BBM203: Software Laboratory 1

Assignment 1 Report

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1 Software Design Notes

1.1 Problem :

This assignment is based on a classic version of the Solitaire. We are expected to read commands and deck from txt file and with this inputs we have to update the game table by the rules.

1.2 Solution :

1.2.1 Approach :

My first thought was how can I save all the informations and use them. So I thought putting them in a struct then with that struct changing game decks etc. is good way to doing this task. I used 2 classes. First class is for reading input files. Second class is for game rules and game tables with multiple arrays. I don't know is it really class but there is a main class too where I execute everything.

1.2.2 Most Difficult Part :

Most difficult part was controlling game board. Because there were a lot of arrays in game and they all had different game rules. It needed to paying attention.

1.2.3 Class Diagram :

Reader:

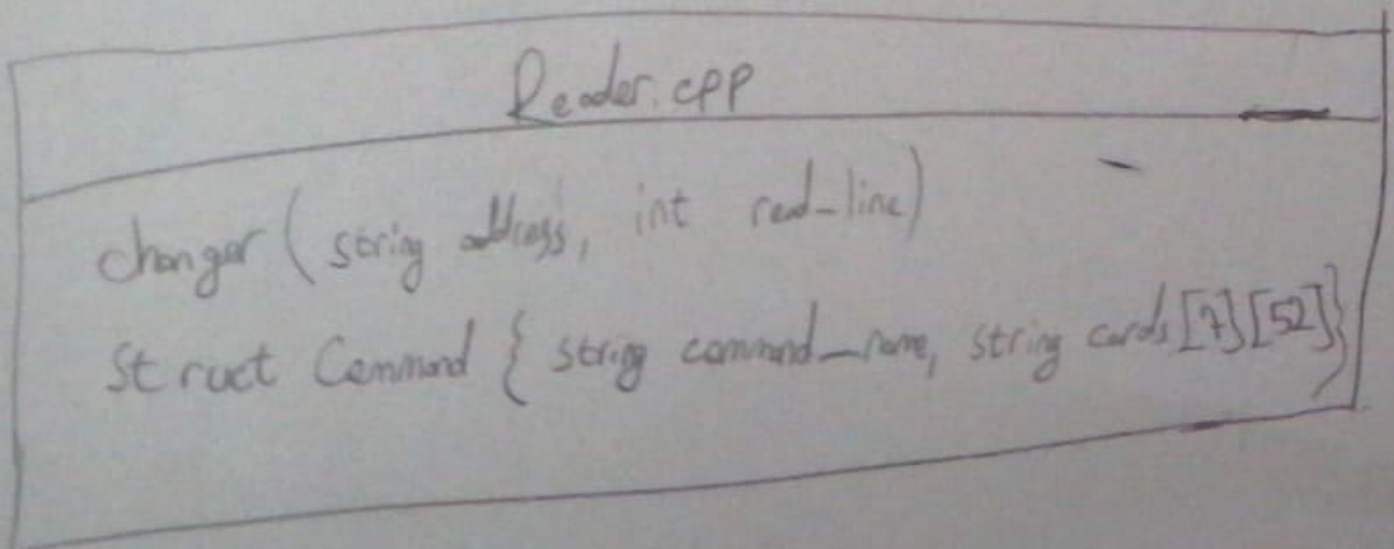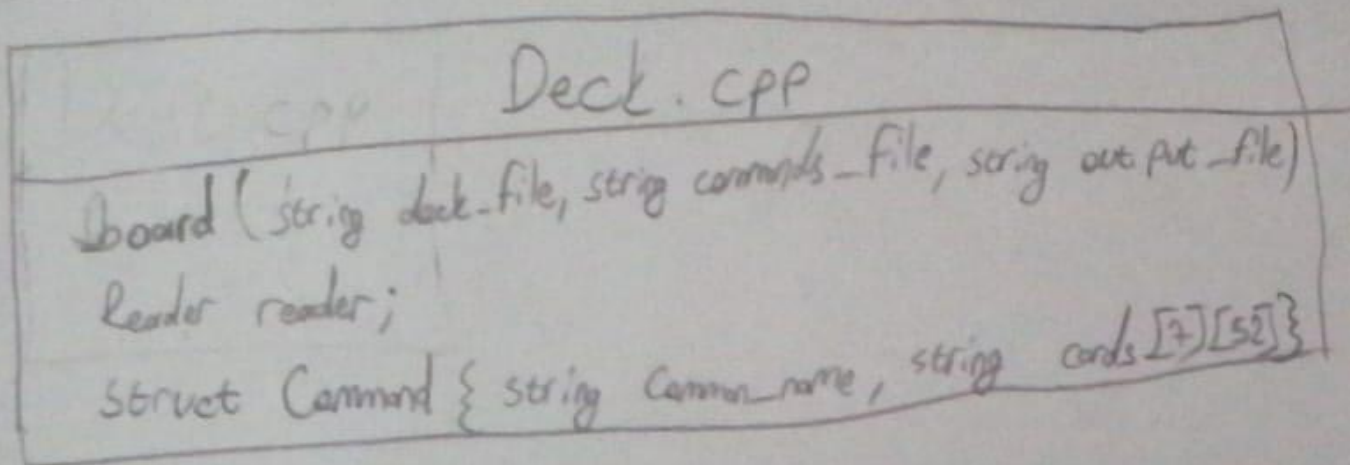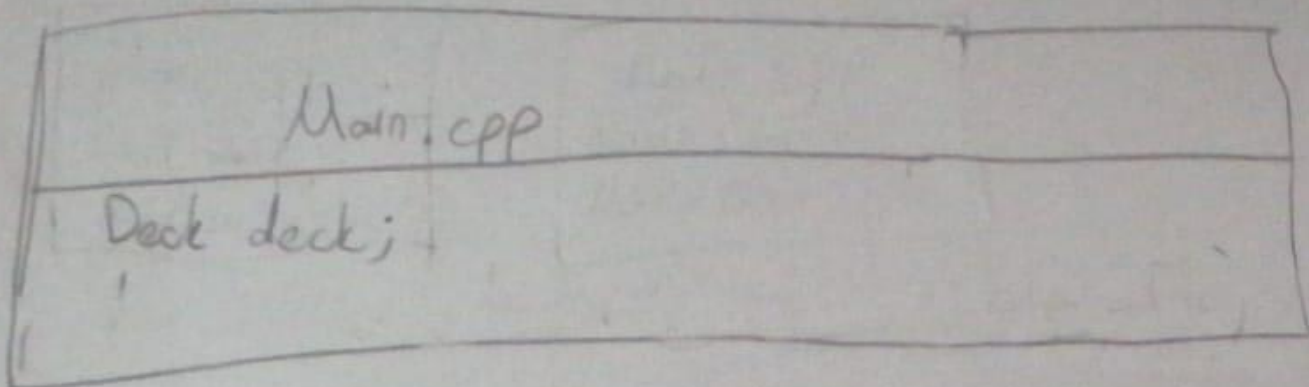In this class I read all input files with fstream library.

Deck:

In this class I did all the tasks. Game rules, Waste area, Foundation area ,Table etc. I used if ,else statements and for,while loops for this.

1.2.4 Where Were The Arrays Used :

I used arrays nearly everywhere. I saved waste ,stock , pile and foundation informations in them. Because we needed to save the informations for use them later and arrays was the only usable way.

1.2.5 UML Diagram:

```
Main.cpp

Deck deck;
```

```
Deck.cpp

board (string deck-file, string commands_file, string out put_file)
Reader reader;
struct Command { string Commmn_name, string cards [7][52]}
```

```
Reader.cpp

changer (string address, int red-line)
struct Command { string command_name, string cards [7][52]}
```

IMPORTANT NOTE: You can execute my code with this codes:

1- dos2unix *

2- g++ -std=c++11 *.cpp -o selcuk

3- ./selcuk deck.txt commands.txt output.txt