APRIL 4, 2022

IMPLEMENTATION AND DELIVERY

CoinSim

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Document Sign-Off

Name (Position)	Signature	Date
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BitBucket Link

- **Access given to Professor Konstantinos Kontogiannis**

Test Driven Development

Test ID	1
Category	Login functionality: Evaluation of user credentials stored on file or DB
Requirements Coverage	UC1-Unsuccessful-User-Login
Initial Condition	Account for particular user does not exist yet
Procedure	1. The user selects the login option from the main menu 2. The user provides a user name that does not exist (ex. NewUser) 3. The user provides a password 4. The user clicks login
Expected Outcome	Using a dialogue box, the program informs the user that the user does not exist or that the credentials are incorrect and termintates the program once message box is closed
Notes	The login could be unsuccessful if an account with that username does not exist or if the account exists but the password is not correct

Test ID	2
Category	Login functionality: Evaluation of user credentials stored on file or DB
Requirements Coverage	UC1-Successful-User-Creation
Initial Condition	Account for particular user does not exist yet

Procedure	1. The user selects the create account option from the main menu
	2. The user provides a user name that does not exist (ex. NewUser)
	3. The user provides a password
	4. The user clicks continue
Expected Outcome	Using a dialogue box, the program informs the user that the account is created and proceeds to the main program once message box is closed
Notes	If an account with that username already exists, the user will be made aware using a dialogue box.

Test ID	3
Category	Login functionality: Evaluation of user credentials stored on file or DB
Requirements Coverage	UC1-Successful-User-Login
Initial Condition	Account for particular user exists
Procedure	1. The user selects the login option from the main menu
	2. The user types the user name (ex. NewUser)
	3. The user types the password
	4. The user clicks login
Expected Outcome	Using a dialogue box, the program informs the user that the login was successful and proceeds to the main program once message box is closed
Notes	

Test ID	4
Category	Modifying the Ledger Class - Adding a Trading Broker
Requirements Coverage	UC2 - Adding a Trading Broker - **Successful Test**
Initial Condition	The Application has been started and runs, and a user has logged in.
Procedure	1. The User click the "Add Row" button 2. The User writes the name, list of coins of interest, and selects the trading strategy to be attached to the trading broker.
Expected Outcome	A new entry is added in the list of Trading Brokers with the user's input for its fields.
Notes	If the name the user input already exists within the list of Trading Brokers, a message is displayed and a new Broker is not added.

Test ID	5
Category	Modifying the Ledger Class - Adding a Trading Broker
Requirements Coverage	UC2 - Adding Trading Broker - **Unsuccessful Test**
Initial Condition	The Application has been started and runs, and a user has logged in.
Procedure	1. The User click the "Add Row" button 2. The User writes the name, list of coins of interest, and selects the trading strategy to be attached to the trading broker.
Expected Outcome	The List of Trading Brokers does not change, no new Trading Broker is added.
Notes	

Test ID	6
Category	Modifying the Ledger Class - Removing a Trading Broker
Requirements Coverage	UC2 - Removing a Trading Broker - **Successful Test**
Initial Condition	The Application has been started and runs, and a user has logged in.
Procedure	1. The User selects the Trading Broker entry to remove and clicks the "Remove Row" button.
Expected Outcome	The Trading Broker entry is removed from the list of Trading Brokers.
Notes	"RemoveRow" button should not be clickable if the list of Trading Brokers is empty.

Test ID	7
Category	Modifying the Ledger Class - Removing a Trading Broker
Requirements Coverage	UC2 - Removing a Trading Broker - **Unsuccessful Test**
Initial Condition	The Application has been started and runs, and a user has logged in.
Procedure	1. The User selects the Trading Broker entry to remove and clicks the "Remove Row" button.
Expected Outcome	The Trading Broker entry is not removed from the list of Trading Brokers and is still present.
Notes	"RemoveRow" button should not be clickable if the list of Trading Brokers is empty.

Test ID	8
Category	Displaying the Trading Action for All Trading Clients
Requirements Coverage	UC4-Empty-Trader-Actions Unsuccessful Attempt
Initial Condition	A system with no trader actions
Procedure	1. Navigate to trading dashboard 2. Select the Perform Trade option
Expected Outcome	The output graph should be empty
Notes	This test is done to make sure that the program does not crash when Perform Trade is selected when no trades are entered into the system.

Test ID	9
Category	Displaying the Trading Action for All Trading Clients
Requirements Coverage	UC4-Trader-Actions Successful Attempt
Initial Condition	A system with trader actions
Procedure	1. Navigate to trading dashboard 2. Select the Perform Trade option
Expected Outcome	The output graph should correctly visualize all the trading results
Notes	This test is done to make sure that the program is able to correctly fetch prices, passing prices to right clients, applying the right trading strategy, and visiualizing the results.

Test ID	10
Category	Trading Strategy being enacted on a Trader
Requirements Coverage	UC3 - Performing a Trade - **Successful Test**
Initial Condition	The user has successfully logged in, and added at least one Trade with a Trading Strategy Assignment that fits that Trader's coins of interest. Logging Trades to Table works correctly.
Procedure	The user clicks the "Perform Trade" button.
Expected Outcome	The DataFetcher class fetches fresh coin data and the TradingStrategy for each Trader in the Ledger is enacted, and their CoinCounts are updated. The trade is logged as a record in the Table class.
Notes	If a trade is not performed on a Trader, a null record is added in the Table.

Test ID	11
Category	Trading Strategy being enacted on a Trader
Requirements Coverage	UC3 - Performing a Trade - **Unsuccessful Test**
Initial Condition	The user has successfully logged in, and added at least one Trade with a Trading Strategy Assignment that fits that Trader's coins of interest. Logging Trades to Table works correctly.
Procedure	1. The user clicks the "Perform Trade" button.
Expected Outcome	The CoinCount of a Trading Broker is not changed even after its Trading Strategy was enacted upon it and said to buy/sell coins. No trade record is added to the Table.
Notes	

Test ID	12
Category	MVC
Requirements Coverage	Check if view is loaded correctly
Initial Condition	New application session
Procedure	1. Navigate to login page and login to the existing account 2. Ensure that the view is rendered correctly
Expected Outcome	View is loaded
Notes	This test is done to make sure that the MVC performs as intended as correctly loads the respective page

Test ID	13
Category	MVC
Requirements Coverage	Check if trader view is loaded correctly
Initial Condition	Application session logged in
Procedure	1. Add a trader 2. Ensure that the trader view is rendered correctly
Expected Outcome	Trader view is loaded
Notes	This test is done to make sure that the MVC performs as intended as correctly loads the respective page

Test ID	14
Category	MVC
Requirements Coverage	Check if histogram and trading history table is loaded correctly
Initial Condition	Application session logged in and at least one active trader
Procedure	1. Click perform trade 2. Ensure that the histogram and trading history table is rendered correctly
Expected Outcome	Histogram and trading history table is loaded
Notes	This test is done to make sure that the MVC performs as intended as correctly loads the respective page

Group Meeting Logs

Present Group Members	Meeting Date	Issues Discussed / Resolved
Arjav, Anubhav, Balaaj, Rishabh	30-03-2022	Discussed deliverable requirements and familiarized ourselves with resources provided. Delegated tasks to members
Arjav, Anubhav, Balaaj, Rishabh	31-03-2022	Discussed progress and any issues being faced.
Balaaj, Arjav	1-04-2022	Worked on trading functionality Interface Descriptions Write-up
Anubhav, Rishabh	1-04-2022	Worked on login functionality
Anubhav, Rishabh	2-04-2022	Improved login/create account UI
Arjav, Anubhav, Balaaj, Rishabh	3-04-2022	Finished trading platform, login and create account splash screen, readme file, documentation.