Exercise -1 Test Plan

I Take the Trading application for sample Test Plan.

1. Intro

This test plan outlines the test scenarios for a newly deployed **Trading Application**. Since this is the first release, the focus will be on **functional testing, usability, and stability** to ensure the application works as expected.

2. Scope

1. User authentication & authorization
2. Market data retrieval
3. Trade execution & order management
4. Portfolio management
5. Fund deposits & withdrawals
6. Reporting & notifications

3. Test Scenarios

Set of test scenarios using the **Given-When-Then** format:

1. User Authentication & Authorization:

1.1 Login with valid credentials.

- ***Given*** User has a valid account
- ***When*** User enter correct credentials and submit
- ***Then*** User should be logged in successfully

1.2 Login with invalid credentials.

- ***Given*** User has an account
- ***When*** User enter incorrect credentials
- ***Then*** An error message should be displayed

1.3 Logout functionality.

- ***Given*** User is logged in
- ***When*** User click on "Logout"
- ***Then*** User should be logged out and redirected to the login page

1.4 Session timeout.

- ***Given*** User is logged in
- ***When*** User remain idle for a certain period
- ***Then*** The session should expire and require re-login

2. Market Data Retrieval:

1.5 Fetching stock prices.

- ***Given*** User is logged in
- ***When*** User view stock prices

- ***Then*** The Correct real-time stock prices should be displayed

1.6 Searching for a specific stock.

- ***Given*** User is logged in
- ***When*** User search for a stock
- ***Then*** The matching stock details should be displayed

3. Trade Execution & Order Management:

1.7 Placing a buy order successfully.

- ***Given*** User has sufficient funds
- ***When*** User place a buy order
- ***Then*** The order should be executed successfully

1.8 Placing a sell order successfully.

- ***Given*** User owns shares of a stock
- ***When*** User place a sell order
- ***Then*** The order should be executed successfully

1.9 Insufficient funds while placing a buy order.

- ***Given*** User does not have enough funds
- ***When*** User attempt to place a buy order
- ***Then*** An error message should be displayed

1.10 Insufficient funds while placing a buy order.

- ***Given*** User has a pending order
- ***When*** User choose to cancel it
- ***Then*** Order should be cancelled successfully

4. Portfolio Management:

1.11 Viewing portfolio details.

- ***Given*** User is logged in
- ***When*** User navigate to the portfolio section
- ***Then*** They should see a list of their holdings

1.12 Portfolio value updates correctly.

- ***Given*** User has stocks in their portfolio
- ***When*** Stock prices change
- ***Then*** The total portfolio value should be updated correctly

5. Fund Deposits & Withdrawals:

1.13 Depositing funds successfully.

- ***Given*** User has a valid payment method
- ***When*** User initiate a deposit

- ***Then*** The funds should be credited to their account

1.14 Withdrawing funds successfully.

- ***Given*** User has sufficient balance
- ***When*** User request a withdrawal
- ***Then*** The funds should be transferred successfully

6. Reporting & Notifications:

1.15 Receiving trade confirmation notification.

- ***Given*** User executes a trade
- ***When*** The trade is completed
- ***Then*** They should receive a confirmation notification

1.16 Generating a trade history report.

- ***Given*** User has placed trades
- ***When*** User request a report
- ***Then*** The report should display correct transaction details

4.Sprint Planning:
Week 1
Manual Tests: Login tests, Market Data retrieval, Order Placement
Automation Tests: Login automation, Market Data validation

Week 2
Manual Tests: Portfolio & Fund Management, Reports & Notifications
Automation Tests: Trade Execution, Portfolio Automation

Portfolio value updates correctly and **Receiving trade confirmation notification** these two scenarios are not able to automate because of Values are fluctuate dynamically based on external conditions and notifications are Timing issues and SMS, email notifications are hard to automate it also can be automate partially