

Queen's University

**Assignment:
Quinterac part 6**

**Course:
CMPE 327**

**Prepared for:
Lecturer: Ding, Steven**

**Group Number:
23**

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Daily and Weekly Script

```
1  # Imports from the backend and frontend of Quinterac
2  import backend as backend
3  import front_end as front_end
4  from importlib import reload
5
6  # runs a daily session
7  def dailySession():
8      #reset all variables in the front end file
9      reload(front_end)
10     #call front end's main function
11     front_end.main()
12
13     infile = open("tsf.txt", "r")
14     lines = infile.read().splitlines()
15
16     outfile = open("tsf.txt", "w")
17     #fix format of the merged tsf file, removing duplicate EOS lines
18     for i in lines:
19         if (i != "EOS 0000000 000 0000000 ***"):
20             outfile.write(i + "\n")
21     outfile.write("EOS 0000000 000 0000000 ***")
22     outfile.close()
23
24     #call back end's main function
25     backend.main()
26
```

```
27
28 # Driver main file
29 def main():
30     # loop the daily driver code for 5 days
31     for i in range(5):
32         while(True):
33             next = input("Press enter to continue to next day. \n")
34             if (next == ''):
35                 print("Day " + str(i + 1))
36                 dailySession()
37                 break
38             else:
39                 print('You typed some text before pressing enter.')
40
41 main()
```

Transaction Session Inputs and Outputs for a Week

Day 1: Session 1:

- login, agent
- createacct, 1234567, BobRoss99
- logout

Day 1: Session 2:

- login, agent
- createacct, 1357924, IronMan2008
- logout

Day 1: Session 3:

- login, agent
- createacct, 2424242, DonaldTrump2016
- logout, exit

Day 1 Transaction Summary File:

```
NEW 1234567 000 0000000 BobRoss99
NEW 1357924 000 0000000 IronMan2008
NEW 2424242 000 0000000 DonaldTrump2016
EOS 0000000 000 0000000 ***
```

Day 1 Master Accounts File:

```
1234567 500000 BobRoss99
1357924 500000 IronMan2008
2424242 500000 DonaldTrump2016
```

Day 2: Session 1:

- login, agent
- createacct, 1111111, KimJungGi
- deposit, 1234567, 100000
- logout

Day 2: Session 2:

- login, atm
- withdraw, 1357924, 100000
- transfer, 1234567, 2424242, 100000
- logout

Day 2: Session 3:

- login, atm
- deposit, 2424242, 100000
- withdraw, 1234567, 200000
- logout, exit

Day 2 Transaction Summary File:

```
NEW 1111111 000 0000000 KimJungGi
DEP 1234567 100000 0000000 ***
WDR 1357924 100000 0000000 ***
XFR 2424242 100000 1234567 ***
DEP 2424242 100000 0000000 ***
WDR 1234567 200000 0000000 ***
EOS 0000000 000 0000000 ***
```

Day 2 Master Accounts File:

```
1111111 500000 KimJungGi
1234567 300000 BobRoss99
1357924 400000 IronMan2008
2424242 700000 DonaldTrump2016
```

Day 3: Session 1:

- login, atm
- deposit, 1111111, 200000
- logout

Day 3: Session 2:

- login, atm
- withdraw, 1357924, 100000
- logout

Day 3: Session 3:

- login, atm
- transfer, 2424242, 1234567, 200000
- logout, exit

Day 3 Transaction Summary File:

```
DEP 1111111 200000 0000000 ***
WDR 1357924 100000 0000000 ***
XFR 1234567 200000 2424242 ***
EOS 0000000 000 0000000 ***
```

Day 3 Master Accounts File:

```
1111111 700000 KimJungGi
1234567 500000 BobRoss99
1357924 300000 IronMan2008
2424242 500000 DonaldTrump2016
```

Day 4: Session 1:

- login, atm
- transfer, 1111111, 1357924, 200000
- deposit, 1111111, 100000
- logout

Day 4: Session 2:

- login, agent
- createacct, 2222222, JamesBond
- deposit, 1234567, 100000
- logout

Day 4: Session 3:

- login, atm
- deposit, 1357924, 100000
- deposit, 2424242, 100000
- logout, exit

Day 4 Transaction Summary File:

```
XFR 1357924 200000 1111111 ***
DEP 1111111 100000 0000000 ***
NEW 2222222 000 0000000 JamesBond
DEP 1234567 100000 0000000 ***
DEP 1357924 100000 0000000 ***
DEP 2424242 100000 0000000 ***
EOS 0000000 000 0000000 ***
```

Day 4 Master Accounts File:

```
1111111 600000 KimJungGi
1234567 600000 BobRoss99
1357924 600000 IronMan2008
2222222 600000 JamesBond
2424242 500000 DonaldTrump2016
```

Day 5: Session 1:

- login, atm
- deposit, 2424242, 100000
- withdraw, 1111111, 600000
- logout

Day 5: Session 2:

- login, atm
- deleteacct, 1111111, KimJungGi
- logout

Day 5: Session 3:

- login, atm
- withdraw, 1234567, 300000
- logout, exit

Day 5 Transaction Summary File:

```
DEP 1357924 100000 0000000 ***
DEP 2424242 100000 0000000 ***
DEP 2424242 100000 0000000 ***
WDR 1111111 600000 0000000 ***
DEL 1111111 000 0000000 KimJungGi
WDR 1234567 300000 0000000 ***
EOS 0000000 000 0000000 ***
```

Day 5 Master Accounts File:

```
1234567 300000 BobRoss99
1357924 600000 IronMan2008
2222222 500000 JamesBond
2424242 700000 DonaldTrump2016
```

Integration Defect Table

Error	Fix
I/O operation error for file TSF.txt	In driver.py, line 22 a close file must be add after the file is written, since tsf.txt cannot be written and read at the same time. Text file was being written in the driver code, and then also read in the backend.
Error in front end where TSF codes from previous days were not cleared in TSF.txt	The front end must be reloaded, using the reload() function at the start of each new day in the driver code to reset all its internal variables and lists.
PermissionError: [Errno 13] Permission denied for TSF.txt when backend.py tried to open in line 87	Changed the open file parameters from r+ to r.
Frontend error where the direction in which money is transferred is incorrect (the from and to is switched).	Fix was made by changing the transfer transaction code in front end, so the money is transferred in the right direction.