

2. Scenario: Online Hotel Reservation System

This system allows users to book hotel rooms with customizable options for their stay.

Variables/Parameters:

1. **Room Type:** Single, Double, Suite
2. **Meal Plan:** Breakfast Only, Half Board, Full Board, No Meals
3. **View Preference:** Sea View, Garden View, City View
4. **Payment Method:** Credit Card, Debit Card, PayPal, Bank Transfer

Task:

Design test cases using pairwise testing to ensure that all combinations between the Room Type, Meal Plan, View Preference, and Payment Method are covered.

9 test cases are a significant reduction from the full factorial set of combinations ($3 \text{ Room Types} \times 4 \text{ Meal Plans} \times 3 \text{ View Preferences} \times 4 \text{ Payment Methods} = 144$ possible combinations), while still ensuring sufficient coverage for all pairs of input variables.

Test Case ID	Room Type	Meal Plan	View Preference	Payment Method
TC-01	Single	Breakfast Only	Sea View	Credit Card
TC-02	Double	Half Board	Garden View	Debit Card
TC-03	Suite	Full Board	City View	PayPal
TC-04	Double	No Meals	Sea View	Bank Transfer
TC-05	Suite	Breakfast Only	Garden View	Debit Card
TC-06	Single	Full Board	Garden View	Bank Transfer
TC-07	Single	No Meals	City View	PayPal
TC-08	Double	Full Board	Sea View	Credit Card
TC-09	Suite	Half Board	City View	Credit Card