Assignment 5 - Domain Testing

Team 16

1.

Test input	Expected result	Equivalence class	
0	Travel for free	Age group: 0-4	
1	Travel for free	Age group: 0-4	
4	Travel for free	Age group: 0-4	
4.5	Invalid age/number, enter a valid age	Age group: between 0-4 & 5-15	
5	Travel for half price	Age group: 5-15	
7	Travel for half price	Age group: 5-15	
12	Travel for half price	Age group: 5-15	
15	Travel for half price	Age group: 5-15	
16	Travel for full price	Age group: 16-64	
50	Travel for full price	Age group: 16-64	

64	Travel for full price	Age group: 16-64	
65	Travel with 25% discount	Age group: 64 years & older	
-5	Invalid age/number, enter a valid age	Age group: out of bounds	
-10	Invalid age/number, enter a valid age	Age group: out of bounds	
-20.6	Invalid age/number, enter a valid age	Age group: out of bounds	
1000000000000	Travel with 25% discount	Age group: 64 years and older	

For the example with age 64, we chose to leave it at full price since most travel agencies have 65 and up for senior discount. Since the year 64 is both in the regular and senior section it should give full price and not jump between the sections. The numbers we chose was to get a wider coverage rather than just picking 1 age from each section. We added the last example to just make a point that since the boundary is 64 & older it should take that number as senior. The age limit is not specified, but the program should have said invalid age since most people don't live that long. The negative numbers should be handled as invalid age, same with the double numbers, because it is not a valid age. The machine should not take these numbers, just let the user now that the numbers are invalid.

The name of the user can vary depending on what the user desires.

2.

Input age	Expected result	Equivalence class	Input destination	Expected output
0	Travel for free	Age group: 0-4	Manchester	£0.00
1	Travel for free	Age group: 0-4	Manchester	£0.00
4	Travel for free	Age group: 0-4	Liverpool	£42.30
4.5	Invalid age/number	Age group: 0-4	Glasgow	"Invalid age"
5	Travel for half price	Age group: 5-15	Edinburgh	£61.80
10	Travel for half price	Age group: 5-15	(no destination was entered)	"Invalid entry"
15	Travel for half price	Age group: 5-15	Swansea	£15.55
16	Travel for full price	Age group: 16-64	Newport	£31.10
50	Travel for full price	Age group: 16-64	Glasgow	£61.80
64	Travel for full price	Age group: 16-64	Liverpool	£42.30
65	Travel with 25% discount	Age group: 64 years & older	Cardiff	£23.325

-5	Invalid age/number	Age group: out of	Swansea	"Invalid age"
		bounds		
-10	Invalid age/number	Age group: out of	Newport	"Invalid age"
		bounds		
-20.6	Invalid age/number	Age group: out of	Warrington	"Invalid age"
		bounds		
10000000000000	Travel with 25% discount	Age group: 64 years	Glasgow	£46.35
		and older		

For destination names, the user would select an input by clicking on the dropdown menu and selecting from the list of options. In this particular case, there would be no possible invalid entries for destination name. Instead, the user could potentially forget to select a destination from the drop down menu, just as it is displayed in the above table.