Black Box Test Plan

The following text files are required for this black box test plan:

airlines.txt

DESCRIPTION,IATA_CODE,CALLSIGN,COUNTRY
United Airlines,UA,UNITED,United States
Delta Air Lines,DL,DELTA,United States
JetBlue Airways,B6,JETBLUE,United States

flights.txt

YEAR,MONTH,DAY,DAY_OF_WEEK,AIRLINE,FLIGHT_NUMBER,ORIGIN_AIRPORT,DESTINATION
_AIRPORT,SCHEDULED_DEPARTURE,DEPARTURE_TIME,DISTANCE,SCHEDULED_ARRIVAL,ARR
IVAL_DELAY
2015,12,20,7,UA,346,ORD,MIA,0730,0730,1197,1139,-20
2015,7,26,7,DL,1233,ATL,ORF,1030,1026,516,1209,-20
2015,1,27,2,B6,1316,FLL,JAX,1855,1854,319,2013,2

cardholders.txt

FIRST,LAST,DATE,FLIGHT,ORIGIN,DESTINATION
Erick,Mcfarland,12/20/2015,UA346,ORD,MIA
Kassandra,Stiltner,12/20/2015,UA346,ORD,MIA
Kassandra,Stiltner,12/20/2015,UA346,ORD,MIA
Erick,Mcfarland,7/26/2015,DL1233,ATL,ORF
Kassandra,Stiltner,12/20/2015,UA346,ORD,MIA
Kassandra,Stiltner,12/20/2015,UA346,ORD,MIA
Erick,Mcfarland,1/27/2015,B61316,FLL,JAX
Kassandra,Stiltner,12/20/2015,UA346,ORD,MIA
Erick,Mcfarland,12/20/2015,UA346,ORD,MIA
Erick,Mcfarland,12/20/2015,UA346,ORD,MIA

doesnotexist.txt

(this file should not exist in any form on the system)

Test ID	Description	Expected Results	Actual Results
Test 1 StartManager Error (DT-loading and invalid file)	**Preconditions**: *airlines.txt* and *flights.txt* must exist on the system as described above; *doesnotexist.txt* must not exist on the system. The user must know how to start the software. Launch the software. When prompted for the three file types (airline, flight, and cardholder information) enter *airlines.txt flights.txt doesnotexist.txt* and press enter.	The software indicates that it was unable to load all the files correctly, and the user is re-prompted for the three files.	The software indicates that it was unable to load all the files correctly, and the user is re-prompted.

Test 2 StartManager Valid (ECP-starting software with valid files)	**Preconditions:** *airlines.txt*, *flights.txt*, and *cardholders.txt* must exist on the system as described above. The user must know how to start the software. Launch the software. When prompted for the three file types (airline, flight, and cardholder information) enter *airlines.txt flights.txt cardholders.txt* and press enter.	The software loads the file information appropriately. The user is prompted for their next action.	The software loads the file information appropriately. The user is prompted for their next action.

Test 3
 	
QueryMileage (ECP-testing valid cardholder for mileage query)
	Preconditions: Test 2 has passed.
	
	Choose to query cardholders.
	
	When prompted for first and last name of cardholder, type *Erick* for first name and *Mcfarland* for last name; then, hit enter.
		The software should display this list of mileage information:
		
		Erick Mcfarland earned
		   3591 miles with United Airlines (UA)
		   516 miles with Delta Air Lines (DL)
		   319 miles with JetBlue Airways (B6)
			The software displays this list of mileage information:
			
			Erick Mcfarland earned
			   3591 miles with United Airlines (UA)
			   516 miles with Delta Air Lines (DL)
			   319 miles with JetBlue Airways (B6)

| Test 4

ProduceMileage Report (ECP-testing valid mileage report & BVA-all data must be sifted through from first entry to last) | **Preconditions:** Test 2 has passed.

Choose to produce a mileage report for all cardholders. | The software should display this list of mileage information:

Erick Mcfarland earned
   3591 miles with United Airlines (UA)
   516 miles with Delta Air Lines (DL)
   319 miles with JetBlue Airways (B6)

Kassandra Stiltner earned
   5985 miles with United Airlines (UA) | The software displays this list of mileage information:

Erick Mcfarland earned
   1197 miles with United Airlines (UA)
   0 miles with Delta Air Lines (DL)
   0 miles with JetBlue Airways (B6)

Kassandra Stiltner earned
   2934 miles with United Airlines (UA)
   0 miles with Delta Air Lines (DL)
   0 miles with JetBlue Airways (B6) |
|---|---|---|---|
| Test 5

QuitCalculator (ECP-testing software function "quit") | **Preconditions:** Test 2 has passed.

Choose to quit the Airline Manager Calculator. | The software closes, and the input files remain unedited. | The software closes, and the input files remain unedited. |
| Test 6

InvalidQuery (DT-testing invalid cardholder & BVA-does not occur within data given) | **Preconditions:** Test 2 has passed.

Choose to query cardholders.

When prompted for first and last name of cardholder, type *John* for the first name and *Smith* for the last name; then, hit enter. | The system indicates that the user has earned no miles. | The system indicates that the user has earned no miles with the message "No miles." |