Intro

Phobos is a terminal and text based video game. For the midterm I have focused on creating the game's introduction with some very limited actions.

Features

1) an opening text scrawl
2) a main menu
3) user input and character choices
4) creating a player and saving player data in a text file

Organization

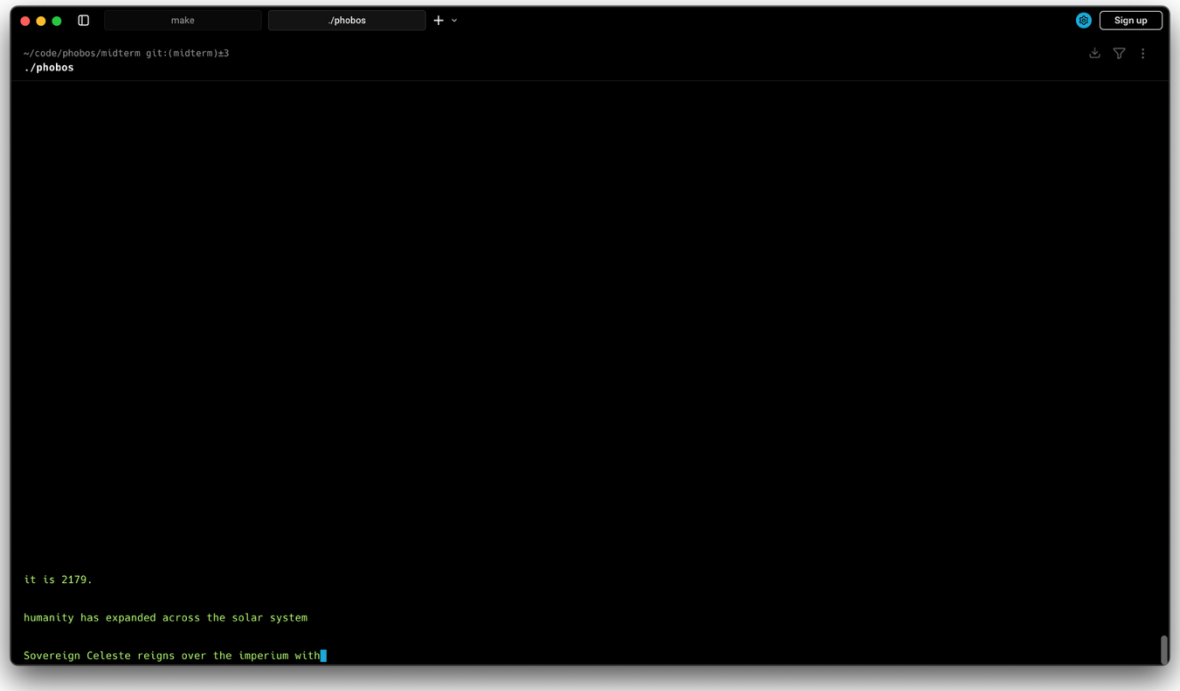
1) main.cpp: runs the main game loo[
2) phobos_logic.cpp: maintains main logic for the game
3) phobos_ui.cpp/.h: contains UI components for the game
4) player_data.txt: saves information about the player

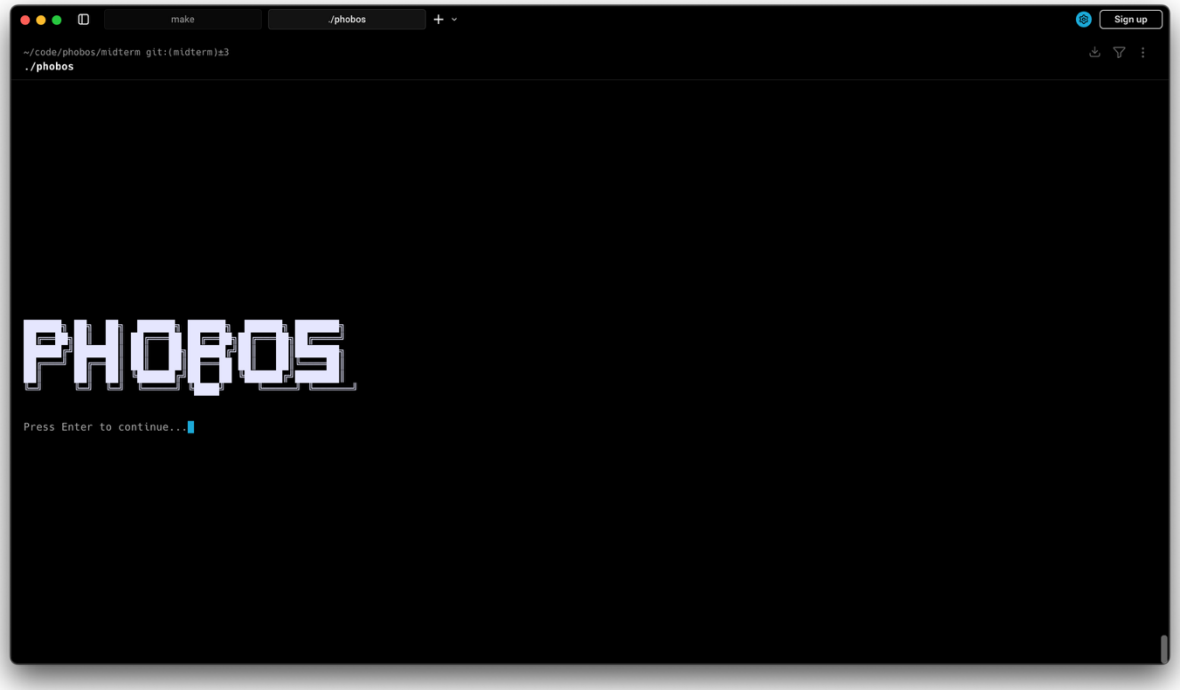
C++ features

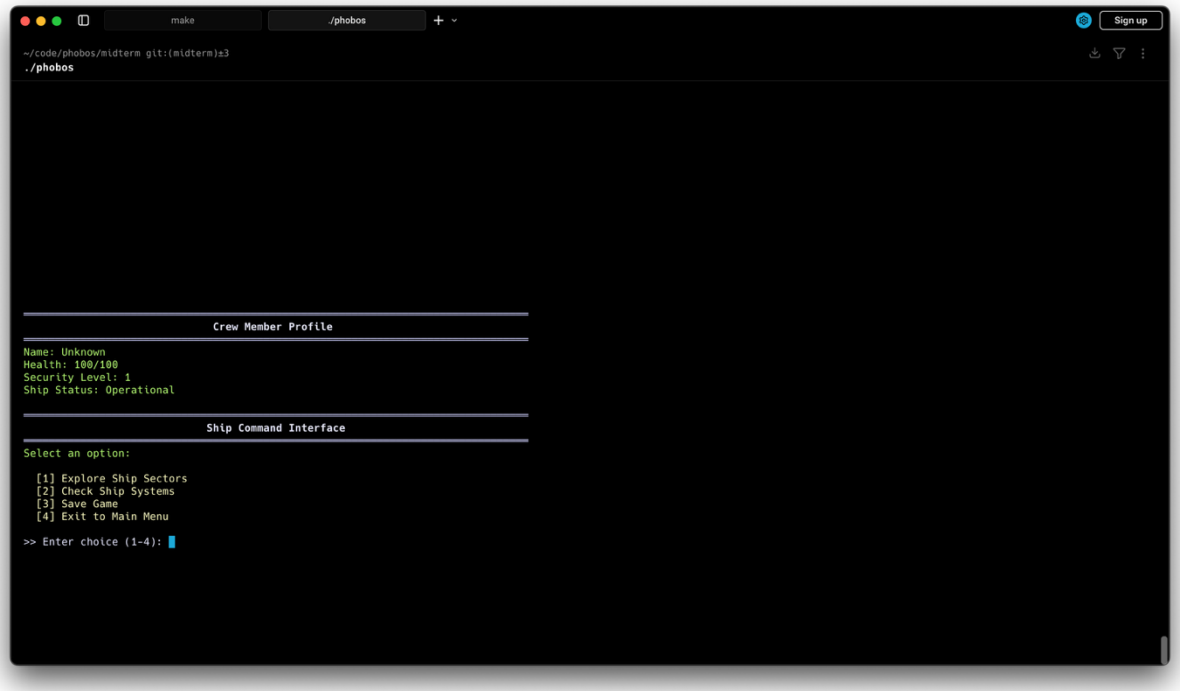
1) DATA TYPES
    a) i used for int health (phobos_logic.cpp line 8)
2) FILE TYPES
    a) i used player_data.txt (created for save/load system)
3) POINTERS
    a) i use a pointer for the Player *currentPlayer class (phobos_logic.cpp line 23)
4) ARRAYS
    a) i use an array for the menu options std::string menuOptions[5] (phobos_logic.cpp line 147)
5) BINARY SEARCH ALGORITHM
    a) i use a binary array in binarySearchSectors() function (phobos_logic.cpp line 82) to search for sections of the ship
6) USE OF STRINGS
    a) i use strings everywhere for UI and text. std::string name (phobos_logic.cpp line 7)
7) FILE I/O
    a) i save player data via savePlayerData() function (phobos_logic.cpp line 34)
8) CLASSES (WITH MEANINGFUL INTERACTION)
    a) the player and gameLogic classes interact via pointer

Challenges

1) Manually formatting text in a terminal is really difficult. I should switch to use framework or library to handle this for me. formatting and printing the Phobos title took me longer than all making the rest of the features combined.
2) I still don't quite have a grasp on how video games handle the main game loop
3) I struggled to determine clear patterns to pass data through the program. I feel it needs to be cleaned up
4) I didn’t really want to use a binary search tree.


make
./phobos
Sign up
~/code/phobos/midterm git:(midterm)±3
./phobos
it is 2179.
humanity has expanded across the solar system
Sovereign Celeste reigns over the imperium with


make
./phobos
Sign up
~/code/phobos/midterm git:(midterm)±3
./phobos
PHOBOS
Press Enter to continue...


make
./phobos
Sign up
~/code/phobos/midterm git:(midterm)±3
./phobos
Crew Member Profile
Name: Unknown
Health: 100/100
Security Level: 1
Ship Status: Operational
Ship Command Interface
Select an option:
[1] Explore Ship Sectors
[2] Check Ship Systems
[3] Save Game
[4] Exit to Main Menu
>> Enter choice (1-4):