CMPE 327 Assignment 6

CMPE 327  
Assignment 6  
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# Source Listing

## Weekly Script

|  |  |
| --- | --- |
|  | #!/bin/bash |
|  | echo 'Starting weekly run...' |
|  | for DAY in 1 2 3 4 5 |
|  | do |
|  | echo "Starting Day $DAY" |
|  |  |
|  | if [[ $DAY != 1 ]]; then |
|  | # Move the previous days results into the input of this day |
|  | PREV=$(($DAY - 1)) |
|  | cp "./outputs/day$PREV/newaccounts.txt" "./inputs/day$DAY/accounts.txt" |
|  | cp "./outputs/day$PREV/newmasteraccounts.txt" "./inputs/day$DAY/masteraccounts.txt" |
|  | fi |
|  |  |
|  | ./daily.sh $DAY |
|  | done |
|  | echo 'Done all 5 iterations of the week' |

## Daily Script

|  |
| --- |
|  |
|  | #!/bin/bash |
|  | # Expects the day to be the first command line options passed to the file |
|  |  |
|  | ORIGDIR=`pwd` |
|  | NUMSESSIONS=3 |
|  | DAY="day$1" |
|  | NEXTDAY=$(($1 + 1)) |
|  | INDIR="$ORIGDIR/inputs/$DAY" |
|  | OUTDIR="$ORIGDIR/outputs/$DAY" |
|  |  |
|  |  |
|  | # Run each session of the front end for the given day |
|  | for i in `seq $NUMSESSIONS` |
|  | do |
|  | echo "Running session $i on $DAY..." |
|  | python "$ORIGDIR/src/frontend/main.py" "$INDIR/accounts.txt" "$OUTDIR/transaction$i.txt" \ |
|  | < "$INDIR/session$i.txt" > "$OUTDIR/session$i.log" |
|  | done |
|  |  |
|  | # Combine the transaction files produced by these sessions |
|  | # into a merged transaction file |
|  | echo "Merging transaction files..." |
|  | rm -f "$OUTDIR/mergedtransactions.txt" |
|  |  |
|  | for j in `seq $NUMSESSIONS` |
|  | do |
|  | echo "`cat "$OUTDIR/transaction$j.txt"`" >> "$OUTDIR/mergedtransactions.txt" |
|  | done |
|  | echo "EOS 0000000 000 0000000 \*\*\*" >> "$OUTDIR/mergedtransactions.txt" |
|  | echo "Done." |
|  |  |
|  | # Run the backoffice on this new transaction file |
|  | echo "Running backoffice for $DAY..." |
|  | python "$ORIGDIR/src/backend/backend.py" "$OUTDIR/mergedtransactions.txt" "$INDIR/masteraccounts.txt" "$OUTDIR/newmasteraccounts.txt" "$OUTDIR/newaccounts.txt" |
|  | echo "Done." |

# Daily Run

## Transaction Session Inputs

### Session 1

login

machine

deposit

1000001

1111111

deposit

1000002

100

logout

### Session 2

login

agent

deposit

1000003

1300000

Logout

### Session 3

login

machine

deposit

1000001

900

withdraw

1000002

100

logout

## Merged Transaction Summary

DEP 1000002 100 0000000 \*\*\*

EOS 0000000 000 0000000 \*\*\*

DEP 1000003 1300000 0000000 \*\*\*

EOS 0000000 000 0000000 \*\*\*

DEP 1000001 900 0000000 \*\*\*

WDR 1000002 100 0000000 \*\*\*

EOS 0000000 000 0000000 \*\*\*

EOS 0000000 000 0000000 \*\*\*

# Weekly Run

Below are the master accounts files produced by the weekly script – the files are ordered by day, descending.

## Day 1

1000001 000 test1

1000002 000 test2

1000003 000 test3

## Day 2

1000001 900 test1

1000002 000 test2

1000003 1300000 test3

## Day 3

1000001 99300 test1

1000002 1000 test2

1000003 2590000 test3

## Day 4

1000001 2702400 test1

1000002 900 test2

## Day 5

1000001 2703300 test1

1000002 10000 test2

1000004 000 test4

# Integration Defect Report

Several errors were found in the code during integration, solely in the backend.

|  |  |
| --- | --- |
| Problem | Resolution |
| The accounts.mergesort function was not properly referenced, causing crashes | Added a reference to self, i.e self.mergesort, wherever it was called, and added the self parameter to the function signature. |
| The accounts.addAccoutn function was rejecting accounts that exist | There was an invalid Boolean check – changed is None to is not None inside addAccount. |
| The output master accounts file was not showing the 000 required for an empty balance amount | The integer for account.balance was being directly put into the file – formatting and string conversion were added to ensure that when a number is less than 3 digits the appropriate amount of 0s were prepended to the string. |
| The program’s check for the EOS command being repeated and therefore ending the cycle seemed to be failing | Incorrect syntax (is vs ==) was being used and was rectified in commands.py’s EOS function. |
| Accounts.addAccount was not casting its account number string input to an integer, which was causing problems in several commands as the stored value did not behave as expected. | Cast the input to a number. |
| Anything using an account number seemed to have problems with comparisons. | Found bugs in several functions within the accounts object where input strings were not cast to an int, added the cast. |
| Valid account files were missing the last entry, 0000000 | The addition of that line was absent from the accounts.finish function, added it in. |

# Work Estimate

## Omar Sandarusi

Estimated hours: 5

Worked on testing the application and integration, took the script output and formatted the document.

## Jonathan Turcotte

Estimated hours: 5

Worked on testing the application and integration, ran the script and presented the resulting files.