Software Engineering

Deliverable 04

Equivalence Class Partitioning & Boundary Value Analysis on One Use Case

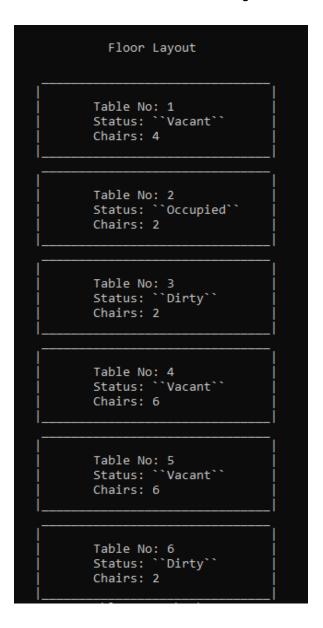
Restaurant Management System

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Use Case:

The use case implemented here consists of an incoming customer looking at the available table interface. The customer is then prompted to select an available table for booking. For the implementation, we have limited the no of tables from 1 to 6. Only vacant tables can be selected, otherwise an error will be generated.



Equivalence Classes:

Equivalence class 1: Table no below 1
Equivalence class 2: Table no from 1 to 6
Equivalence class 3: Table no above 6

Boundary Values Test Cases:

Test case 1: Table No 0: Member of equivalence class 1 and adjacent to boundary value.

Test case 2: Table No 1: Boundary value.

<u>Test case 3:</u> Table No 2: Adjacent to boundary value.

Test case 4: Table No 4: Member of equivalence class 2.

Test case 5: Table No 5: Adjacent to boundary value.

Test case 6: Table No 6: Boundary value.

Test case 7: Table No 7: Member of equivalence class 3 and adjacent to boundary value.

Results for Test Cases:

Test Case 1: Table No 0 (Invalid Table No)

Please enter a Table No to book: 0 Error! Invalid selection. Enter positive integers from 1-6:

Test Cae 2: Table No 1 (Vacant Table Booked)

Please enter a Table No to book: 1 Success! Your table no: 1 has been booked!

Test Case 3: Table No 2 (Valid Selection but Table not Available)

Please enter a Table No to book: 3 Sorry, this table is not vacant yet. Please try another table:

Test Case 4: Table No 4 (Vacant Table Booked)

Please enter a Table No to book: 4 Success! Your table no: 4 has been booked!

Test Case 5: Table No 5 (Vacant Table Booked)

Please enter a Table No to book: 5 Success! Your table no: 5 has been booked!

Test Case 6: Table No 6 (Valid Selection but Table Not Available)

Please enter a Table No to book: 6 Sorry, this table is not vacant yet. Please try another table:

Test Case 7: Table No 7 (Invalid Table No)

Please enter a Table No to book: 7
Error! Invalid selection. Enter positive integers from 1-6:

Note: The source code for this use case implementation is attached in the .cpp file.