

## Assignment #2

Worth: 10% of final grade

### Account Ticketing System

Milestone	Worth	Due Date	Submission Required
1	10%	(Suggested Target: November 16 <sup>th</sup> )	NO
2	40%	November 19 <sup>th</sup> by 23:59 EST (end of Week 10)	YES
3	10%	(Suggested Target: November 26 <sup>th</sup> )	NO
4	40%	December 3 <sup>rd</sup> by 23:59 EST (end of Week 12)	YES

### A2-MS2: Sample Output (**SHORT**)

The SHORT submission option will qualify you to **potentially earn a maximum of 70% (B)**.

Also available, is a text file "**A2MS2-SHORT\_Inputs.txt**" which contains only the user inputs and can be used to help automate testing your work by copying and pasting it into your command window.

```

=====
Account Ticketing System - Login
=====
1) Login to the system
0) Exit application
-----

Selection: 2
ERROR: Value must be between 0 and 1 inclusive: 0

Are you sure you want to exit? ([Y]es|[N]o): n

=====
Account Ticketing System - Login
=====
1) Login to the system
0) Exit application
-----

Selection: 1

Enter the account#: 30004
User Login       : agentJ
Password        : TT*&21tt
INVALID user login/password combination! [attempts remaining:2]

Enter the account#: 50008
User Login       : userA
Password        : TT*&21tt
INVALID user login/password combination! [attempts remaining:1]

```

```
Enter the account#: 50008
User Login       : agentJ
Password        : 12345678
INVALID user login/password combination! [attempts remaining:0]
```

ERROR: Access Denied.

<< ENTER key to Continue... >>

=====  
Account Ticketing System - Login  
=====

- 1) Login to the system
- 0) Exit application

-----  
Selection: 1

```
Enter the account#: 50008
User Login       : agentJ
Password        : TT*&21tt
```

AGENT: Will Smith (50008)

=====  
Account Ticketing System - Agent Menu  
=====

- 1) Add a new account
- 2) Modify an existing account
- 3) Remove an account
- 4) List accounts: detailed view

- 
- 5) List new tickets
  - 6) List active tickets
  - 7) List closed tickets
  - 8) Add a new ticket
  - 9) Manage a ticket

-----  
0) Logout

Selection: 4

Acct#	Acct.Type	Full Name	Birth	Income	Country	Login	Password
-----	-----	-----	-----	-----	-----	-----	-----
30001	CUSTOMER	Silly Sally	1990	150000.10	CANADA		
50599	AGENT	Fred Flintstone	1972	2250400.22	AFRICA	agent1	y*b*##@*
30004	CUSTOMER	Betty Boop	1978	250800.74	INDIA		
50008	AGENT	Will Smith	1952	2350600.82	U.S.A.	agentJ	T***2*t*
30020	CUSTOMER	Shrimpy Shrimp	2000	350500.35	KOREA		

<< ENTER key to Continue... >>

AGENT: Will Smith (50008)

=====  
Account Ticketing System - Agent Menu  
=====

- 1) Add a new account
- 2) Modify an existing account

- 3) Remove an account
- 4) List accounts: detailed view

- 5) List new tickets
- 6) List active tickets
- 7) List closed tickets
- 8) Add a new ticket
- 9) Manage a ticket

0) Logout

Selection: **6**

Ticket	Acct#	Full Name	Status	Subject	Messages
060001	30004	Betty Boop	ACTIVE	Frequent Disconnects	5
080599	30001	Silly Sally	ACTIVE	No power/does not turn on	1
080004	30020	Shrimpy Shrimp	ACTIVE	My head hurts!	3
080020	30020	Shrimpy Shrimp	ACTIVE	It's broken/does not work	5

Enter the ticket number to view the messages or  
0 to return to previous menu: **80004**

=====

080004 (ACTIVE) Re: My head hurts!

=====

CUSTOMER (Shrimpy Shrimp):

When the unit is placed on my head it hurts.

AGENT (Will Smith):

Don't place it on your head.

CUSTOMER (Shrimpy Shrimp):

I don't understand - why not?

<< ENTER key to Continue... >>

Ticket	Acct#	Full Name	Status	Subject	Messages
060001	30004	Betty Boop	ACTIVE	Frequent Disconnects	5
080599	30001	Silly Sally	ACTIVE	No power/does not turn on	1
080004	30020	Shrimpy Shrimp	ACTIVE	My head hurts!	3
080020	30020	Shrimpy Shrimp	ACTIVE	It's broken/does not work	5

Enter the ticket number to view the messages or  
0 to return to previous menu: **0**

AGENT: Will Smith (50008)

=====

Account Ticketing System - Agent Menu

=====

- 1) Add a new account
- 2) Modify an existing account
- 3) Remove an account

```
4) List accounts: detailed view
-----
5) List new tickets
6) List active tickets
7) List closed tickets
8) Add a new ticket
9) Manage a ticket
-----
0) Logout

Selection: 1

ERROR: Account listing is FULL, call ITS Support!

<< ENTER key to Continue... >>

AGENT: Will Smith (50008)
=====
Account Ticketing System - Agent Menu
=====
1) Add a new account
2) Modify an existing account
3) Remove an account
4) List accounts: detailed view
-----
5) List new tickets
6) List active tickets
7) List closed tickets
8) Add a new ticket
9) Manage a ticket
-----
0) Logout

Selection: 3

Enter the account#: 30020

Acct# Acct.Type Full Name      Birth Income      Country  Login      Password
-----
30020 CUSTOMER  Shrimpy Shrimp    2000    350500.35 KOREA

Are you sure you want to remove this record? ([Y]es|[N]o): Y

*** Account Removed! (2 ticket(s) removed) ***

<< ENTER key to Continue... >>

AGENT: Will Smith (50008)
=====
Account Ticketing System - Agent Menu
=====
1) Add a new account
2) Modify an existing account
3) Remove an account
4) List accounts: detailed view
-----
5) List new tickets
6) List active tickets
```

```

7) List closed tickets
8) Add a new ticket
9) Manage a ticket
-----
0) Logout

Selection: 3

Enter the account#: 30001

Acct# Acct.Type Full Name      Birth Income      Country  Login      Password
-----
30001 CUSTOMER  Silly Sally      1990   150000.10 CANADA

Are you sure you want to remove this record? ([Y]es|[N]o): Y

*** Account Removed! (1 ticket(s) removed) ***

<< ENTER key to Continue... >>

AGENT: Will Smith (50008)
=====
Account Ticketing System - Agent Menu
=====
1) Add a new account
2) Modify an existing account
3) Remove an account
4) List accounts: detailed view
-----
5) List new tickets
6) List active tickets
7) List closed tickets
8) Add a new ticket
9) Manage a ticket
-----
0) Logout

Selection: 1

New Account Data (Account#:50600)
-----
Enter the account type (A=Agent | C=Customer): A

Person Data Input
-----
Enter the person's full name (30 chars max): Funny Phillis
Enter birth year (current age must be between 18 and 110): 2003
Enter the household Income: $765432.11
Enter the country (30 chars max.): Scotland

User Login Data Input
-----
Enter user login (10 chars max): agent Z
ERROR: The user login must NOT contain whitespace characters.
Enter user login (10 chars max): agentZ
Enter the password (must be 8 chars in length): TT-/tt88
SECURITY: Password must contain 2 of each:
Digit: 0-9

```

```
UPPERCASE character
lowercase character
symbol character: !@#$%^&*
Enter the password (must be 8 chars in length): TT@tt88
```

\*\*\* New account added! \*\*\*

<< ENTER key to Continue... >>

AGENT: Will Smith (50008)

=====
Account Ticketing System - Agent Menu
=====

- 1) Add a new account
- 2) Modify an existing account
- 3) Remove an account
- 4) List accounts: detailed view

- 
- 5) List new tickets
  - 6) List active tickets
  - 7) List closed tickets
  - 8) Add a new ticket
  - 9) Manage a ticket
- 

0) Logout

Selection: 2

Enter the account#: 50599

Update Account: 50599 (Fred Flintstone)

- 
- 1) Update account type (current value: A)
  - 2) Person
  - 3) Login
  - 0) Done

Selection: 1

Enter the account type (A=Agent | C=Customer): C

Update Account: 50599 (Fred Flintstone)

- 
- 1) Update account type (current value: C)
  - 2) Person
  - 3) Login
  - 0) Done

Selection: 2

Person Update Options

- 
- 1) Full name (current value: Fred Flintstone)
  - 2) Household Income (current value: \$2250400.22)
  - 3) Country (current value: AFRICA)
  - 0) Done

Selection: 1

Enter the person's full name (30 chars max): Happy Hillary

## Person Update Options

- 
- 1) Full name (current value: Happy Hillary)
  - 2) Household Income (current value: \$2250400.22)
  - 3) Country (current value: AFRICA)
  - 0) Done

Selection: 2

Enter the household Income: \$665544.33

## Person Update Options

- 
- 1) Full name (current value: Happy Hillary)
  - 2) Household Income (current value: \$665544.33)
  - 3) Country (current value: AFRICA)
  - 0) Done

Selection: 3

Enter the country (30 chars max.): Brazil

## Person Update Options

- 
- 1) Full name (current value: Happy Hillary)
  - 2) Household Income (current value: \$665544.33)
  - 3) Country (current value: BRAZIL)
  - 0) Done

Selection: 0

Update Account: 50599 (Happy Hillary)

- 
- 1) Update account type (current value: C)
  - 2) Person
  - 3) Login
  - 0) Done

Selection: 0

AGENT: Will Smith (50008)

## Account Ticketing System - Agent Menu

- =====
- 1) Add a new account
  - 2) Modify an existing account
  - 3) Remove an account
  - 4) List accounts: detailed view

- 
- 5) List new tickets
  - 6) List active tickets
  - 7) List closed tickets
  - 8) Add a new ticket
  - 9) Manage a ticket

-----

0) Logout

Selection: 8

Enter the account#: 30004

Acct#	Acct.Type	Full Name	Birth	Income	Country	Login	Password
-------	-----------	-----------	-------	--------	---------	-------	----------

```
-----
30004 CUSTOMER  Betty Boop      1978    250800.74 INDIA

Add a new ticket for this customer? ([Y]es|[N]o): Y

New Ticket (Ticket#:070534)
-----
Enter the ticket SUBJECT (30 chars. maximum): Empty Bottle!

Enter the ticket message details (150 chars. maximum). Press the ENTER key to submit:
Scotch bottle arrived empty!

*** New ticket created! ***

<< ENTER key to Continue... >>

AGENT: Will Smith (50008)
=====
Account Ticketing System - Agent Menu
=====
1) Add a new account
2) Modify an existing account
3) Remove an account
4) List accounts: detailed view
-----
5) List new tickets
6) List active tickets
7) List closed tickets
8) Add a new ticket
9) Manage a ticket
-----
0) Logout

Selection: 9

Enter ticket number: 70534

-----
Ticket 070534 - Update Options
-----
Status   : ACTIVE
Subject  : Empty Bottle!
Acct#    : 30004
Customer: Betty Boop
-----
1) Add CUSTOMER message
2) Add AGENT message
3) Close ticket
4) Re-activate ticket
0) Done
Selection: 2

Enter the ticket message details (150 chars. maximum). Press the ENTER key to submit:
We will resend with a full bottle.

-----
Ticket 070534 - Update Options
-----
```



```
Status : ACTIVE
Subject : Empty Bottle!
Acct#   : 30004
Customer: Betty Boop
-----
1) Add CUSTOMER message
2) Add AGENT message
3) Close ticket
4) Re-activate ticket
0) Done
Selection: 1

Enter the ticket message details (150 chars. maximum). Press the ENTER key to submit:
Thanks!

-----
Ticket 070534 - Update Options
-----
Status : ACTIVE
Subject : Empty Bottle!
Acct#   : 30004
Customer: Betty Boop
-----
1) Add CUSTOMER message
2) Add AGENT message
3) Close ticket
4) Re-activate ticket
0) Done
Selection: 0

AGENT: Will Smith (50008)
=====
Account Ticketing System - Agent Menu
=====
1) Add a new account
2) Modify an existing account
3) Remove an account
4) List accounts: detailed view
-----
5) List new tickets
6) List active tickets
7) List closed tickets
8) Add a new ticket
9) Manage a ticket
-----
0) Logout

Selection: 9

Enter ticket number: 70533

-----
Ticket 070533 - Update Options
-----
Status : CLOSED
Subject : Nothing happens...
Acct#   : 30004
Customer: Betty Boop
```

```

-----
1) Add CUSTOMER message
2) Add AGENT message
3) Close ticket
4) Re-activate ticket
0) Done
Selection: 4

Are you sure you want to RE-ACTIVATE this closed ticket? ([Y]es|[N]o): Y

*** Ticket re-activated! ***

-----
Ticket 070533 - Update Options
-----
Status : ACTIVE
Subject : Nothing happens...
Acct# : 30004
Customer: Betty Boop
-----
1) Add CUSTOMER message
2) Add AGENT message
3) Close ticket
4) Re-activate ticket
0) Done
Selection: 0

AGENT: Will Smith (50008)
=====
Account Ticketing System - Agent Menu
=====
1) Add a new account
2) Modify an existing account
3) Remove an account
4) List accounts: detailed view
-----
5) List new tickets
6) List active tickets
7) List closed tickets
8) Add a new ticket
9) Manage a ticket
-----
0) Logout

Selection: 4

Acct# Acct.Type Full Name Birth Income Country Login Password
-----
50600 AGENT Funny Phillis 2003 765432.11 SCOTLAND agentZ T*~*t*8*
50599 CUSTOMER Happy Hillary 1972 665544.33 BRAZIL
30004 CUSTOMER Betty Boop 1978 250800.74 INDIA
50008 AGENT Will Smith 1952 2350600.82 U.S.A. agentJ T***2*t*

<< ENTER key to Continue... >>

AGENT: Will Smith (50008)
=====
Account Ticketing System - Agent Menu

```

```

=====
1) Add a new account
2) Modify an existing account
3) Remove an account
4) List accounts: detailed view
-----
5) List new tickets
6) List active tickets
7) List closed tickets
8) Add a new ticket
9) Manage a ticket
-----
0) Logout

Selection: 6

-----
Ticket Acct# Full Name      Status Subject                      Messages
-----
060001 30004 Betty Boop      ACTIVE Frequent Disconnects          5
070534 30004 Betty Boop      ACTIVE Empty Bottle!              3
070533 30004 Betty Boop      ACTIVE Nothing happens...        1
-----

Enter the ticket number to view the messages or
0 to return to previous menu: 70534

=====
070534 (ACTIVE) Re: Empty Bottle!
=====
CUSTOMER (Betty Boop):
    Scotch bottle arrived empty!

AGENT (Will Smith):
    We will resend with a full bottle.

CUSTOMER (Betty Boop):
    Thanks!

<< ENTER key to Continue... >>

-----
Ticket Acct# Full Name      Status Subject                      Messages
-----
060001 30004 Betty Boop      ACTIVE Frequent Disconnects          5
070534 30004 Betty Boop      ACTIVE Empty Bottle!              3
070533 30004 Betty Boop      ACTIVE Nothing happens...        1
-----

Enter the ticket number to view the messages or
0 to return to previous menu: 0

AGENT: Will Smith (50008)
=====
Account Ticketing System - Agent Menu
=====
1) Add a new account
2) Modify an existing account

```

```
3) Remove an account
4) List accounts: detailed view
-----
5) List new tickets
6) List active tickets
7) List closed tickets
8) Add a new ticket
9) Manage a ticket
-----
0) Logout

Selection: 0

### LOGGED OUT ###

=====
Account Ticketing System - Login
=====
1) Login to the system
0) Exit application
-----

Selection: 0

Are you sure you want to exit? ([Y]es|[N]o): Y

=====
Account Ticketing System - Terminated
=====
```