**TEST PLAN**

**Project Name : Mercury Demo**



Mercury Demo

# **Prepared By - Palak Mangal**

# **Date - 12-Nov-2024**

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# **Introduction**

The Mercury Demo website is a stock market platform offering features such as user account management, real-time stock data, trading functionality, and portfolio tracking. This test plan ensures all components of the website function correctly and meet user expectations.

# **Objectives**

* Validate the core functionalities : Stock search, real-time updates, trading (buy/sell) , and portfolio management.
* Ensure user data and transactions are secure.
* Verify the system's ability to handle high traffic.
* Confirm compatibility across different devices and browsers.

# **Scopes**

* User registration, login, and account management.
* Search and view stock details.
* Buy/Sell transactions and confirmation.
* Portfolio view and management.
* Notifications for successful transactions.

# **Key Features to Test**

1. **Authentication:**

* User registration.
* Login/logout functionality.
* Password recovery and change.

1. **Stock Data:**

* Real-time stock updates.
* Search functionality with filters (by price, sector, etc).
* Viewing stock performance graphs.

1. **Trading:**

* Placing buy/sell orders.
* Viewing transaction status (pending, complete).
* Error handling for invalid inputs.

1. **Portfolio Management:**

* Viewing current holdings.
* Calculation of gains/losses.
* Downloadable reports.

1. **Performance:**

* Real-time data loading during market hours.
* System response under high traffic.

1. **Security:**

* Secure login (encryption, session management).
* Prevention of unauthorized trading.

# **Testing Strategy**

* **Functional testing:** Test the correctness of core features (e.g. search, trade, portfolio).
* **Performance testing:** Verify the speed and responsiveness of real-time stock updates.
* **Usability testing:** Ensure the demo is user-friendly and intuitive.
* **Compatibility testing:** Check for cross browser and cross-device compatibility.
* **Security testing:** Test demo data security (login, password encryption).

# **Test Environment**

1. **Frontend:**

* The mercury stock market demo website deployed on a staging server or a local machine.

1. **Backend:**

* Database with dummy stock market data for testing (e.g. sample stocks, user accounts, transactions).

1. **Testing devices:**

* Desktop/Laptop: To test the website on a larger screen.
* Mobile phone/Tablet: To check responsiveness and usability on smaller screens.

1. **Browsers for testing:**

* Google chrome
* Mozilla Firefox
* Safari
* Microsoft Edge

1. **Network:**

* A stable internet connection to ensure smooth access to the website.

# **Test Deliverables**

* Test Scenario
* Bug report with severity level.
* Test Cases report.
* Final test summary report.

# **Entry and Exit Criteria**

* **Entry Criteria:**
* All Features are developed and deployed in the test environment.
* Test environment is set up.
* Test cases are created and reviewed.
* **Exit criteria:**
* All critical and high-severity bugs have been fixed.
* All test cases are executed >95%.

# **Risks and Mitigation**

| **Risk** | **Mitigation** |
| --- | --- |
| Delayed real time update | Conduct performance testing under load |
| UI inconsistencies across browsers | Conduct through cross-browser testing |

# **Roles and Responsibilities**

| **Name** | **Role** | **Responsibility** |
| --- | --- | --- |
| Palak Mangal | Test Manager | Oversee the testing process |
| Palak Mangal | Test Engineer | Design and execute test cases |

# **Schedule**

| **Phase** | **Start Date** | **End Date** |
| --- | --- | --- |
| Test planning | 12-Nov-2024 | 12-Nov-2024 |
| Test Scenario | 13-Nov-2024 | 13-Nov-2024 |
| Test Cases | 14-Nov-2024 | 14-Nov-2024 |
| Bug report | 15-Nov-2024 | 15-Nov-2024 |
| Test summary report | 16-Nov-2024 | 16-Nov-2024 |

# **Approval**

This test plan is approved by:

* Project Manager
* Project Owner