# DSCI 560 Lab 3 Meeting Notes

**1/28:**

- Finished part 1: Database Installation and Connection
- Discussed database schema
- Wrote script for database initialization
- Tested database initialization script
- Wrote and tested code for user create account and login
- Wrote and tested code for create portfolio
- Wrote and tested code for display portfolio, list stocks and give option to edit stocks
- Next meeting: Use yfinance and connect add stock and delete stock functionalities

**1/29:**

- Wrote script for portfolio creation and stock management
- Implemented stock validation using yfinance API
- Added functionality to add a stock to the portfolio
- Added functionality to remove a stock from the portfolio
- Implemented display functionality to list all portfolios with creation date and stocks
- Added validation messages (e.g., "added successfully", "invalid stock name")
- Next meeting: Test the portfolio system and refine error handling

**1/30:**

- Finished part 3: Data Collection and Storage
- Tested the portfolio management system, ensuring smooth stock addition/removal
- Refined error handling for invalid stock symbols and API connection failures
- Discussed the possibility of using an online database to store daily stock data
- Reviewed strategies for handling missing values, forward/backward filling and interpolation
- Discussed methods to transform stock data for analysis, such as timestamp conversion and feature engineering
- Identified key metrics for stock price prediction, including daily returns and moving averages
- Next meeting: Finish the data preprocessing part

**1/31:**

- Finished part 4: Data Preprocessing
- Wrote code for converting timestamps into a standardized format

- Wrote code for computing daily returns for stock price movement analysis
- Wrote code for handling missing values using forward/backward fill and interpolation
- Discussed more about the analysis and prediction of stock prices for next assignment
- Next meeting: Finish the demo video and README

**2/1:**

- Wrote the README
- Completed the demo video for Lab 3
- Discussed methods to build an online database so we can share it with teammates