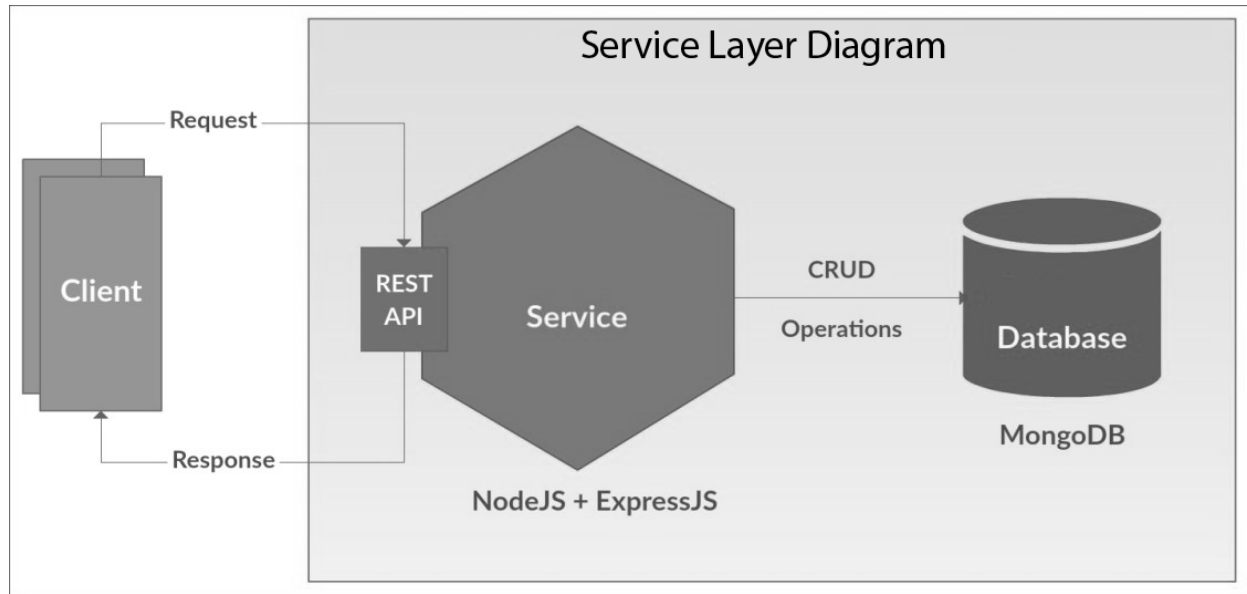


SERVICE LAYER

Carina Sylvester

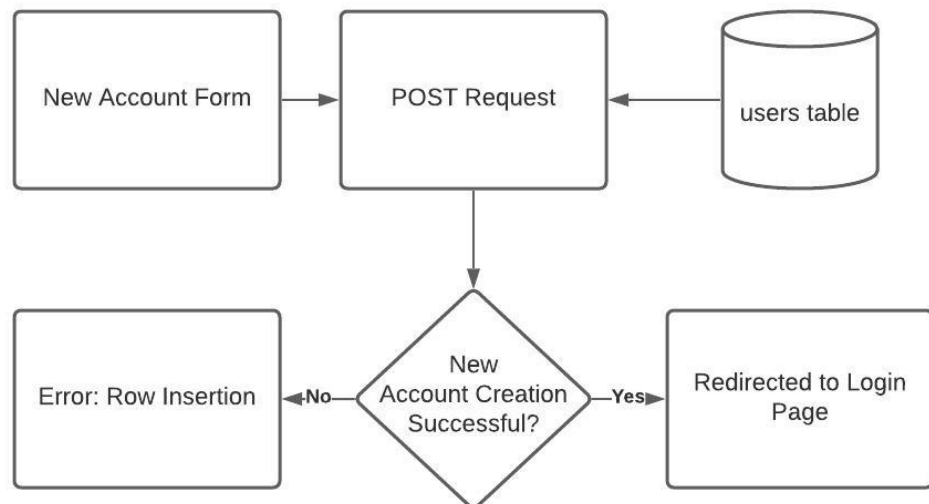
SWDV691



Creating a new account

This endpoint is used when a user wants to create a new account on the application. The user will fill in the information of the new account on the **Register** page and click Register. The server will then generate a POST request, which will capture all the

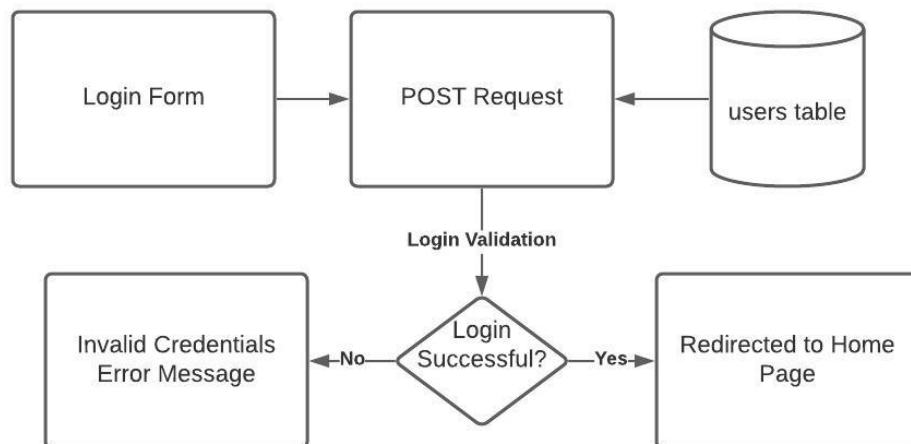
fields in the form and inserts the contents into the users table. If the values are entered successfully, the account was registered successfully and can be accessed via the Login page; if not, the system will display an error.



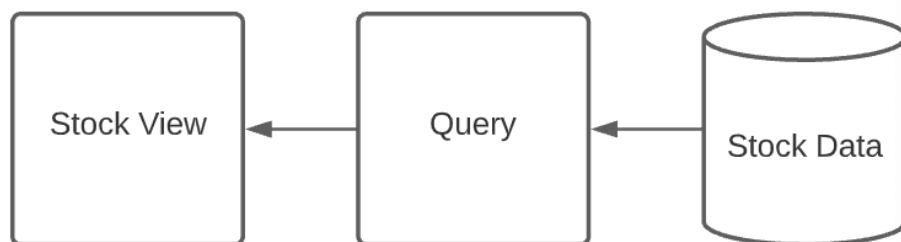
Login validation process

The user attempts to login on the login page.

Login validation is used to verify and authenticate the login credentials (username, password) for a user logging into the application. It does so by creating a POST request with the entered information once the user click the login button. The username and field are then validated against the data in the user table. If a matching record is found, the user gets logged in; otherwise, the system will display an error message.

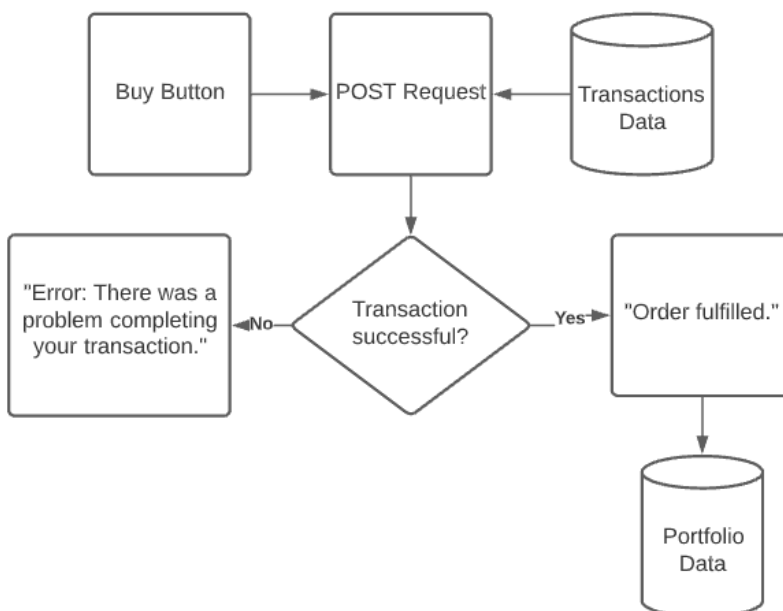


The user **searches for a particular stock** (e.g. by name or ticket number) on the Market page:



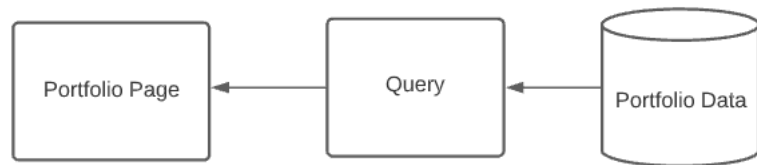
Purchasing Stock:

The user is buying stock. If the order is fulfilled, the portfolio data (value, number of shares, etc.) is modified accordingly.



Display Portfolio Data:

The user's portfolio data is displayed on their portfolio page. This includes stock names/tickers, quantity of shares, asset values, and price movement (%).



HTTP methods	Action/Effect	Response Code	Responses
POST (user)	Creates user account	201 404 400	Account created (redirecting to login page) Error: Unable to create account Error: Account already exists
GET (user)	Logs user into the application	200 404	Successful login Error: Invalid credentials (e.g. does not match account data; not all fields have been entered,...)
PUT (user)	Updates user information	202 404	Updated! Error: Improper input
DELETE (user)	Deletes the user account	200 400	Account deleted Error: Account could not be deleted
GET (stock)	Search for stocks	200 404	(displays stock information) Error: No such stock
POST (stock)	Purchase shares of a new stock	200 400 400 400	Shares successfully purchased Error: Unable to purchase shares Error: Invalid share count (e.g. < 0) Error: Insufficient funds
POST (stock)	Sell shares of stock	200 400	Shares successfully sold! Error: Unable to sell share (e.g. attempting to sell more shares than owned)
GET (logs)	Fetches account logs	200 404	(displays account logs) Error: An error has occurred fetching your account logs
GET (stocks)	Fetches currently owned stocks	200 404	(displays currently owned stocks) Error: You don't own any stocks.
PATCH (stocks)	Updates purchased or sold stock data	200 404	(alters portfolio data – add/subtract) Error: Unable to complete transaction