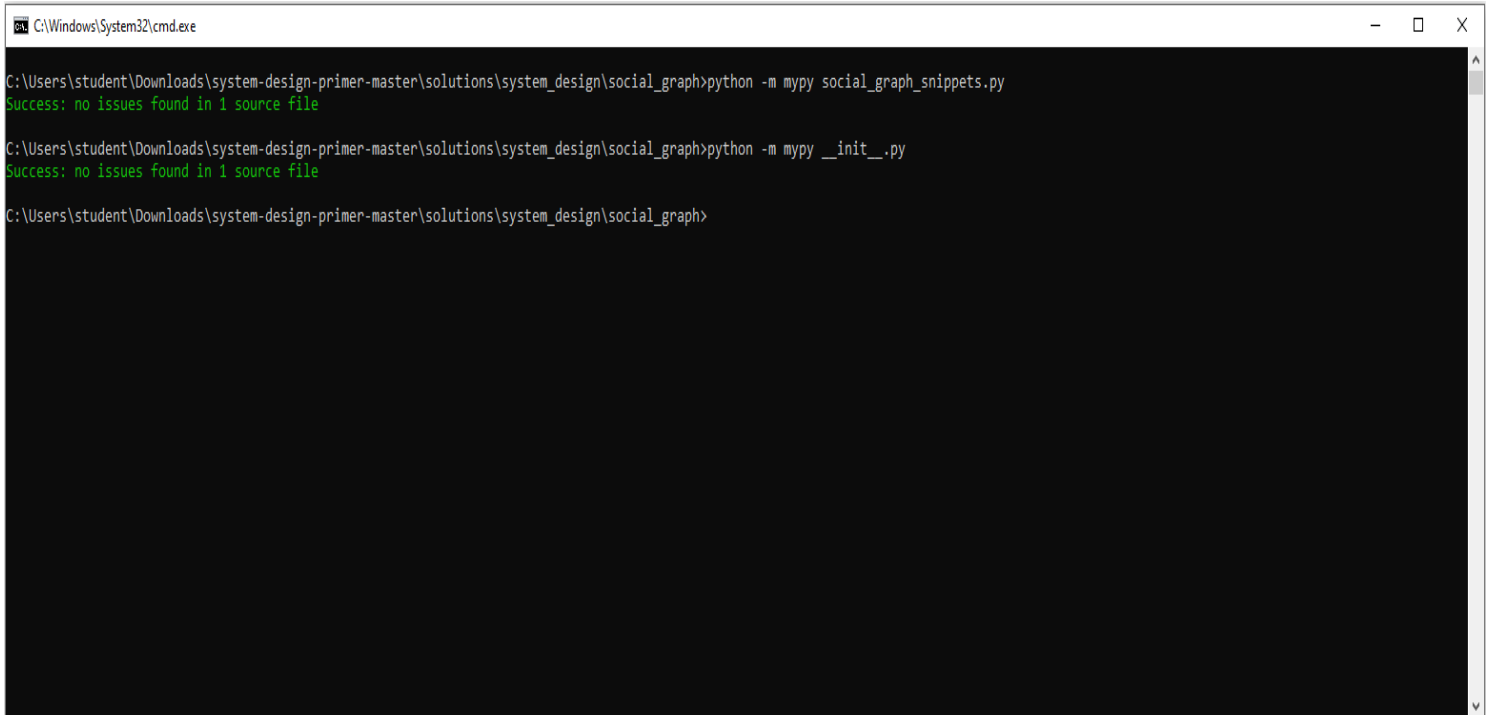
C:\Users\student\Downloads\system-design-primer-master\solutions\system_design\mint>python -m mypy mint_mapreduce.py
mint_mapreduce.py:3: error: Cannot find implementation or library stub for module named "mrjob.job" [import]
mint_mapreduce.py:3: note: See https://mypy.readthedocs.io/en/stable/running_mypy.html#missing-imports
Found 1 error in 1 file (checked 1 source file)

C:\Users\student\Downloads\system-design-primer-master\solutions\system_design\mint>python -m mypy mint_snippets.py
Success: no issues found in 1 source file

C:\Users\student\Downloads\system-design-primer-master\solutions\system_design\mint>python -m mypy __init__.py
Success: no issues found in 1 source file

C:\Users\student\Downloads\system-design-primer-master\solutions\system_design\mint>
```

Social graph



```
C:\Windows\System32\cmd.exe

C:\Users\student\Downloads\system-design-primer-master\solutions\system_design\social_graph>python -m mypy social_graph_snippets.py
Success: no issues found in 1 source file

C:\Users\student\Downloads\system-design-primer-master\solutions\system_design\social_graph>python -m mypy __init__.py
Success: no issues found in 1 source file

C:\Users\student\Downloads\system-design-primer-master\solutions\system_design\social_graph>
```