CSE 6324 - Agile Fall 2024 Team 3

Project Name: Charles – A Technical Analysis Charting Assistant

Test Case Name: Registration

Test Case Id: CSE6324/FALL2024/Team3/Registration

Test	Test Case Description	Expected results	Outcome
Case No.			Pass, Fail, Other (comments)
TC1	Press the Register button and enter an email, username, password, first name, and last name. (ensure valid test credentials are created and provided to testers).	The system authenticates successfully, and the user is granted access to the application, redirecting to the login screen.	
TC2	Press the Register button and enter an invalid formatted email.	The system should deny registration and display an error message like "Invalid email format." The user should remain on the registration page.	
TC3	Press the Register button and enter a different password for the "confirm password" entry than you did for the "password" entry	The system should prevent registration and display an error message like "The passwords don't match." The user remains on the registration page.	
TC4	Enter a password that does not meet the requirements of the system.	The system should prevent registration and display an error message that the user did not meet the password specifications. The user remains on the registration page.	
TC5	Press the Register button and leave a field in the registration page blank	The system should prevent registration and display an error message that the user did not input all the data. The user remains on the registration page	

Test Case Name:

LoginCSE6324/FALL2024/Team3/Login **Test Case Id**:

Test	Test Case Description	Expected results	Outcome
Case No.			Pass, Fail, Other (comments)
TC1	Press the login button and enter a valid user ID and password (ensure valid test credentials are created and provided to testers).	The system authenticates successfully, and the user is granted access to the application, redirecting to the homepage/dashboard.	
TC2	Press the login button and enter an incorrect user ID or password (use a deliberately incorrect password or non-existent user ID).	The system should deny access and display an error message like "Invalid username or password." The user should remain on the login page.	
TC3	Press the login button without entering either a user ID or password, leaving one or both fields blank.	The system should prevent login and display an error message prompting the user to fill in the missing information. The user remains on the login page.	
TC4	Enter a password, then toggle the "Show Password" option to make the password visible, and toggle it again to hide the password.	The password is displayed in plain text when "Show Password" is toggled on, and masked (hidden) when toggled off, with no other changes to the page.	
TC5	Log in with valid credentials and remain inactive for the duration of the session timeout setting (e.g., 15 minutes). Afterward, attempt to interact with the application.	The system should log the user out automatically due to inactivity. The user is prompted to log in again, and all previous session data is cleared.	

Test Case Name: Subscribe

Test Case Id: CSE6324/FALL2024/Team3/Subscribe

Test	Test Case Description	Expected results	Outcome
Case No.			Pass, Fail, Other (comments)
TC1	Enter valid credit card details, including a real credit card number format, expiration date, and CVV (use test card information if possible).	The payment is processed successfully, the subscription is activated, and the user receives a confirmation message.	
TC2	Enter an incorrect or invalid card number (e.g., one that is missing digits or contains letters).	The system should prevent submission and display an error message like "Invalid card number," without processing payment. The user remains on the payment page.	
TC3	Enter a valid card number and expiration date but enter an incorrect CVV (e.g., fewer digits than required or a non-numeric CVV).	The system should display an error message, such as "Invalid CVV," and prevent payment from processing, keeping the user on the payment page.	
TC4	Login as a user that is not subscribed to Charles.	The system should redirect the user to the Subscribe page.	
TC5	Login as a user that is subscribed to Charles.	The system should redirect the user to the Home page.	

Test Case Name: See Stock Chart

Test Case Id: CSE6324/FALL2024/Team3/See-Stock-Chart

Test	Test Case Description	Expected results	Outcome
Case No.			Pass, Fail, Other (comments)
TC1	Instruct Charles to create an image of a stock chart for a valid stock ticker (e.g., "AAPL" for Apple Inc.).	Charles generates a clear image of the Apple stock chart, showing relevant data such as time range and price fluctuations.	
TC2	Request a stock chart for an invalid or unknown stock ticker (e.g., "XXXX").	Charles responds with an error message like "Invalid ticker symbol. Please try again with a valid ticker," and no chart image is generated.	
TC3	Ask Charles for a stock chart using the full stock name instead of the ticker (e.g., "Microsoft").	Charles identifies the correct ticker symbol (MSFT) and generates a stock chart image for Microsoft.	
TC4	Request a stock chart from Charles without specifying a time range.	Charles generates a default stock chart (e.g., daily or one-month view) and provides an option to specify a custom time range for more precise data.	
TC5	Ask Charles to create a chart for a non-stock asset, like a cryptocurrency ticker (e.g., "BTC").	Charles either generates a crypto chart (if supported) or responds with a message like "Currently, I only support stock tickers. Please try with a valid stock name or ticker."	

Test Case Name: Un-Subscribe

Test Case Id: CSE6324/FALL2024/Team3/Un-Subscribe

Test	Test Case Description	Expected results	Outcome
Case No.			Pass, Fail, Other (comments)
TC1	Click the unsubscribe button and confirm the action when prompted.	The user's subscription is successfully canceled, a confirmation message is displayed (e.g., "You have successfully unsubscribed")	
TC2	Attempt to unsubscribe from the service when the user does not have an active subscription.	The user shouldn't be able to find or see the unsubscribe button	
TC3	Click the unsubscribe button, then cancel the unsubscribe action when the confirmation prompt appears.	The unsubscribe action is not completed, and the user remains subscribed.	
TC4	Navigate to the unsubscribe page to begin intent to unsubscribe	The system should display the unsubscribe page and not do any unsubscribe action to the user without any input	
TC5	Unsubscribe from the service, then attempt to access previously available subscription-only content.	The system should prevent access to subscription-only content.	

Test Case Name:

Change Stock Chart Time Frame
CSE6324/FALL2024/Team3/Change-Stock-Chart-Time-Frame **Test Case Id:**

Test	Test Case Description	Expected results	Outcome
Case No.			Pass, Fail, Other (comments)
TC1	Ask Charles to change the time frame on an existing stock chart from day to week	Charles updates the stock chart to display week view, retaining any existing indicators (e.g., Moving Average, MACD) with settings adjusted to the new time frame if necessary.	
TC2	Ask Charles to switch the time frame to an invalid or unsupported time range like decade	Charles should not produce a chart with decade timeframe with the stock ticker	
TC3	Ask Charles to change the time frame from week back to day	Charles updates the stock chart to display day view, retaining any existing indicators (e.g., Moving Average, MACD) with settings adjusted to the new time frame if necessary.	
TC4	Ask Charles to change from a non-month timeframe to month	Charles updates the stock chart to display month view, retaining any existing indicators (e.g., Moving Average, MACD) with settings adjusted to the new time frame if necessary.	
TC5	Ask Charles for the same timespan	Charles updates the stock chart to display the same timespan view, retaining any existing indicators (e.g., Moving Average, MACD)	

Test Case Name: Add Indicators to Stock Chart

Test Case Id: CSE6324/FALL2024/Team3/Add-Indicators-to-Stock-Chart

Test	Test Case Description	Expected results	Outcome
Case No.	Test Case Description	Expected results	Pass, Fail, Other (comments)
TC1	Instruct Charles to create a stock chart for a valid ticker (e.g., "AAPL") and add the MACD indicator.	Charles generates a stock chart image of Apple with the MACD indicator displayed below or overlaid on the chart, including signal line and histogram if applicable.	
TC2	Request Charles to add an indicator that doesn't exist or is misspelled (e.g., "MCD" instead of "MACD").	Charles will not display the graph with "MCD" because this indicator doesn'	
TC3	Ask Charles to create charts with multiple indicators, such as MACD, RSI, and Moving Average, on a valid stock (e.g., "GOOGL with MACD, RSI and SMA").	Charles generates a stock chart of Google with all specified indicators (MACD, RSI, and Moving Average) displayed clearly, distinguishing each indicator appropriately.	
TC4	Request a stock chart with the MACD indicator without specifying a time range (e.g., "Show AAPL with MACD").	Charles generates a stock chart of Apple with MACD, using a default time range (e.g., one month) and displaying MACD based on that range.	
TC5	Instruct Charles to create a stock chart with the EMA indicator and then in a separate request tell it to "Add VROC" and then "Add OBV"	Charles recognizes that additional indicators have been requested to be added and Charles will create charts for each	

Test Case Name:

Test Trial Before Paying CSE6324/FALL2024/Team3/Test-Trial-Before-Paying **Test Case Id:**

Test	Test Case Description	Expected results	Outcome
Case No.	•	•	Pass, Fail, Other (comments)
TC1	Prompt Charles to Subscribe and then Start a Free Trial	Charles successfully starts the user to a free trial and gives them 3 free requests. The user will be redirected to the stocks page	
TC2	Request Charles to display a stock (e.g., Show me Palantir with Candlestick")	Charles successfully displays the stock with a candlestick chart	
TC3	Make 2 more requests to display a stock (e.g., Add MACD and Add RSI")	Charles successfully displays the stock with candlestick, MACD, and RSI charts	
TC4	Attempt to make a fourth request after using all three trial requests (e.g., "Show me a chart for MSFT").	Charles responds with a message indicating that the trial limit has been reached and invites the user to subscribe for continued access to the service.	
TC5	After each request (first, second, and third), check if Charles provides feedback on the remaining requests (e.g., "You have 2 requests remaining").	After each request, Charles provides accurate updates on the number of remaining requests (e.g., "You have 2 requests remaining," then "You have 1 request remaining" after the second request).	

Test Case Name: See News for Stock

Test Case Id: CSE6324/FALL2024/Team3/See-News-and-Financials-for-Stock

Test	Test Case Description	Expected results	Outcome
Case No.	Test Cuse Description	L'Apecteu l'esuits	Pass, Fail, Other (comments)
TC1	Instruct Charles to show news for a valid stock ticker (e.g., "Show news for AAPL").	Charles retrieves and displays a list of links to the latest news articles related to Apple, ensuring that the links are clickable and lead to the respective news sources.	
TC2	Instruct Charles to remove news for a valid stock ticker (e.g., "Remove news for AAPL").	Charles removes the news for the requested stock	
TC3	Instruct Charles to show financials for a valid stock ticker (e.g., "Show financials for AAPL").	Charles responds with the following financials: Balance Sheet, Income Statement, and Cash Flow Statement	
TC4	Instruct Charles to remove financials for a valid stock ticker (e.g., "Remove financials for AAPL").	Charles removes the financials for the requested stock	
TC5	Request both news and financials for a given stock (e.g., "Show financials and news for AAPL").	Charles displays both the news and financials for the given stock	

Test Case Name: Use Charles on the Internet

Test Case Id: CSE6324/FALL2024/Team3/Use-Charles-on-the-Internet

Test	Test Case Description	Expected results	Outcome
Case No.	,		Pass, Fail, Other (comments)
TC1	Open the URL to Charles on a non-mobile device	The interface appears on the web browser that is clearly Charles and there is connectivity	
TC2	Access Charles securely on a browser	The web browser does not throw any SSL error or certificate issues	
TC3	Simulate multiple users accessing the Charles web interface simultaneously to perform various queries.	Charles handles concurrent requests efficiently without significant delays or performance degradation, providing accurate responses to each user.	
TC4	Access the Charles web interface on a mobile device.	The interface adapts to the mobile screen size, maintaining usability and functionality, allowing the user to query stock information easily.	
TC5	Refreshing the URL of Charles	The user should still land on the Charles app	

Test Case Name: Change Indicators on Stock Chart

Test Case Id: CSE6324/FALL2024/Team3/Change-Indicators-on-Stock-Chart

Test	Test Case Description	Expected results	Outcome
Case No.			Pass, Fail, Other (comments)
TC1	Ask Charles to replace the existing indicator (e.g., MACD) on a stock chart for "AAPL" with a new indicator (e.g., "Change to RSI").	Charles removes the MACD indicator and adds the RSI indicator to the Apple stock chart. The updated chart image with RSI is generated and displayed.	
TC2	Instruct Charles to add a new indicator (e.g., Moving Average) to an existing stock chart that already includes MACD (e.g., "Add Moving Average to this chart").	Charles adds the Moving Average indicator to the chart while retaining the existing MACD indicator, resulting in a chart that displays both MACD and Moving Average.	
TC3	Request Charles to remove a specific indicator from a stock chart that has multiple indicators (e.g., "Remove RSI from this chart").	Charles removes the RSI indicator from the chart, leaving the remaining indicators (if any) intact. The updated chart image without RSI is generated.	
TC4	Instruct Charles to clear all indicators from the current stock chart (e.g., "Remove all indicators from this chart").	Charles removes all indicators from the chart, leaving only the stock price data. The updated chart with no indicators is generated and displayed.	
TC5	Provide an invalid command to change indicators, such as an unsupported indicator name or ambiguous request (e.g., "Switch to XYZ indicator").	Charles responds with an error message like "Invalid indicator name. Please try with a supported indicator," and no chart is generated.	

Test Case Name: Change Stock with Previously Given Indicators

Test Case Id: CSE6324/FALL2024/Team3/Change-Stock-with-Previously-

Given-Indicators

Test	Test Case Description	Expected results	Outcome
Case No.			Pass, Fail, Other (comments)
TC1	Ask Charles to switch the stock on an existing chart (e.g., from "AAPL" to "GOOGL") while retaining the current indicators (e.g., Moving Average and MACD).	Charles generates a new stock chart for Google with the Moving Average and MACD indicators applied, matching the indicator settings used on the Apple chart.	
TC2	Ask Charles to change the stock on a chart with multiple indicators (e.g., MACD, RSI, and Moving Average) from "TSLA" to "MSFT."	Charles generates a stock chart for Microsoft with MACD, RSI, and Moving Average indicators applied, reflecting the same settings as on the Tesla chart.	
TC3	Ask Charles to switch the stock to an invalid or unknown ticker (e.g., "XXXX") while retaining the indicators.	Charles responds with an error message like "Invalid ticker symbol. Please try again with a valid ticker," and the chart is not generated.	
TC4	Ask Charles to change the stock symbol on a chart without explicitly stating to keep the existing indicators (e.g., "Switch to GOOG").	Charles assumes the request is to retain previous indicators and generates a new chart for Google, keeping any existing indicators in the same configuration.	
TC5	Instruct Charles to change the stock, add and remove multiple indicators all in one command.	Charles adds and removes the desired stock charts for the instructed stock ticker	

Test Case Name: Charles Will Friendly Respond to Requests

Test Case Id: CSE6324/FALL2024/Team3/Charles-will-friendly-respond-to-requests

Test Case No.	Test Case Description	Expected results	Outcome Pass, Fail, Other (comments)
TC1	Open the stock page with chat feature with Charles.	Charles responds with a friendly greeting.	
TC2	Ask Charles for a plain stock chart.	Charles responds with a message acknowledging your request.	
TC3	Ask Charles to add an indicator to a chart.	Charles responds with a message acknowledging your request.	
TC4	Ask Charles to show you news about the given stock.	Charles responds with a friendly message acknowledging your request.	
TC5	Ask Charles to add an indicator and change the timeframe.	Charles responds with a friendly message acknowledging all of the changes.	