

City University of Hong Kong
Department of Computer Science
CS3343 (A) Software Engineering Practice
2014/15
Bug Report

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Title: Baggage Fee Calculation Error Caused by Baggage Extra Fee		
Description: Incorrect baggage fee when take more than one baggage.		
Vendor: Team 18	Product: Airline Ticket Purchasing System	Versions: 1.09
Severity: Critical		Update: 1/10/2014
Status: Outstanding		Assigned to: Nelson Wong Chung Man
Problem: <p>The baggage fee calculator outputs an incorrect fee \$400 which includes extra baggage fee when it is in following situations:</p> <ol style="list-style-type: none"> 1. Free baggage allowance is based on unit <i>Piece</i>. 2. 1 baggage and 1 sporting equipment is free for transfer. 3. Extra fee \$1000 must be paid for each extra baggage. 4. Extra fee \$400 must be paid if average baggage weight is 30 – 40 KG. 5. Total baggage is 2 including a sporting equipment. 6. Total weight of 2 baggage is 40 KG and average weight is 20 KG. <p>The formula should be as the following:</p> $ \begin{aligned} &(\$1000 \text{ fee} \times 2 \text{ baggage}) \\ &- (\$1000 \text{ free baggage} + \$1000 \text{ free sporting equipment transfer}) \\ &+ \$0 \text{ exceed average weight fee} \\ &= \underline{\underline{\$0}} \end{aligned} $ <p>According to the formula, we can see that the calculator incorrectly fulfill the condition of point 4. Thus, the final result is \$400 incorrectly.</p>		
Updated by Nelson Wong Chung Man on 12/10/2014		
After Nelson checking, it is caused by the total baggage weight have not divided by amount of baggage. Thus, the fee is abnormally high and the weight cannot be shared by a group. Now, the incorrect formula already fixed and passed testing.		

Title: Baggage Fee Calculation Error Caused by Pet Extra Fee		
Description: Incorrect baggage fee when baggage includes a pet.		
Vendor: Team 18	Product: Airline Ticket Purchasing System	Versions: 1.09
Severity: Critical		Update: 1/10/2014
Status: Outstanding		Assigned to: Nelson Wong Chung Man
Problem: <p>The baggage fee calculator outputs an incorrect fee \$3100 which includes extra pet fee when it is in following situations:</p> <ol style="list-style-type: none"> 1. Free baggage allowance is based on unit <i>Piece</i>. 2. 1 baggage and 1 sporting equipment is free for transfer. 3. Extra fee \$1000 must be paid for each extra baggage 4. Extra fee \$1500 must be paid for each pet. 5. Extra fee \$100 must be paid if average <i>pet</i> weight is 25 – 30 KG. 6. Total number of baggage is 1 with 20KG. 7. Total number of pet is 2 with average 15KG. <p>The formula should be as the following:</p> $ \begin{aligned} &(\$1000 \text{ fee} \times 1 \text{ baggage}) \\ &- (\$1000 \text{ free baggage transfer}) \\ &+ \$0 \text{ exceed baggage average weight fee} \\ &+ \$1500 \times 2 \text{ pets} \\ &+ \$0 \text{ exceed pet average weight fee} \\ &= \underline{\underline{\$3000}} \end{aligned} $ <p>According to the formula, we can see that the calculator incorrectly fulfill the condition of point 5. Thus, the final result is \$3100 incorrectly.</p>		
Updated by Nelson Wong Chung Man on 13/10/2014		
After Nelson checking, it is caused by the total pet weight have not divided by amount of pet. Thus, the fee is abnormally high and the weight cannot be shared by a group of pet. Now, the incorrect formula already fixed and passed testing.		

Title: Incorrect Baggage Fee Caused by Out of Conditional Range		
Description: The extra baggage fee is incorrect when the input KG or Inch is out of conditional range.		
Vendor: Team 18	Product: Airline Ticket Purchasing System	Versions: 1.20
Severity: Critical		Update: 15/11/2014
Status: Outstanding		Assigned to: Nelson Wong Chung Man
Problem: <p>The extra baggage fee is incorrect when the input KG or Inch is out of conditional range.</p> <p>For example, two conditions are set to the extra fee. The first is \$100 charge from 25.0KG to 30.9 KG. The second one is \$400 charge from 31.0KG to 50.9KG. If the baggage satisfies the condition, extra fee must be paid. In case, if the input is 30.95KG, no condition can be satisfied because it is out of range. But normally, it is expected that the charge should be \$100 for 30.95KG. Similar cases for 30.955KG, 30.9999KG, etc.</p>		
Updated by Nelson Wong Chung Man on 19/11/2014		
<p>After Nelson checking, the problem is caused by incorrect IF conditions and CSV structure. The current KG conditional ranges are from N to M, and then from M+1 to X. Thus, there are out of range between M and M+1. It can be solved by modifying the conditions and CSV structure like following. Therefore, the range can be reach 100% coverage.</p> <p>Given CSV Data:</p> <p>KGFrom1 = 30, KGFrom2 = 40, KGFrom3 = 50,</p> <p>Ask user to input InputKG = 39.5;</p> <p>IF(InputKG > KGFrom1 AND InputKG < KGFrom2)</p> <p> THEN PAID \$100</p> <p>ELSE IF(InputKG > KGFrom2 AND InputKG < KGFrom3)</p> <p> THEN PAID \$200</p> <p>ELSE</p> <p> THEN PAID \$400</p>		
Updated by Nelson Wong Chung Man on 23/11/2014		
<p>The problem has solved by following the proposed solution. The solution has also passed the testing. It works fine now.</p>		

Title: Incorrect Credit Card Discount Caused by typo		
Description: An incorrect credit card discount is showed out which is caused by a typo in the related file.		
Vendor: Team 18	Product: Airline Ticket Purchasing System	Versions: 1.20
Severity: Critical		Update: 05/11/2014
Status: Outstanding		Assigned to: Jack Kong Tsz Kit
Problem: The credit card discount is incorrect caused by a typo in the related file. For example, VISA credit card's discount for Cathay Pacific Airways is originally is 0.8. Since the developer make a typo in the data file. The discount changed to 0.5. It is a seriously case if the system is actually run on the business.		
Updated by Jack Kong Tsz Kit n 06/11/2014		
The typo is already changed from 0.5 to 0.8. The VISA credit card's discount for Cathay Pacific Airways is correctly showed out.		

Title: Incorrect Credit Card Discount Caused by wrong if conditions		
Description: An incorrect credit card discount is returned which is caused by wrong if conditions		
Vendor: Team 18	Product: Airline Ticket Purchasing System	Versions: 1.20
Severity: Critical		Update: 23/11/2014
Status: Outstanding		Assigned to: Jack Kong Tsz Kit
Problem: For the correct if-clause condition of checking credit card discount, it must check the flight's airline company and the type of credit card. For this bug, the developer only checked the type of credit card. It made lots of discount that are returned which are meet the type of credit card.		
Updated by Jack Kong Tsz Kit n 24/11/2014		
The related code were changed which have two if conditions (flight's airline company and the type of credit card)		

Title: Query Flights		
Description: Incorrect query result when query flight		
Vendor: Team 18	Product: Airline Ticket Purchasing System	Versions: 1.09
Severity: Critical		Update: 14/11/2014
Status: Outstanding		Assigned to: Leo Yiu Yiu Yeung
Problem: System cannot work normally when user input with the wrong letter case <u>Example:</u> Sorted Flight: Dragonair,CP001,FIRST,Hong Kong,Taiwan,2014-01-01 14:30:00,2014-01-01 17:30:00,30,25000.00 User Input Departure: HONG KONG Destination: Taiwan Date: 2014-01-01 In this situation, system should show there is a flight is suitable for the user. But the system say “No Suitable Flight”		
Updated by Leo Yiu Yiu Yeung on 15/11/2014		
After Leo checking, it is caused by developers have not consider with that case. Leo modified those codes and let system be non-case sensitive.		

Title: Incorrect Base points of calculate flyer miles		
Description: The base points is incorrect when calculate the flyer miles.		
Vendor: Team 18	Product: Airline Ticket Purchasing System	Versions: 1.1
Severity: Critical		Update: 29/11/2014
Status: Outstanding		Assigned to: Lau Kam Yu
Problem: The points incorrect when the distance is 5000. Case: The base point when distance is 5000 will return 0 in findBasePoints(int distance). The expect result should be 2500.		
Updated by Lau Kam Yu on 29/11/2014		
After checking, the problem is caused by incorrect IF conditions. The IF condition haven't includes equals (=), only > or < exist now. Thus, there are out of range when the distance is equals to the minimum and maximum distance in those range. IF statement should be: For i = 0 to base points list size-1 Min = minimum value of base point list size i max = maximum value of base point list size i if(distance>=min and distance<=max) return the points of i		
Updated by Lau Kam Yu on 30/11/2014		
The problem has solved by following the proposed solution. The solution has also passed the testing. It works fine now.		