Test and Inspection Report

**Stock Market Simulator**

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Overview

Testing of application and inspection of code can be mainly subdivided into following categories:

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| **Category** | **Description** |
| Login | Includes testing of login, new user registration and forgot password functionalities. |
| Portfolio | Includes testing of Sell Stocks button, Pie chart depicting user’s assets, Grid showing details of stocks owned by the user and the graph functionalities. |
| Purchase | Includes testing of Search button, dropdown filter, Purchase Stocks button, Display Historical Graph button and Name and Symbol radio buttons functionalities. |
| Watchlist | Includes testing of Search button, dropdown filter, Name and Symbol radio buttons, Purchase Stocks button, Add to Watchlist button, Remove from Watchlist button and Graph functionalities. |

Individual test cases

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| **Project Name:** Stock Market Simulator | |
| **Test case ID:** 10001 | **Test case Name:** New User Registration |
| **Priority:** High | **Test case Location:** Login Page |
| **Author:** Bhavya Mahajan | **Inspector:** Prabhjot Singh |
| **Features to be Tested:** Creating a new login for a new user | |
| **Pass/Fail Criteria:** A new login should be created with provided parameters | |
| **Dependencies:** Local Database | |
| **Test Procedure:**   1. User launches the application. 2. System shows the login window. 3. User clicks on Register button. 4. System shows registration page. 5. User provides username, password, first name, last name, email, security question and answer 6. System creates new login, and opens the login page. | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  1. If any information is not provided (left blank), system prompts user to fill it in.  2. If provided username exists in database, system prompts user to give a different username. | |

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| **Project Name:** Stock Market Simulator | |
| **Test case ID:** 10002 | **Test case Name:** Login |
| **Priority:** High | **Test case Location:** Login Page |
| **Author:** Bhavya Mahajan | **Inspector:** Mukund Subakanthan |
| **Features to be Tested:** Login | |
| **Pass/Fail Criteria:** User must be able to login to the system | |
| **Dependencies:** Local Database | |
| **Test Procedure:**   1. User launches the application. 2. System shows the login window. 3. User enters username and password. 4. System validates and shows the main form. | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  1. If any information is not provided (left blank), system prompts user to fill it in.  2. If provided username or password does not exist in database, system prompts the user that the provided username or password does not match the records. | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10003 | | **Test case Name:** Recover password | |
| **Priority:** High | | **Test case Location:** Login Page | |
| **Author:** Bhavya Mahajan | | **Inspector:** Abraheem Irheem | |
| **Features to be Tested:** Recovering lost password | | | |
| **Pass/Fail Criteria:** A new password must be generated for existing user | | | |
| **Dependencies:** Local Database | | | |
| **Test Procedure:**   1. User launches the application. 2. System shows the login window. 3. User enters his username and clicks on forgot password button. 4. System shows recover password screen and displays the security question 5. User provides answer to the security question. 6. System allows user to change password if input information matches. 7. User inputs new password. 8. System stores new password and the login screen is shown | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  1. If any information is not provided (left blank), system prompts user to fill it in.  2. If provided username does not exist in database, system prompts user to give a valid username.  3. If security question and answer do not match, system prompts user to enter right information.  4. If entered passwords do not match, system prompts user to enter matching passwords. | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10004 | | **Test case Name:** Pie Chart depicting total assets | |
| **Priority:** High | | **Test case Location:** User Portfolio page | |
| **Author:** Prabhjot Singh | | **Inspector:** Abraheem Irheem | |
| **Features to be Tested:** Pie Chart Illustrating stocks that user has and the total assets the user owns | | | |
| **Pass/Fail Criteria:** System displays pie chart of all the stocks that the user owns | | | |
| **Dependencies:** Local Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application and the system displays the portfolio page 3. System displays a pie chart of all the stocks that user owns along with the total assets that the user owns. | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  1. If the user does not own any stock then the pie chart should be empty. | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10005 | | **Test case Name:** Current Purchased stocks grid | |
| **Priority:** High | | **Test case Location:** User Portfolio page | |
| **Author:** Prabhjot Singh | | **Inspector:** Bhavya Mahajan | |
| **Features to be Tested:** Grid illustrating all the stocks that the user owns | | | |
| **Pass/Fail Criteria:** System displays all the stocks the user owns in a grid | | | |
| **Dependencies:** Local Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application and the system displays the portfolio page 3. System displays all the stocks the user owns in a grid | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  1. If the user does not own any stock then the grid should be empty. | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10006 | | **Test case Name:** Graph chart information | |
| **Priority:** High | | **Test case Location:** User Portfolio page | |
| **Author:** Prabhjot Singh | | **Inspector:** Mukund Subakanthan | |
| **Features to be Tested:** Graph chart information of the selected stock | | | |
| **Pass/Fail Criteria:** System displays graph chart information of the stock selected by the user on the grid | | | |
| **Dependencies:** Local Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application and the system displays the portfolio page 3. User selects a particular stock on the grid. 4. System displays graph chart information of the selected stock | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  1. If the user does not own any stock then the grid should be empty and therefore there would be no graph chart information of any stock. | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10007 | | **Test case Name:** Sell Stocks | |
| **Priority:** High | | **Test case Location:** User Portfolio page | |
| **Author:** Prabhjot Singh | | **Inspector:** Abraheem Irheem | |
| **Features to be Tested:** Selling of stocks that are owned by the user | | | |
| **Pass/Fail Criteria:** User is able to sell the stocks he owns and stock grid gets updated. | | | |
| **Dependencies:** Local Database and Stocks Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application and the system displays the portfolio page 3. User selects a particular stock on the grid. 4. User selects the quantity of that particular stock he wants to sell. 5. User clicks the sell stocks button to sell his stocks. 6. System sells his stocks and updates the balance, pie chart and the grid. | | | |
| **Result:** Fail, if the user sells all the stocks, the grid does not flush out last data. | |
| **Fixes Proposed (if any):** check for empty table after the user has sold a stock. | |
| **Exceptions/Special Considerations:**  1. If the user tries to sell more quantity of stocks than what he has then system prompts the user that he does not have this much quantity of that particular stock. | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10008 | | **Test case Name:** Purchase Stocks button | |
| **Priority:** High | | **Test case Location:** Purchase Page | |
| **Author:** Abraheem Irheem | | **Inspector:** Bhavya Mahajan | |
| **Features to be Tested:** Purchasing stocks from Purchase page | | | |
| **Pass/Fail Criteria:** User purchases the selected stock. | | | |
| **Dependencies:** Stock Database and Local Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application. 3. User opens Purchase page. 4. System shows a list of stocks. 5. User selects a stock from the list of stocks, enters quantity of stocks to be purchased and clicks “Purchase Stocks” 6. System checks if the user has sufficient balance, deducts the user’s balance and selected stock is purchased by the user. | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  1. If the total purchase cost exceeds the user’s available balance, system prompts the user of insufficient balance. | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10009 | | **Test case Name:** Search Button | |
| **Priority:** High | | **Test case Location:** Purchase Page | |
| **Author:** Abraheem Irheem | | **Inspector:** Mukund Subakanthan | |
| **Features to be Tested:** Searching for stocks in Purchase page | | | |
| **Pass/Fail Criteria:** System shows the stock that the user has searched for | | | |
| **Dependencies:** Stock Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application. 3. User opens Purchase page. 4. User enters either name of a company or symbol of the stock in the Search box and clicks Search. 5. System fetches and returns the relevant stocks. | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  1. System provides autofill feature when the user enters the text in the Search box. | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10010 | | **Test case Name:** Display Historical Graph | |
| **Priority:** High | | **Test case Location:** Purchase Page | |
| **Author:** Abraheem Irheem | | **Inspector:** Prabhjot Singh | |
| **Features to be Tested:** Historical Graph of selected stock | | | |
| **Pass/Fail Criteria:** System displays Historical graph of selected stock | | | |
| **Dependencies:** Stock Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application. 3. User opens Purchase page. 4. User selects a stock and clicks Display Historical Graph button 5. System presents up to date historic graph of selected stock. | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  NA | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10011 | | **Test case Name:** Dropdown filter | |
| **Priority:** High | | **Test case Location:** Purchase Page | |
| **Author:** Abraheem Irheem | | **Inspector:** Bhavya Mahajan | |
| **Features to be Tested:** Selecting an industry from the dropdown. | | | |
| **Pass/Fail Criteria:** System displays all the stocks that belong to selected industry. | | | |
| **Dependencies:** Stock Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application. 3. User opens Purchase page. 4. User selects an industry from the dropdown. 5. System fetches and returns all the stocks that belong to the selected industry. | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  NA | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10012 | | **Test case Name:** Name and Symbol Radio buttons | |
| **Priority:** High | | **Test case Location:** Purchase Page | |
| **Author:** Abraheem Irheem | | **Inspector:** Mukund Subakanthan | |
| **Features to be Tested:** Selecting either name or Symbol radio button | | | |
| **Pass/Fail Criteria:** System displays stock name if Name radio button is selected and Stock symbol if Symbol radio button is selected. | | | |
| **Dependencies:** Local Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application. 3. User opens Purchase page. 4. User selects Name Radio button and system displays stock names. 5. User selects Symbol Radio button and system displays stock symbols. | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  NA | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10013 | | **Test case Name:** Add to Watchlist | |
| **Priority:** High | | **Test case Location:** Watchlist Page | |
| **Author:** Mukund Subakanthan | | **Inspector:** Bhavya Mahajan | |
| **Features to be Tested:** Adding stocks to Watchlist | | | |
| **Pass/Fail Criteria:** Selected stock should be added to the watchlist | | | |
| **Dependencies:** Stock Database and Local Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application. 3. User opens Watchlist page. 4. System shows a list of stocks. 5. User selects a stock and clicks “Add to Watchlist”. 6. System adds the selected stock to the Watchlist. | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**   1. If the user already has 5 stocks in his Watchlist and tries to add one more stock,   System prompts the user that only a maximum of 5 stocks can be added to the Watchlist.  2. If the user tries add a stock which is already added to the Watchlist, system prompts the user that the stock has been already added to the Watchlist. | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10014 | | **Test case Name:** Remove From Watchlist | |
| **Priority:** High | | **Test case Location:** Watchlist Page | |
| **Author:** Mukund Subakanthan | | **Inspector:** Prabhjot Singh | |
| **Features to be Tested:** Removing stocks from Watchlist | | | |
| **Pass/Fail Criteria:** Selected stock should be removed from the watchlist | | | |
| **Dependencies:** Stock Database and Local Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application. 3. User opens Watchlist page. 4. System shows a list of stocks that the user has in his Watchlist. 5. User selects a stock and clicks “Remove From Watchlist”. 6. System removes the selected stock from the Watchlist. | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:** NA | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10015 | | **Test case Name:** Purchase Stocks in Watchlist page | |
| **Priority:** High | | **Test case Location:** Watchlist Page | |
| **Author:** Mukund Subakanthan | | **Inspector:** Abraheem Irheem | |
| **Features to be Tested:** Purchasing stocks from Watchlist page | | | |
| **Pass/Fail Criteria:** User purchases the selected stock. | | | |
| **Dependencies:** Stock Database and Local Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application. 3. User opens Watchlist page. 4. System shows a list of stocks. 5. User selects a stock from the Watchlist table, enters quantity of stocks to be purchased and clicks “Purchase Stocks” 6. System checks if the user has sufficient balance, deducts the user’s balance and selected stock is purchased by the user. | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  1. If the total purchase cost exceeds the user’s available balance, system prompts the user of insufficient balance. | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10016 | | **Test case Name:** Search Button | |
| **Priority:** High | | **Test case Location:** Watchlist Page | |
| **Author:** Mukund Subakanthan | | **Inspector:** Bhavya Mahajan | |
| **Features to be Tested:** Searching for stocks in Watchlist page | | | |
| **Pass/Fail Criteria:** System shows the stock that the user has searched for. | | | |
| **Dependencies:** Stock Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application. 3. User opens Watchlist page. 4. User enters either name of a company or symbol of the stock in the Search box and clicks Search. 5. System fetches and returns the relevant stocks. | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  1. System provides autofill feature when the user enters the text in the Search box. | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10017 | | **Test case Name:** Graph of Stocks | |
| **Priority:** High | | **Test case Location:** Watchlist Page | |
| **Author:** Mukund Subakanthan | | **Inspector:** Prabhjot Singh | |
| **Features to be Tested:** Displaying the graph of stocks | | | |
| **Pass/Fail Criteria:** Graph about all the stocks in the Watchlist is displayed | | | |
| **Dependencies:** Stock Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application. 3. User opens Watchlist page. 4. System shows a graph about all the stocks in the Watchlist. | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  1. If there is no stock in the Watchlist table, the graph shows nothing. | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10018 | | **Test case Name:** Dropdown filter | |
| **Priority:** High | | **Test case Location:** Watchlist Page | |
| **Author:** Mukund Subakanthan | | **Inspector:** Abraheem Irheem | |
| **Features to be Tested:** Selecting an industry from the dropdown. | | | |
| **Pass/Fail Criteria:** System displays all the stocks that belong to selected industry. | | | |
| **Dependencies:** Stock Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application. 3. User opens Watchlist page. 4. User selects an industry from the dropdown. 5. System fetches and returns all the stocks that belong to the selected industry. | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  NA | |

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| **Project Name:** Stock Market Simulator | | | |
| **Test case ID:** 10019 | | **Test case Name:** Name and Symbol Radio buttons | |
| **Priority:** High | | **Test case Location:** Watchlist Page | |
| **Author:** Mukund Subakanthan | | **Inspector:** Abraheem Irheem | |
| **Features to be Tested:** Selecting either name or Symbol radio button | | | |
| **Pass/Fail Criteria:** System displays stock name if Name radio button is selected and Stock symbol if Symbol radio button is selected. | | | |
| **Dependencies:** Local Database | | | |
| **Test Procedure:**   1. User launches the application. 2. User logs in to the application. 3. User opens Watchlist page. 4. User selects Name Radio button and system displays stock names. 5. User selects Symbol Radio button and system displays stock symbols. | | | |
| **Result:** Pass, works as intended | |
| **Fixes Proposed(if any):** NA | |
| **Exceptions/Special Considerations:**  NA | |