Intro to C++ Midterm

The project I created was a Vertical Jump Journal that allows the user to track their vertical jump measurements over time. You can add new entries, view existing ones, search by date (binary search), and save data or load it from a .txt file. It uses two classes, JournalEntry, which is used for each entry (as given by the name of the class), and VertJournal, which manages the collection of entries. Data is stored dynamically and uses file I/O. I incorporated all concepts given by the guidelines of the project. Unfortunately, my g++ was not working correctly in the VSCode powershell and wasn't creating a main.exe file when running, but I used the terminal within my files folder as an alternative, using this code in terminal:

g++ main.cpp VertJournal.cpp JournalEntry.cpp -o main.exe ./main.exe

```
Vertical Leap Journal
1. Add new entry
2. Display all entries
3. Search by date
4. Save & Exit
Enter choice:
```

```
Vertical Leap Journal

1. Add new entry

2. Display all entries

3. Search by date

4. Save & Exit
Enter choice: 1
Enter date (YYYY-MM-DD): 2025-07-13
Enter vertical leap (in inches): 36
Your result has been recorded.
```

```
Vertical Leap Journal

1. Add new entry

2. Display all entries

3. Search by date

4. Save & Exit
Enter choice: 2
Date: 2025-07-11, Vertical Leap: 35 inches
Date: 2025-07-12, Vertical Leap: 36 inches
Date: 2025-07-13, Vertical Leap: 36 inches
```

Vertical Leap Journal

- 1. Add new entry
- 2. Display all entries
- 3. Search by date
- 4. Save & Exit

Enter choice: 3

Enter date to search: 2025-07-13

Date: 2025-07-13, Vertical Leap: 36 inches

Vertical Leap Journal

- 1. Add new entry
- 2. Display all entries
- 3. Search by date
- 4. Save & Exit

Enter choice: 3

Enter date to search: 2025

Entry not found.

Vertical Leap Journal

- Add new entry
- 2. Display all entries
- Search by date
- 4. Save & Exit

Enter choice: 4

Data saved.

Midterm > ≡ vert_log.txt

- 1 2025-07-11,35
- 2 2025-07-12,36
- 3 **2025-07-13,36**
- 4