|  |  |  |
| --- | --- | --- |
| **Use Case Name** | Get suggestions | |
| **Scenario** | User enters selected stock to get a suggestion | |
| **Triggering Event** | User requests a stock suggestion. | |
| **Brief description** | Get suggestion from system bot to a selected stock. | |
| **Actor** | User | |
| **Preconditions** | User select a stock to predict | |
| **Postconditions** | User receives suggestion | |
| **Flow of activities** | Actor | System |
| 1. User clicks on get suggestion button. 2. User will fill in a stock name | * 1. System display box to fill in stock name.   2.1 System will send the stock name to the model.  2.2 System will receive the suggestion and show it to the user |
| **Exceptions** |  | |

|  |  |  |
| --- | --- | --- |
| **Use Case Name** | Sign in | |
| **Scenario** | User/Admin enters credentials to log in his account | |
| **Triggering Event** | User/Admin wants to enter his account | |
| **Brief description** | User/Admin will have access to his account. | |
| **Actor** | User, Admin | |
| **Preconditions** | User/Admin enter the web page | |
| **Postconditions** | User/Admin will be in his account | |
| **Flow of activities** | Actor | System |
| 1. User/Admin Enters website 2. User/Admin fills required credentials | * 1. System shows required credentials   2.1 System will check if credentials  match an account  2.2 System gives access if credentials  match |
| **Exceptions** |  | |

|  |  |  |
| --- | --- | --- |
| **Use Case Name** | View Report | |
| **Scenario** | User wants a report about a portfolio | |
| **Triggering Event** | User wants a | |
| **Brief description** | User ask System to generate a report about a portfolio | |
| **Actor** | User | |
| **Preconditions** | Selected portfolio | |
| **Postconditions** | Report generated | |
| **Flow of activities** | Actor | System |
| 1. User enters a portfolio and clicks view report button | 1.1 System generate a report for the selected portfolio.  1.2 return the report to the User |
| **Exceptions** |  | |

|  |  |  |
| --- | --- | --- |
| **Use Case Name** | Customize Bot | |
| **Scenario** | User wants to change bot settings | |
| **Triggering Event** | User customize trading bot | |
| **Brief description** | User change bot settings and trading strategies | |
| **Actor** | User | |
| **Preconditions** | user has the necessary permissions and credentials to customize bot settings. | |
| **Postconditions** | Bot settings updated | |
| **Flow of activities** | Actor | System |
| 1. User click on customize button  2. change to the wanted settings then click save  3. confirm new settings | 1.1 display all bot settings  2.1 shows new settings with confirmation massage  3.1 update settings |
| **Exceptions** |  | |

|  |  |  |
| --- | --- | --- |
| **Use Case Name** | Sign up | |
| **Scenario** | The user wants to make a new account. | |
| **Triggering Event** | - | |
| **Brief description** | Sign up to website by inserting full name, username, email, and password | |
| **Actor** | User | |
| **Preconditions** | The user must have a new email. | |
| **Postconditions** | A new account registered to the database. | |
| **Flow of activities** | Actor | System |
| 1. Enter his details.  2. Confirm email. | 1.1 Check if email and username doesn’t exist already.  1.2 Validate information.  1.3 Send a confirmation email.  2.1 Create account.  2.2 Open account. |
| **Exceptions** | 1.1 Account already exists.  1.2 Information not valid. | |

|  |  |  |
| --- | --- | --- |
| **Use Case Name** | Predict Price | |
| **Scenario** | Bot wants to Predict a price | |
| **Triggering Event** | Bot scheduled prediction process | |
| **Brief description** | Bot sends stock details to system for price prediction and signal | |
| **Actor** | Bot | |
| **Preconditions** | Created portfolio | |
| **Postconditions** | Price Predicted | |
| **Flow of activities** | Actor | System |
| 1. Send stock name and symbol | 1.1 predict stock price  1.2 generate decision signal  1.3 send predicted price and signal |
| **Exceptions** |  | |

|  |  |  |
| --- | --- | --- |
| **Use Case Name** | Create Portfolio | |
| **Scenario** | User wants to create a portfolio | |
| **Triggering Event** | User clicks on create portfolio button | |
| **Brief description** | User enters a set of stocks that he wants the bot to track and trade and set a balance to the bot | |
| **Actor** | User | |
| **Preconditions** | User must login an account | |
| **Postconditions** | Portfolio created | |
| **Flow of activities** | Actor | System |
| 1. Click on create portfolio button  2. select a time and set a balance for portfolio | * 1. ask user for needed information   2.1 create a portfolio with selected |
| **Exceptions** |  | |

|  |  |  |
| --- | --- | --- |
| **Use Case Name** | Change Balance | |
| **Scenario** | Admin wants to change portfolio balance | |
| **Triggering Event** |  | |
| **Brief description** | Admin changes balance available to the bot in portfolio | |
| **Actor** | Admin | |
| **Preconditions** | Selected a portfolio | |
| **Postconditions** | Balance updated | |
| **Flow of activities** | Actor | System |
| 1. Admin select a portfolio and press update balance Button  2. confirm the new balance | 1.1 System shows old and new balance and asks for confirmation  2.1 update portfolio balance |
| **Exceptions** |  | |

|  |  |  |
| --- | --- | --- |
| **Use Case Name** | Buy stock | |
| **Scenario** | Bot wants to buy a stock | |
| **Triggering Event** | Buy signal received | |
| **Brief description** | Bot buys a stock | |
| **Actor** | Bot | |
| **Preconditions** | Buy signal received | |
| **Postconditions** | Bought stock | |
| **Flow of activities** | Actor | System |
| 1. Send stock name, symbol, and quantity | 1.1 Send a buy order with received information |
| **Exceptions** |  | |

|  |  |  |
| --- | --- | --- |
| **Use Case Name** | Sell stock | |
| **Scenario** | Bot wants to Sell a stock | |
| **Triggering Event** | Buy signal received | |
| **Brief description** | Bot buys a stock | |
| **Actor** | Bot | |
| **Preconditions** | Sell signal received | |
| **Postconditions** | Sold stock | |
| **Flow of activities** | Actor | System |
| 1. Send stock name, symbol, and quantity | 1.1 Send a sell order with received information |
| **Exceptions** |  | |

|  |  |  |
| --- | --- | --- |
| **Use Case Name** | Backtesting | |
| **Scenario** | Test Bot performance | |
| **Triggering Event** | User press Backtesting button | |
| **Brief description** | User test bot performance in simulated environment before live trading | |
| **Actor** | User | |
| **Preconditions** | Portfolio must be created | |
| **Postconditions** | Backtest report generated | |
| **Flow of activities** | Actor | System |
| 1. User enters Bot id and period of time | * 1. run a test on the period selected   2. generate a report of the performance   1.3 display a report for User |
| **Exceptions** |  | |