1. Test Scenarios for Flights Less than 500 Miles: a. Verify that the cost is $100 for flights less than 500 miles. b. Ensure that there are no additional costs for extra baggage for flights less than 500 miles.
2. Test Scenarios for Flights between 500 and 1000 Miles:

a. Verify that the cost is calculated correctly based on distance and departure date.

i. Test the cost calculation for departing within 7 days. ii. Test the cost calculation for departing within 30 days. iii. Test the cost calculation for departing within 90 days. b. Verify that the cost for extra baggage is $25 per kg. i. Test the additional cost calculation for different weights within the maximum limit (50kg). ii. Test the system's behavior when exceeding the maximum baggage weight.

1. Test Scenarios for Flights over 1000 Miles: a. Verify that the cost is calculated correctly based on distance, departure date, and service class. i. Test the cost calculation for Economy class. ii. Test the cost calculation for Business class (double the cost). iii. Test the cost calculation for First class (triple the cost). b. Verify that the cost for extra baggage is $50 per kg. i. Test the additional cost calculation for different weights within the maximum limit (50kg). ii. Test the system's behavior when exceeding the maximum baggage weight.
2. Test Scenarios for Departure Dates: a. Test the system's behavior when the departure date is today. b. Test the system's behavior when the departure date is in the past. c. Test the system's behavior when the departure date is more than 90 days in the future.
3. Test Scenarios for Distance: a. Test the system's behavior when the distance is exactly 500 miles. b. Test the system's behavior when the distance is exactly 1000 miles. c. Test the system's behavior when the distance is just below or above 500 miles and 1000 miles.
4. Test Scenarios for Invalid Inputs: a. Test the system's behavior when providing invalid distance values (e.g., negative values, non-numeric values). b. Test the system's behavior when providing invalid departure date formats or non-date values. c. Test the system's behavior when providing invalid service class values.
5. Test Scenarios for Performance: a. Test the system's performance with a large volume of flight data to ensure it can handle the calculations efficiently. b. Test the system's response time when processing different combinations of distance, departure date, and service class.
6. Test Scenarios for Regression: a. Retest previously identified defects after they have been fixed to ensure they have been resolved.