

World Plane Inc.

CS509 Reservation System

VERIFICATION RESULTS

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Prepared by:

Team Muse

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Unit Tests

Unit tests have been created for input validators and for the local time converter code. Although they remain close to the source codes they test, an additional “test” folder has been created on the level of the “src” folder to consolidate all of the JUnit tests. This covers all tests marked for JUnit testing, tests 2, 3, and 4.

Test Procedures

Test Case: Verify the reservation type				Test Organization:World Plane Inc.		
Test Version: Version 1				Execution Date:11/29		
Description: Verify that the system can allow customer to choose one-way trip or round trip				Executed By:Juexing Wang		
				SW Baseline:SW version 1		
Preconditions:Program has started, departing and arrival airports have been inputted						
Dependencies:No dependencies, unit level						
Step	Actions	Data	Expected Result	Actual Results	Pass/ Fail	Notes
1	Verify the customer has already select the round trip		System will ask input for departure trip and return trip	System ask input for departure trip and return trip	Pass	
2	Type ”12/10/2017” and press “Enter”	12/10/2017	System accepts date and respond with “please input return date in “MM/DD/YYYY”	System accepts date and respond with “please input return date in “MM/DD/YY YY”	Pass	
3	Verify the		System will ask	System only	Pass	

	customer not select the round trip		input for departure trip	ask input for departure trip		
4	Type Type "12/10/2017" and press "Enter"	12/10/2017	System accepts date and return results without asking input for the return trip	System accepts date and return results without asking input for the return trip	Pass	
Postconditions: System will ask input with return date only in the situation that customer click the "round trip"						

Test Case: Verify Return Date			Test Organization:World Plane Inc.			
Test Version: Version 1			Execution Date: 11/29/2017			
Description: Verify that the system ensures departure date is not after return date.			Executed By: Yahan Zhu			
			SW Baseline: SW version 1			
Preconditions: Program has started, departing and arrival airports have been inputted, and round trip has been selected						
Dependencies: No dependencies, unit level						
Step	Actions	Data	Expected Result	Actual Results	Pass/ Fail	Notes
1.	Verify system prompts to input departure date		System has prompted user for input	System has prompted user for input	pass	

2.	Type "12/25/2017" and press "Enter"	12/25/2017	System accepts date input	System accepts date input	pass	Departure date
3.	Verify system prompts to input return date		System Respond with "please input return date in MM/DD/YYYY Y"	System Respond with "please input return date in MM/DD/YYYY Y"	pass	
4.	Type "2017/12/10" and press "Enter"	2017/12/10	System Respond with "please input return date in MM/DD/YYYY Y"	System Respond with "please input return date in MM/DD/YYYY Y"	pass	Wrong return date
5.	Type "2017/12/10" and press "Enter"	"2017/12/10"	System shows the available flights.	System shows the available flights.	pass	Acceptable return date
Postconditions: System has accepted inputs for departure date and return date						

Test Case: Verify the reservation type	Test Organization:World Plane Inc.
Test Version: Version 1	Execution Date:12/3/2017
Description: System shall allow a customer to make an airline reservation to travel either one-way between two airports or reserve a round-trip between two airports.	Executed By: Marie Solman
	SW Baseline:SW version 1
Preconditions: System has started	
Dependencies: User input validation has been finished	

Step	Actions	Data	Expected Result	Actual Results	Pass/Fail	Notes
1.	System will request departure airport				pass	
2.	Input “BOS”	“BOS”	System accepts date input	System accepts date input	pass	
3.	System will request arrival airport		System has prompted user for input	System has prompted user for input	pass	
4.	Input “JFK”	“JFK”	System accepts date input	System accepts date input	pass	
5.	System will request departure date		System has prompted user for input	System has prompted user for input	pass	
6.	Input “12/10/2017”	12/10/2017	System accepts date input	System accepts date input	pass	
7.	System will ask for seat preference		System has prompted user for input	System has prompted user for input	pass	
8.	Input “coach”	“coach”	System accepts date input	System accepts date input	pass	
9.	System will ask if you want round trip		System has prompted user for input	System has prompted user for input	pass	
Postconditions:						

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*****Do you want to start a new search?(yes/no)*****
yes
*****Please input your departure airport code*****
BOS
*****please input your arrival airport code*****
JFK
*****Please input your departure date in the format of mm/dd/yyyy*****
12/10/2017
*****Please input your preference seat (First Class/Coach)*****
coach
*****Do you want to have stopover between the departure and destination(yes/no)*****
no
*****Do you want a round trip(yes/no)*****
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Test Case: Verify the reservation type				Test Organization:World Plane Inc.		
Test Version: Version 1				Execution Date:12/3/2017		
Description: System shall allow customers to choose their type of seat: first-class seating or coach seating.				Executed By: Marie Solman		
				SW Baseline:SW version 1		
Preconditions: System has started						
Dependencies: Input validation has been finished						
Step	Actions	Data	Expected Result	Actual Results	Pass/ Fail	Notes
1.	System will request departure airport				pass	
2.	Input “BOS”	“BOS”	System accepts date input	System accepts date input	pass	
3.	System will request arrival airport		System has prompted user for input	System has prompted user for input	pass	
4.	Input	“JFK”	System accepts	System accepts	pass	

	“JFK”		date input	date input		
5.	System will request departure date		System has prompted user for input	System has prompted user for input	pass	
6.	Input “12/10/2017”	12/10/2017	System accepts date input	System accepts date input	pass	
7.	System will ask for seat preference		System has prompted user for input	System has prompted user for input	pass	
Postconditions: System allows user input for coach or first class						

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*****Do you want to start a new search?(yes/no)*****
yes
*****Please input your departure airport code*****
BOS
*****please input your arrival airport code*****
JFK
*****Please input your departure date in the format of mm/dd/yyyy*****
12/10/2017
*****Please input your preference seat (First Class/Coach)*****

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Test Case: Verify system instruction	Test Organization: World Plane Inc.
Test Version: Version 1	Execution Date:12/03/2017
Description: Verify the system will provide concise instruction for user's each step	Executed By: Juexing Wang
	SW Baseline: SW version 1
Preconditions: No	
Dependencies: No dependencies, unit level	

Step	Actions	Data	Expected Result	Actual Results	Pass/Fail	Notes
1	Start this program		System will ask that" Do you want to start a new search?(yes/no)"	System ask that" Do you want to start a new search?(yes/no)"	Pass	Clear instruction, Type "yes" or "no"
2	Type" Yes" and press"Enter"	"Yes"	System will ask that" Please input your departure airport code"	System ask that" Please input your departure airport code"	Pass	Clear instruction, Type "BOS" as example
3	Type" BOS" and press" Enter"	" BOS"	System will ask that" please input your arrival airport code"	System ask that" please input your arrival airport code"	Pass	Clear instruction, Type" JFK" as example
4	Type" JFK" and press" Enter"	" JFK"	System will ask that" Please input your departure date in the format of mm/dd/yyyy"	System ask that" Please input your departure date in the format of mm/dd/yyyy"	Pass	Clear instruction, Type"12/10/17" as example
5	Type"12/10/17"and press "Enter"	"12/10/17"	System will ask that" Please input your preference seat (First Class/Coach)"	System ask that" Please input your preference seat (First Class/Coach)"	Pass	Clear instruction, Type "Coach" or" First Class"
6	Type "Coach" and press" Enter"	"Coach"	System will ask that" Do you want to have stopover between the departure and destination(yes/no)"	System ask that" Do you want to have stopover between the departure and destination(yes/no)"	Pass	Clear instruction, Type "yes" or "no"
7	Type "No" and press "Enter"	"No"	System will ask that" Do you want a round trip(yes/no)"	System that" Do you want a round trip(yes/no)"	Pass	Clear instruction, Type "yes" or "no"

8	Type “No” and press “Enter”	“No”	System will show the” search result of outbound flights” and ask that” Do you want to sort flights? (yes/no)”	System show the” search result of outbound flights” and ask that” Do you want to sort flights? (yes/no)”	Pass	Clear instruction, Type “yes” or “no”
9	Type “No” and press “Enter”	“No”	System will ask that” Do you want to make reservation right now?(yes/no)”	System ask that” Do you want to make reservation right now?(yes/no)”	Pass	Clear instruction, Type “yes” or “no”
10	Type” Yes” and press “Enter”	“Yes”	System will ask that” please select your OUTBOUND flights”	System will ask that” please select your OUTBOUND flights”	Pass	Clear instruction
Postconditions: System allows user select OUTBOUND flights						

Test Case:Verify “No seat available” situation			Test Organization:World Plane Inc.			
Test Version:Version 1			Execution Date:12/03/2017			
Description:System will respond when seating is not available			Executed By:Juexing Wang			
			SW Baseline:Version 1			
Preconditions:Program has started, departing and arrival airports and dates have been inputted						
Dependencies: DAO and Server Interface have been developed and can return flights to use						
St ep	Actions	Data	Expected Result	Actual Results	Pass/F ail	Notes

1.	System request departure airport		System has prompted user for input	System has prompted user for input	pass	
2.	Type “BOS”	“BOS”	System will accepts date input	System accepts date input	pass	
3.	System request arrival airport		System has prompted user for input	System has prompted user for input	pass	
4.	Type “HNL”	“HNL”	System will accepts date input	System accepts date input	pass	
5.	System request departure date		System has prompted user for input	System has prompted user for input	pass	
6.	Input “12/10/2017”	12/10/2017	System accepts date input	System accepts date input	pass	
7.	System ask for seat preference		System has prompted user for input	System has prompted user for input	pass	
8.	Type “coach”	“coach”	System will accepts date input	System accepts date input	pass	
9.	System ask if you want round trip		System has prompted user for input	System has prompted user for input	pass	
10.	Type “no”	“no”	System will accepts date input	System accepts date input	pass	
11.	System return flights		System will displays “no outbound flights for your current search”	System will displays “no outbound flights for your current search”	pass	System make response when seating is not available

Postconditions: System make response when seating is not available						

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*****Do you want to start a new search?(yes/no)*****
yes
*****Please input your departure airport code*****
BOS
*****please input your arrival airport code*****
HNL
*****Please input your departure date in the format of mm/dd/yyyy*****
12/10/2017
*****Please input your preference seat (First Class/Coach)*****
coach
*****Do you want to have stopover between the departure and destination(yes/no)*****
no
*****Do you want a round trip(yes/no)*****
no
*****Please input your preference seat (First Class/Coach)*****
*****no outbound flights for your current search*****
*****Do you want to sort flights? (yes/no)*****

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Test Case: Verify Seat Preference				Test Organization:World Plane Inc.		
Test Version: Version 1				Execution Date: 11/29/2017		
Description: Verify that the system allows customer to choose seat type from coach and first class.				Executed By: Yahan Zhu		
				SW Baseline: SW version 1		
Preconditions: Program has started, departing and arrival airports have been inputted, and departure date has been verified.						
Dependencies: No dependencies, unit level						
Step	Actions	Data	Expected Result	Actual Results	Pass/ Fail	Notes
1.	Verify system prompts to input seat type		System has prompted user for input	System has prompted user for input	pass	

2.	Type "akak" and press "Enter"	"akak"	System respond with "Please input your preference seat (First Class /Coach)"	System respond with "Please input your preference seat (First Class /Coach)"	pass	Wrong seat type
3.	Type "first class" and press "Enter"	"first class"	System respond with "Do you want to have stopover between the departure and destination(yes/no)"	System respond with "Do you want to have stopover between the departure and destination(yes/no)"	pass	Correct seat type. System accept the input and prompt for next input
Postconditions: System has accepted inputs for preference seat.						

Test Case: Verify Searching notification				Test Organization:World Plane Inc.		
Test Version: Version 1				Execution Date: 11/29/2017		
Description: Verify that the system notifies the user when the system is searching the airlines.				Executed By: Yahan Zhu		
				SW Baseline: SW version 1		
Preconditions: Program has started, system prompt user input for whether a round trip or not						
Dependencies: No dependencies, unit level						
Step	Actions	Data	Expected Result	Actual Results	Pass/ Fail	Notes
1.	Type “no”	“no”	System respond	System respond	pass	

	and press “Enter”		with “Searching...”	with “Searching...”		
2.	Wait a moment for the searching result					
3.	Verify that the system show searching results		System respond with “Searching results of outbound flights” and all possible reservations	System respond with “Searching results of outbound flights” and all possible reservations	pass	
Postconditions: System has accepted inputs for preference seat.						

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*****Do you want to start a new search?(yes/no)*****
yes
*****Please input your departure airport code*****
bos
*****Please input your departure airport code*****
BOS
*****please input your arrival airport code*****
JFK
*****Please input your departure date in the format of mm/dd/yyyy*****
12/10/2017
*****Please input your preference seat (First Class/Coach)*****
coach
*****Do you want to have stopover between the departure and destination(yes/no)*****
no
*****Do you want a round trip(yes/no)*****
no
*****Searching...*****
*****search result of outbound flights*****
Index: 1
Flight number: 4972, Departure: BOS, 2017 Dec 09 19:12 EST
Flight number: 4972, Arrival: JFK, 2017 Dec 09 19:41 EST
Duration: 00:29, Price: 27.44, stop over: 1

Index: 2
Flight number: 4981, Departure: BOS, 2017 Dec 09 23:35 EST
Flight number: 4981, Arrival: JFK, 2017 Dec 10 00:05 EST
Duration: 00:30, Price: 28.84, stop over: 1

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Test Case: Verify Return Date				Test Organization:World Plane Inc.		
Test Version: Version 1				Execution Date: 12/3/2017		
Description: System shall present a list of trips including direct flights and connecting flights with up to two layovers.				Executed By: Marie Solman		
				SW Baseline: SW version 1		
Preconditions: Program has started, departing and arrival airports and dates have been inputted, and round trip has been selected						
Dependencies: DAO and Server Interface have been developed and can return flights to user						
Step	Actions	Data	Expected Result	Actual Results	Pass/ Fail	Notes
1.	System will request departure airport		System has prompted user for input	System has prompted user for input	pass	
2.	Input “BOS”	“BOS”	System accepts date input	System accepts date input	pass	
3.	System will request arrival airport		System has prompted user for input	System has prompted user for input	pass	
4.	Input “JFK”	“JFK”	System accepts date input	System accepts date input	pass	
5.	System will request departure date		System has prompted user for input	System has prompted user for input	pass	
6.	Input “12/10/2017 ”	12/10/2017	System accepts date input	System accepts date input	pass	
7.	System will ask for seat		System has prompted user	System has prompted user	pass	

	preference		for input	for input		
8.	Input “coach”	“coach”	System accepts date input	System accepts date input	pass	
9.	System will ask if you want round trip		System has prompted user for input	System has prompted user for input	pass	
10.	Input “no”	“no”	System accepts date input	System accepts date input	pass	
11.	System will return flights		System displays flights	System displays flights	pass	
Postconditions: System has returned and displayed flights						

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*****Please input your departure airport code*****
BOS
*****please input your arrival airport code*****
JFK
*****Please input your departure date in the format of mm/dd/yyyy*****
12/10/2017
*****Please input your preference seat (First Class/Coach)*****
coach
*****Do you want to have stopover between the departure and destination(yes/no)*****
yes
*****Do you want a round trip(yes/no)*****
no
*****Searching...*****
[4992, BOS, America/New_York, 2017 Dec 10 04:15 EST
JFK, 2017 Dec 10 04:37 EST
]
[5011, BOS, America/New_York, 2017 Dec 10 16:32 EST
JFK, 2017 Dec 10 17:01 EST
]
[5013, BOS, America/New_York, 2017 Dec 10 17:33 EST
JFK, 2017 Dec 10 18:05 EST
]
[5015, BOS, America/New_York, 2017 Dec 10 18:23 EST
JFK, 2017 Dec 10 18:46 EST
]
[5016, BOS, America/New_York, 2017 Dec 10 18:37 EST
JFK, 2017 Dec 10 19:13 EST
]
[4984, BOS, America/New_York, 2017 Dec 10 00:37 EST
CLT, 2017 Dec 10 02:44 EST
, 6162, CLT, America/New_York, 2017 Dec 10 04:36 EST
JFK, 2017 Dec 10 06:12 EST
]

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Test Case: Verify Return Date				Test Organization:World Plane Inc.		
Test Version: Version 1				Execution Date: 12/3/2017		
Description: System shall allow the user to sort list of trips by price in USD, local departure time, local arrival time and travel time.				Executed By: Marie Solman		
				SW Baseline: SW version 1		
Preconditions: Program has started, departing and arrival airports and dates have been inputted, and round trip has been selected						
Dependencies: DAO and Server Interface have been developed and can return flights to user						
Step	Actions	Data	Expected Result	Actual Results	Pass/ Fail	Notes
1.	System will request departure airport				pass	
2.	Input “BOS”	“BOS”	System accepts date input	System accepts date input	pass	
3.	System will request arrival airport		System has prompted user for input	System has prompted user for input	pass	
4.	Input “JFK”	“JFK”	System accepts date input	System accepts date input	pass	
5.	System will request departure date		System has prompted user for input	System has prompted user for input	pass	
6.	Input “12/10/2017”	12/10/2017	System accepts date input	System accepts date input	pass	

7.	System will ask for seat preference		System has prompted user for input	System has prompted user for input	pass	
8.	Input “coach”	“coach”	System accepts date input	System accepts date input	pass	
9.	System will ask if you want round trip		System has prompted user for input	System has prompted user for input	pass	
10.	Input “no”	“no”	System accepts date input	System accepts date input	pass	
11.	System will return flights		System displays flights	System displays flights	pass	
12.	System will ask if you want to sort		System has prompted user for input	System has prompted user for input	pass	
13.	Input “yes”	“yes”	System accepts date input	System accepts date input	pass	
14.	System will ask if you want to sort by price, duration, departure time, or arrival time		System has prompted user for input	System has prompted user for input	pass	
15.	Input “price”	“price”	System accepts date input	System accepts date input	pass	
16.	System will display flights in ascending sort order of price		System displays results	System displays results	pass	

17.	Repeat steps 1-14					
18.	Input “time”	“time”	System accepts date input	System accepts date input	pass	
19.	System will display flights in ascending time duration		System displays results	System displays results	pass	
20.	Repeat steps 1-14					
21.	Input “departure”	“departure”	System accepts date input	System accepts date input	pass	
22.	System will display flights in ascending departure time		System displays results	System displays results	pass	
23.	Repeat steps 1-14					
24.	Input “arrival”	“arrival”	System accepts date input	System accepts date input	pass	
25.	System will display flights in ascending arrival time		System displays results	System displays results	pass	
Postconditions: System has sorted flights and displayed them						

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*****Do you want to sort flights? (yes/no)*****
yes
*****Sort flights by price/time/departure/arrival*****
price
*****search result of outbound flights*****
Index: 4
Flight number: 5015, Departure: BOS, 2017 Dec 10 18:23 EST
Flight number: 5015, Arrival: JFK, 2017 Dec 10 18:46 EST
Duration: 00:23, Price: 3.99, stop over: 1

Index: 5
Flight number: 5016, Departure: BOS, 2017 Dec 10 18:37 EST
Flight number: 5016, Arrival: JFK, 2017 Dec 10 19:13 EST
Duration: 00:36, Price: 6.88, stop over: 1

Index: 3
Flight number: 5013, Departure: BOS, 2017 Dec 10 17:33 EST
Flight number: 5013, Arrival: JFK, 2017 Dec 10 18:05 EST
Duration: 00:32, Price: 12.15, stop over: 1
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