**Assignment 1**

Question 1: Groom the user story.

1. Mention any clarifications required in the user story acceptance criteria.

* What is supposed to happen when a user cancels a ticket on the exact boundary day. For example: Day 60, 30, 10 or 1.
* How to deal with cancellation in case of train failure or natural disaster? Should the refund be made or not?
* What amount should be refunded in case the user has used any discount or promotional coupon while booking the ticket.
* What should be the status of the ticket after the journey date? Should there be an exception for cancellation in such a case?
* What should be the content of the email sent to the user upon booking the ticket?
* How soon should the refund be processed and credited to the user in case of ticket cancellation?

1. Mention questions for scope of requirements.

* Is the refund process only applicable to train tickets? Can it be applied to other tickets of other transportation mediums?
* Can there be a variety of tickets like Economy, General, or Business class?

Question 2: Test Coverage Scenarios for the User Story.

1. Cancel Button Visibility:

* Verify that the button is displayed for tickets with a journey date greater than or equal to current date.
* Verify that the button is not displayed for tickets with a journey date earlier than the current date.

1. Notify through Email:

* Verify that an email is sent to the user after successfully cancelling the ticket which includes details such as ticket number, refund amount.

1. Refund Verification:

* Verify that the refund amount is accurately calculated and processed according to the business rules.

1. Ticket status:

* Verify that the system handles status of tickets properly, now-refundable tickets or tickets with discounts.

1. Refund amount calculation and test:

* Verify that 70% refund is made after ticket cancellation before exactly 60 days or before the journey date.
* Verify that 50% refund is made after ticket cancellation between exactly 60 days and 30 days before the journey date.
* Verify that 35% refund is made after ticket cancellation between exactly 30 days and 10 days before the journey date.
* Verify that 20% refund is made after ticket cancellation before exactly 10 days and 1 day before the journey date.

Question 3: Test Cases for the Refund Amount calculations for User Story

| Test Case ID | Test Case Description | Input | Expected Output |
| --- | --- | --- | --- |
| TC01 | Refund 70% for cancellation made 60+ days before the journey | Ticket Cost: ₹1000,  Cancel: 61 days before journey date | Refund: ₹700 |
| TC02 | Refund 50% for cancellation made 30-60 days before the journey | Ticket Cost: ₹1000,  Cancel: 45 days before journey date | Refund: ₹500 |
| TC03 | Refund 35% for cancellation made 10-30 days before the journey | Ticket Cost: ₹1000,  Cancel: 15 days before journey date | Refund: ₹350 |
| TC04 | Refund 20% for cancellation made 1-10 days before the journey | Ticket Cost: ₹1000,  Cancel: 5 days before journey date | Refund: ₹200 |
| TC05 | No refund if the journey date has already passed | Ticket Cost: ₹1000,  Cancel: 1 day after journey date | Refund: ₹0 |

Question 4:

4.a: Use boundary Value analysis technique and provide the set of data which you will take for testing.

| Test Case | Input (Days before Journey) | Expected Refund |
| --- | --- | --- |
| TC01 | 61 | 70% |
| TC02 | 60 | 70% |
| TC03 | 59 | 50% |
| TC04 | 31 | 50% |
| TC05 | 30 | 50% |
| TC06 | 29 | 35% |
| TC07 | 11 | 35% |
| TC08 | 10 | 35% |
| TC09 | 9 | 20% |
| TC10 | 1 | 20% |
| TC11 | 0 | 0% |
| TC12 | -1 | 0% |

4.b: Use equivalence partitioning technique and create test data which you will use for Testing.

| Partition ID | Input Range (Days before Journey) | Representative | Expected Refund (%) |
| --- | --- | --- | --- |
| EP01 | >= 60 | 65 | 70% |
| EP02 | 30-59 | 45 | 50% |
| EP03 | 10-29 | 20 | 35% |
| EP04 | 1-9 | 5 | 20% |
| EP05 | <= 0 | -2 | 0% |

**Assignment 2**

Decision Table:

| Customer Type | Payment Method | Order Size  ( >= 50 Unit) | Discount Offered |
| --- | --- | --- | --- |
| Retail Outlet | Cash On Delivery | Yes | 4% (2% + 2%) |
| Retail Outlet | Cash On Delivery | No | 2% |
| Retail Outlet | Other Payment | Yes | 2% |
| Retail Outlet | Other Payment | No | 0% |
| Wholesale Outlet | Cash On Delivery | Yes | 6% (2% + 2% + 2%) |
| Wholesale Outlet | Cash On Delivery | No | 4% (2% + 2%) |
| Wholesale Outlet | Other Payment | Yes | 4% (2% + 2%) |
| Wholesale Outlet | Other Payment | No | 2% |