

Assignment 1

Answer 1

A. Clarification Required in User Story:

1. Should the cancel button not be displayed after midnight or there will be any specific time slot ?
2. What is the refund policy for cancellations made on the journey date or a few hours before departure ?
3. In the refund criteria, do boundary days are included or excluded ? like in the 60 - 30 days period, are "60" and "30" included or not ?
4. Will refund be calculated on the fare price or the full ticket price with charges and taxes?
5. What information must the cancellation email contain(e.g. Refund Amount, journey details, cancellation ID, etc) ?

B. Questions for the scope of requirements:

1. Does this cancellation policy apply to all types of tickets ?
2. Are there any circumstances where full refund will be granted to the user like train cancellation or emergency?
3. Can a user cancel a ticket if the ticket is part of any promotional offer ?
4. If one booking has multiple tickets, can a user cancel only some tickets ?
5. Will the refund be processed back to the original payment method ?
6. Is there any limit on the number of cancellations by a user within a certain period ?

Answer 2

1. Cancel Button Visibility:-
2. Verify the "Cancel Ticket" button is displayed for a ticket with a journey date in the future.
3. Verify the "Cancel Ticket" button is not displayed for a ticket with a journey date in the past.
4. Verify the "Cancel Ticket" button is displayed for a ticket with a journey date as the current date.
5. Ticket Cancellation Process :-
6. Successful cancellation of a ticket when all conditions are met.
7. Verify user receives a confirmation message upon successful cancellation.
8. Verify system behavior when attempting to cancel a cancelled ticket.
9. Verify system behavior when attempting with a invalid ticket information.
10. Refund Calculation Logic :-

11. Verify 70% refund for cancellation exactly 60 days prior to journey date.
12. Verify 70% refund for cancellation more than 60 days prior to journey date.
13. Verify 50% refund for cancellation between 60-30 days prior to journey date.
14. Verify 35% refund for cancellation between 30-10 days prior to journey date.
15. Verify 20% refund for cancellation between 10-1 days prior to journey date.
16. Verify refund behavior for cancellation on the journey date.
17. Verify no refund for tickets whose journey date has passed.
18. Email Notification :-
19. Verify successful email dispatch to the registered user email ID upon successful cancellation.
20. Verify the content of the email includes all the necessary information about the cancellation.
21. Verify system behaviour if the email service is down or fails to send email.
22. Verify email is not sent if cancellation fails.
23. Error Handling :-
24. Verify appropriate error messages are displayed for invalid inputs or failed cancellation.
25. Verify system behavior on server errors.

Answer 3

Test Cases for the Refund Amount Calculation :-

1. **Days >= 60** : 70% Refund (Interpreting "60 days prior").
2. **30 <= Days <= 59** : 50% Refund (Interpreting "between 60-30 days")
3. **10 <= Days <= 29** : 35% Refund (Interpreting "between 30-10 days")
4. **1 <= Days <= 9** : 20% Refund (Interpreting "between 10-1 days")

Answer 4

A. Boundary Value Analysis (BVA):

Partition being tested BVA Test values Expected Refund
Tier

| | | |
|------------------|-------------|-----|
| 1 <= Days <= 9 | 1 (min) | 20% |
| | 2 (min +1) | 20% |
| | 8 (max - 1) | 20% |
| | 9 (max) | 20% |
| 10 <= Days <= 29 | 10 (min) | 35% |

| | | |
|------------------|--------------|-----|
| | 11 (min + 1) | 35% |
| | 28 (max - 1) | 35% |
| | 29 (max) | 35% |
| 30 <= Days <= 59 | 30 (min) | 50% |
| | 31 (min + 1) | 50% |
| | 58 (max - 1) | 50% |
| | 59 (max) | 50% |
| Days >= 60 | 60 (min) | 70% |
| | 61 (min + 1) | 70% |

Set of Data for BVA : {1, 2, 8, 9, 10, 11, 28, 29, 30, 31, 58, 59, 60, 61}

B. Equivalence Partition Technique:

Partition Days Prior Test Data Expected
Outcome

| | | | |
|---------|-------------------|------|------------------------------|
| Valid | Days >= 60 | 100 | 70% Refund |
| Valid | 30 <= Days <= 59 | 45 | 50% Refund |
| Valid | 10 <= Days <= 29 | 20 | 35% Refund |
| Valid | 1 <= Days <= 9 | 5 | 20% Refund |
| Invalid | Days < 0 | -5 | Cancellation not allowed |
| Invalid | Non-integer value | 20.6 | Show error or roundoff value |