**Testing Concepts Session-1 Assignment**

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**Assignment 1**

**As a railway user, I should get an option to cancel the tickets, so that user can cancel the ticket and get refund.**

**Acceptance Criteria:**

**● A new button with Label “Cancel Ticket” should be displayed for cancelling the ticket.**

**● Button should not be displayed for those tickets for which journey date is previous than current date.**

**● Refund amount should be calculated as follows:**

**● If user cancels the ticket 60 days prior to journey date. Refund 70% of amount**

**● If user cancels the ticket b/n 60-30 days prior to journey date Refund 50% of amount.**

**● If user cancels the ticket between 30-10 days Refund 35% of amount.**

**● If user cancels the ticket between 10-1 days. Refund 20% of amount.**

**● User should get an email for successful cancellation.**

**Question 1.) Groom the above user story and mention :**

**a. Any clarification required in user story acceptance criteria.**

1. Refund Calculation: Should the refund percentage apply to the total ticket amount or just the base fare, excluding taxes and additional fees?

2. Should the "Cancel Ticket" button be displayed only on the booking details page, or should it be available on the user dashboard as well?

3. What information should the email contain? (Refund amount, transaction ID, estimated processing time, etc.)

4. If a booking has multiple tickets, can the user cancel a subset of those tickets, or is it an all-or-nothing approach?

5. Should the refund be processed automatically, or is manual verification required in some cases?

**b. Any questions for the scope of the requirements.**

1.Should the date calculations consider the user’s local time zone or only the server time zone?

2. What happens if the user cancels the ticket exactly on the journey date?

3. Should the system allow cancellation if the ticket was purchased using loyalty points or special offers?

4. Should the button visibility logic consider database latency or caching issues?

5. Are there any restrictions on the number of cancellations a user can make within a certain period?

**Question 2.) Create all Test Coverage Scenarios for the above User Story.**

| Scenario | Expected Outcome |
| --- | --- |
| Ticket is for a future date | Cancel button is visible |
| Ticket is for a past journey date | Cancel button is not visible |
| Ticket canceled 60+ days before the journey date | 70% refund |
| Ticket canceled 30-60 days days before the journey date | 50% refund |
| Ticket canceled 10-30 days days before the journey date | 35% refund |
| Ticket canceled 1-10 days days before the journey date | 20% refund |
| Ticket Canceled on the journey date | No refund, button not available |
| Email sent on successful cancellation | Email received |
| Email not sent due to server issue | Proper error message displayed |
| Ticket sent but refund fails | Retry option |

**Question 3.) Create Test Cases for the Refund Amount calculations for above user story:**

| **Test Case ID** | **Description** | **Days Prior to Journey (DPJD)** | **Ticket Price (₹)** | **Expected Refund %** | **Expected Refund Amount (₹)** | **Expected Result** |
| --- | --- | --- | --- | --- | --- | --- |
| TC\_REF\_001 | Cancel >= 60 days prior | 60 | 1000 | 70% | 700 | Ticket is cancelled. Refund of ₹700 is processed/shown. Confirmation message displayed. Email received. |
| TC\_REF\_002 | Cancel > 60 days prior | 75 | 1000 | 70% | 700 | Ticket is cancelled. Refund of ₹700 is processed/shown. Confirmation message displayed. Email received. |
| TC\_REF\_003 | Cancel 30 to <60 days prior | 59 | 1000 | 50% | 500 | Ticket is cancelled. Refund of ₹500 is processed/shown. Confirmation message displayed. Email received. |
| TC\_REF\_004 | Cancel 30 to <60 days prior | 45 | 1000 | 50% | 500 | Ticket is cancelled. Refund of ₹500 is processed/shown. Confirmation message displayed. Email received. |
| TC\_REF\_005 | Cancel 30 to <60 days prior | 30 | 1000 | 50% | 500 | Ticket is cancelled. Refund of ₹500 is processed/shown. Confirmation message displayed. Email received. |
| TC\_REF\_006 | Cancel 10 to <30 days prior | 29 | 1000 | 35% | 350 | Ticket is cancelled. Refund of ₹350 is processed/shown. Confirmation message displayed. Email received. |
| TC\_REF\_007 | Cancel 10 to <30 days prior | 15 | 1000 | 35% | 350 | Ticket is cancelled. Refund of ₹350 is processed/shown. Confirmation message displayed. Email received. |
| TC\_REF\_008 | Cancel 10 to <30 days prior | 10 | 1000 | 35% | 350 | Ticket is cancelled. Refund of ₹350 is processed/shown. Confirmation message displayed. Email received. |
| TC\_REF\_009 | Cancel 1 to <10 days prior | 9 | 1000 | 20% | 200 | Ticket is cancelled. Refund of ₹200 is processed/shown. Confirmation message displayed. Email received. |
| TC\_REF\_010 | Cancel 1 to <10 days prior | 5 | 1000 | 20% | 200 | Ticket is cancelled. Refund of ₹200 is processed/shown. Confirmation message displayed. Email received. |
| TC\_REF\_011 | Cancel 1 to <10 days prior | 1 | 1000 | 20% | 200 | Ticket is cancelled. Refund of ₹200 is processed/shown. Confirmation message displayed. Email received. |

**Question 4.) For our use case:**

**4.a) Use boundary Value analysis technique and provide the set of**

**data which you will take for testing.**

| **Test Case ID** | **Days before journey** | **Expected Refund(%)** | **Expected Outcome** |
| --- | --- | --- | --- |
| TC1 | 61 days | 70% | Refund 70%the ticket amount |
| TC2 | 60 days | 70% | Refund 70%the ticket amount |
| TC3 | 59 days | 50% | Refund 50%the ticket amount |
| TC4 | 45 days | 50% | Refund 50%the ticket amount |
| TC5 | 30 days | 50% | Refund 50%the ticket amount |
| TC6 | 29 days | 35% | Refund 35%the ticket amount |
| TC7 | 15 days | 35% | Refund 35%the ticket amount |
| TC8 | 10 days | 35% | Refund 35%the ticket amount |
| TC9 | 9 days | 20% | Refund 20%the ticket amount |
| TC10 | 1 days | 20% | Refund 20%the ticket amount |

**4.b) Use equivalence partitioning technique and create test data**

**which you will use for testing.**

### **Equivalence Partitioning (EP)**

| **Test Case** | **Days Before Journey** | **Expected Refund** |
| --- | --- | --- |
| TC1 | 70 | 70% (Represents 60+ days) |
| TC2 | 45 | 50% (Represents 30-59 days) |
| TC3 | 20 | 35% (Represents 10-29 days) |
| TC4 | 5 | 20% (Represents 1-9 days) |
| TC5 | -5 | No refund, invalid request |

**Assignment 2**

**Create a decision Table for the following scenario :-**

**Company ABC sells goods to wholesale and retail outlets. The company encourages both wholesale and retail customers to pay cash on delivery by offering a two percent discount for this method of payment. Wholesale customers receive an additional two percent discount on all orders. Another two percent discount is given on orders of 50 or more units to both types of**

**customers. Each column represents a certain type of order.**

| **Case** | **Customer**  **Type** | **Payment** | **Order QTY** | **COD**  **Discount** | **Wholesale  Discount** | **Bulk Discount** | **Total Discount** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Wholesale | COD | >=50 | 2% | 2% | 2% | 6% |
| 2 | Wholesale | COD | <50 | 2% | 2% | 0% | 4% |
| 3 | Wholesale | Not COD | >=50 | 2% | 2% | 2% | 4% |
| 4 | Wholesale | Not COD | <50 | 2% | 2% | 0% | 2% |
| 5 | Retail | COD | >=50 | 0% | 0% | 2% | 4% |
| 6 | Retail | COD | <50 | 0% | 0% | 0% | 2% |
| 7 | Retail | Not COD | >=50 | 0% | 0% | 2% | 2% |
| 8 | Retail | Not COD | <50 | 0% | 0% | 0% | 0% |