Screenshot File for Enterprise Computing Project 2

Simulation starting along with Deposit, Withdraw, and Flags being shown:

```
* * * SIMULATION BEGINNING * * *
Deposit Agents:
                                Withdrawal Agents:
                                                                                        Balances:
                                                                                                                         Transaction Number:
Agent DT1 deposits $363 into: JA-1
                                                                             (+) JA-1 balance is $363
Agent DT2 deposits $550 into: JA-2
Agent DT4 deposits $481 into: JA-1
                                                                             (+) JA-2 balance is $550
(+) JA-1 balance is $844
***Flagged Transaction***Agent DT4 made a deposit in excess of $450.00 USD - See Flagged Transaction Log.
***Flagged Transaction***Agent DT2 made a deposit in excess of $450.00 USD - See Flagged Transaction Log.
Agent DT3 deposits $4 into: JA-2 (+) JA-2 balance is $554 4
Agent DT5 deposits $593 into: JA-1 (+) JA-1 balance is $1437 5

***Flagged Transaction***Agent DT5 made a deposit in excess of $450.00 USD - See Flagged Transaction Log.
                     Agent WT2 withdraws $32 from JA-2
Agent WT3 withdraws $82 from JA-2
                                                                            (-) JA-2 balance is $522
(-) JA-2 balance is $440
                     Agent WT4 withdraws $50 from JA-2
                                                                             (-) JA-2 balance is $390
                     Agent WT5 withdraws $11 from JA-2
                                                                             (-) JA-2 balance is $379
                     Agent WT1 withdraws $30 from JA-1
                                                                             (-) JA-1 balance is $1407
                                                                                                                                    10
                      Agent WT8 withdraws $23 from JA-1
                                                                                  JA-1 balance is $1384
                     Agent WT6 withdraws $83 from JA-2
Agent WT10 withdraws $90 from JA-1
                                                                             (-) JA-2 balance is $296
                                                                                                                                    12
                                                                             (-) JA-1 balance is $1294
                                                                                                                                    13
                      Agent WT7 withdraws $85 from JA-2
                                                                             (-) JA-2 balance is $211
***Flagged Transaction***Agent WT10 made a withdrawal in excess of $90.00 USD - See Flagged Transaction Log.
                     Agent WT9 withdraws $37 from JA-2
                                                                             (-) JA-2 balance is $174
```

All 10 withdrawal agents being blocked:

```
***** WITHDRAWAL BLOCKED ******
                 Agent WT5 attempts to withdraw $42 from JA-2
                                                                              !INSUFFICIENT FUNDS!
                                                                                Balance only $5
Agent DT3 demosits $77 into: JA-2
                                                               (+) JA-2 balance is $82
                                                                                                            131
                                                                       ***** WITHDRAWAL BLOCKED *****
                 Agent WT10 attempts to withdraw $16 from JA-2
                                                                              !INSUFFICIENT FUNDS!
Balance only $4
                                                                       ***** WITHDRAWAL BLOCKED *
                 Agent WT7 attempts to withdraw $93 from JA-2
                                                                              !INSUFFICIENT FUNDS!
                                                                       Balance only $4
****** WITHDRAWAL BLOCKED ******
                 Agent WT3 attempts to withdraw $23 from JA-2
                                                                              !INSUFFICIENT FUNDS!
                                                                       Balance only $4
****** WITHDRAWAL BLOCKED ******
                 Agent WT8 attempts to withdraw $64 from JA-2
                                                                              !INSUFFICIENT FUNDS!
                                                                                Balance only $4
                                                                       ***** WITHDRAWAL BLOCKED ******
!INSUFFICIENT FUNDS!
                 Agent WT9 attempts to withdraw $62 from JA-2
                                                                       Balance only $4
****** WITHDRAWAL BLOCKED ******
                 Agent WT6 attempts to withdraw $12 from JA-2
                                                                              !INSUFFICIENT FUNDS!
Balance only $4
                                                                       ***** WITHDRAWAL BLOCKED *****
                 Agent WT4 attempts to withdraw $48 from JA-2
                                                                              !INSUFFICIENT FUNDS!
                                                                       Balance only $4
****** WITHDRAWAL BLOCKED ******
                 Agent WT1 attempts to withdraw $62 from JA-2
                                                                              !INSUFFICIENT FUNDS!
                                                                        Balance only $4
****** WITHDRAWAL BLOCKED **
                 Agent WT5 attempts to withdraw $42 from JA-2
                                                                              !INSUFFICIENT FUNDS!
                                                                                Balance only $4
                                                                       ***** WITHDRAWAL BLOCKED ******
!INSUFFICIENT FUNDS!
                 Agent WT2 attempts to withdraw $16 from JA-2
                                                                                Balance only $4
                                                                                                            133
Agent DT3 deposits $315 into: JA-1
TRANSFER-->Agent TR2 attempts to transfer $41 from JA-2
```

Transfer scenarios showing successful and blocked transfers:

```
Agent DT4 deposits $562 into: JA-1
                                                       (+) JA-1 balance is $2473
                                                 in excess of $450.00 USD - See Flagged Transaction Log.
TRANSFER-->Agent TR2 attempts to transfer $87 from JA-2
 *****TRANSFER BLOCKED*****
     INSUFFICIENT FUNDS
  JA-2 balance is only $6
                                                       (-) JA-1 balance is $2408
                                   שע trom JA-1
                Agent WT4 attempts to withdraw $14 from JA-2 ****** WITHDRAWAL BLOCKED ******
                                                                   !INSUFFICIENT FUNDS!
                                                                      Balance only $6
                                                              ***** WITHDRAWAL BLOCKED *****
               Agent WT2 attempts to withdraw $53 from JA-2
                                                                    !INSUFFICIENT FUNDS!
                                                                       Balance only $6
                Agent WT10 attempts to withdraw $46 from JA-2 ****** WITHDRAWAL BLOCKED ******
                                                                     LINSUFFICIENT FUNDS!
TRANSFER--->Agent TR2 transferring $80 from JA-1 to JA-2 --> JA-1 balance is now $2328
                                                                                               46
TRANSFER COMPLETE
                                                          JA-2 balance is now $86
Agent DT3 deposits $134 into: JA-2
                                                       (+) JA-2 balance is $220
                                                                                               47
               Agent WT7 withdraws $69 from JA-2
                                                       (-) JA-2 balance is $151
                                                                                               48
                Agent WT6 withdraws $65 from JA-2
                                                       (-) JA-2 balance is $86
                                                                                               49
                 tent WT3 withdraws $10 from 11-2
```

Internal Bank Audit:

```
!INSUFFICIENT FUNDS!
                                                                   Balance only $8
              Agent WT6 withdraws $93 from JA-1
                                                   (-) JA-1 balance is $1662
***Flagged Transaction***Agent WT6 made a withdrawal in excess of $90.00 USD - See Flagged Transaction Log.
Internal Bank Audit Beginning...
       The total number of transactions since last Internal Audit is: 151
       INTERNAL BANK AUDITOR FINDS CURRENT ACCOUNT BALANCE FOR JA-1 TO BE: $1662
       INTERNAL BANK AUDITOR FINDS CURRENT ACCOUNT BALANCE FOR JA-2 TO BE: $8
Internal Bank Audit Complete.
   *************************************
              Agent WT6 attempts to withdraw $12 from JA-2 ****** WITHDRAWAL BLOCKED ******
                                                                !INSUFFICIENT FUNDS!
                                                                  Balance only $8
Agent DT4 deposits $116 into: JA-1
                                                    (+) JA-1 balance is $1778
Agent DT5 deposits $125 into: JA-2
                                                    (+) JA-2 balance is $133
```

Treasury Audit:

```
Agent WT2 attempts to withdraw $12 from JA-1
                                                          ***** WITHDRAWAL BLOCKED *****
                                                                !INSUFFICIENT FUNDS!
                                                                 Balance only $0
                                             Daiance C
(-) JA-2 balance is $475
              Agent WT8 withdraws $40 from JA-2
                                                                                       1472
UNITED STATES DEPARTMENT OF THE TREASURY - Bank Audit Beginning...
       The total number of transactions since last Treasury Department Audit is: 506
       TREASURY DEPT AUDITOR FINDS CURRENT ACCOUNT BALANCE FOR JA-1 TO BE: $0
       TREASURY DEPT AUDITOR FINDS CURRENT ACCOUNT BALANCE FOR JA-2 TO BE: $475
Treasury Department Audit Complete.
*************************
Agent DT5 deposits $177 into: JA-2
                                                   (+) JA-2 balance is $652
                                                                                       1473
Agent DT3 deposits $301 into: JA-2
                                                   (+) JA-2 balance is $953
                                                                                        1474
```

transactions.csv preview:

```
transactions - Notepac
File Edit Format View Help
Agent DT4 issued deposit
                                   of $496.00
                                                   at:09/16/2024 15:49:27 FDT
                                                                                     Transaction Number : 3
Agent WT3 issued withdrawal
                                   of $94.00
                                                   at:09/16/2024 15:49:27 EDT
                                                                                     Transaction Number:
Agent WT10 issued withdrawal
                                   of $92.00
                                                   at:09/16/2024 15:49:27 EDT
                                                                                     Transaction Number: 15
Agent WT3 issued withdrawal
                                                   at:09/16/2024 15:49:27 EDT
                                   of $94.00
                                                                                     Transaction Number: 27
Agent WT5 issued withdrawal
Agent WT1 issued withdrawal
                                   of $92.00
                                                   at:09/16/2024 15:49:27 EDT
at:09/16/2024 15:49:27 EDT
                                                                                     Transaction Number : 30
                                   of $91.00
                                                                                     Transaction Number: 46
Agent DT5 issued deposit
Agent DT2 issued deposit
                                                   at:09/16/2024 15:49:27 EDT
at:09/16/2024 15:49:28 EDT
                                   of $545.00
                                                                                     Transaction Number: 47
                                   of $501.00
                                                                                     Transaction Number: 48
                                                   at:09/16/2024 15:49:28 EDT
at:09/16/2024 15:49:28 EDT
Agent WT1 issued withdrawal
                                   of $90.00
                                                                                     Transaction Number: 58
Agent DT1 issued deposit
                                   of $585.00
                                                                                     Transaction Number: 81
Agent WT1 issued withdrawal
                                   of $93.00
                                                   at:09/16/2024 15:49:28 EDT
                                                                                     Transaction Number: 89
Agent WT9 issued withdrawal
                                   of $97.00
                                                   at:09/16/2024 15:49:28 EDT
                                                                                     Transaction Number: 90
Agent DT1 issued deposit
                                   of $569.00
                                                   at:09/16/2024 15:49:28 EDT
                                                                                      Transaction Number :
Agent WT7 issued withdrawal
                                                   at:09/16/2024 15:49:28 EDT
                                   of $98.00
                                                                                     Transaction Number: 94
Agent DT4 issued deposit
                                   of $456.00
                                                   at:09/16/2024 15:49:28 EDT
                                                                                     Transaction Number :
Agent WT10 issued withdrawal
                                                   at:09/16/2024 15:49:28 EDT
                                   of $95.00
                                                                                     Transaction Number: 120
Agent WT5 issued withdrawal
                                   of $96.00
                                                   at:09/16/2024 15:49:28 EDT
                                                                                      Transaction Number :
Agent WT1 issued withdrawal
                                   of $90.00
                                                   at:09/16/2024 15:49:28 EDT
                                                                                     Transaction Number: 131
                                                   at:09/16/2024 15:49:29 EDT
Agent DT4 issued deposit
                                   of $536.00
                                                                                      Transaction Number
Agent WT5 issued withdrawal
                                   of $92.00
                                                   at:09/16/2024 15:49:29 EDT
                                                                                     Transaction Number: 151
Agent WT4 issued withdrawal
                                                   at:09/16/2024 15:49:29 EDT
                                                                                      Transaction Number :
Agent DT4 issued deposit
                                   of $521.00
                                                   at:09/16/2024 15:49:29 EDT
                                                                                     Transaction Number: 162
Agent WT7 issued withdrawal
                                   of $97.00
                                                   at:09/16/2024 15:49:29 EDT
                                                                                     Transaction Number :
Agent WT1 issued withdrawal
                                   of $94.00
                                                   at:09/16/2024 15:49:29 EDT
                                                                                     Transaction Number: 168
Agent WT8 issued withdrawal
                                                   at:09/16/2024 15:49:29 EDT
                                   of $91.00
                                                                                      Transaction Number : 173
                                                   at:09/16/2024 15:49:29 EDT
Agent WT2 issued withdrawal
                                   of $97.00
                                                                                     Transaction Number: 178
Agent DT5 issued deposit
                                   of $504.00
                                                   at:09/16/2024 15:49:30 EDT
                                                                                     Transaction Number: 207
Agent DT2 issued deposit
                                   of $479.00
                                                   at:09/16/2024 15:49:30 EDT
                                                                                     Transaction Number: 213
Agent DT5 issued deposit
                                   of $470.00
                                                   at:09/16/2024 15:49:30 EDT
                                                                                     Transaction Number : 216
Agent WT2 issued withdrawal
                                   of $94.00
                                                   at:09/16/2024 15:49:30 EDT
                                                                                     Transaction Number: 223
Agent WT1 issued withdrawal
                                   of $92.00
                                                   at:09/16/2024 15:49:30 EDT
                                                                                     Transaction Number: 229
Agent WT4 issued withdrawal
                                   of $94.00
                                                   at:09/16/2024 15:49:30 EDT
                                                                                     Transaction Number: 232
Agent WT3 issued withdrawal
                                   of $95.00
                                                   at:09/16/2024 15:49:30 EDT
                                                                                     Transaction Number: 240
Agent DT1 issued deposit
                                   of $488.00
                                                   at:09/16/2024 15:49:31 EDT
                                                                                     Transaction Number: 250
                                   of $95.00
                                                   at:09/16/2024 15:49:31 EDT
Agent WT4 issued withdrawal
                                                                                     Transaction Number: 252
Agent WT1 issued withdrawal
                                   of $98.00
                                                   at:09/16/2024 15:49:31 EDT
at:09/16/2024 15:49:31 EDT
                                                                                     Transaction Number :
Agent WT6 issued withdrawal
                                   of $97.00
                                                                                     Transaction Number:
                                                                                                           255
                                                    at:09/16/2024 15:49:31
```

Screenshot towards end of run showing depreciation of account towards \$0:

```
ConsoleOutputOfSim - Notepad
ile Edit Format View Help
                                                                                           Balance only $9
Agent DT1 deposits $137 into: JA-1
                                                                       (+) JA-1 balance is $146
                    Agent WT8 withdraws $94 from JA-1
                                                                       (-) JA-1 balance is $52
                                                                                                                          2151
***Flagged Transaction***Agent WT8 made a withdrawal in excess of $90.00 USD - See Flagged Transaction Log.

Agent WT1 attempts to withdraw $59 from JA-1  ****** WITHDRAWAL BLOCKED ******
                                                                                        !INSUFFICIENT FUNDS!
                                                                                           Balance only $52
                                                                                                                          2152 🥊
                    Agent WT6 withdraws $34 from JA-1
                                                                       (-) JA-1 balance is $18
                    Agent WT7 attempts to withdraw $75 from JA-1
                                                                                          WITHDRAWAL BLOCKED *****
                                                                                        !INSUFFICIENT FUNDS!
                                                                                           Balance only $18
                                                                               ***** WITHDRAWAL BLOCKED *
                    Agent WT3 attempts to withdraw $88 from JA-1
                                                                                        !INSUFFICIENT FUNDS!
                                                                                           Balance only $18
                    Agent WT10 attempts to withdraw $19 from JA-1 ****** WITHDRAWAL BLOCKED ******
                                                                                        !INSUFFICIENT FUNDS!
                                                                                 Balance only $18
****** WITHDRAWAL BLOCKED ******
                    Agent WT4 attempts to withdraw $60 from JA-1
                                                                                         !INSUFFICIENT FUNDS!
                                                                                           Balance only $18
                                                                                 ***** WITHDRAWAL BLOCKED ******
                    Agent WT9 attempts to withdraw $56 from JA-1
                                                                                        !INSUFFICIENT FUNDS!
                                                                                 Balance only $18
****** WITHDRAWAL BLOCKED ******
                    Agent WT5 attempts to withdraw $91 from JA-1
                                                                                         !INSUFFICIENT FUNDS!
                                                                                 Balance only $18
****** WITHDRAWAL BLOCKED ******
                    Agent WT2 attempts to withdraw $74 from JA-1
                                                                                         !INSUFFICIENT FUNDS!
                                                                                 Balance only $18
****** WITHDRAWAL BLOCKED ****
!INSUFFICIENT FUNDS!
                    Agent WT6 attempts to withdraw $3 from JA-2
(-) JA-1 balance is $337
(-) JA-1 balance is $277
                    Agent WT10 withdraws $19 from JA-1
Agent WT4 withdraws $60 from JA-1
Agent WT9 withdraws $56 from JA-1 (-) JA-1 balance is $221 2159
Agent WT9 withdraws $56 from JA-1 (-) JA-1 balance is $221 2159
Agent WT5 withdraws $71 from JA-1 (-) JA-1 balance is $130 2160
***Flagged Transaction***Agent WT5 made a withdrawal in excess of $90.00 USD - See Flagged Transaction Log.
Agent WT2 withdraws $74 from JA-1 (-) JA-1 balance is $56 2161
```