CSCI 4100

Software Components

Dr. Patton

<Thao Pham>

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**Week 4 Assignment**

**Program Code**

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//

// main.cpp

// week\_4\_Thao\_Pham

//

// Created by Thao Pham on 2/4/22.

//

#include <iostream>

#include <vector>

#include <fstream>

#include <string>

#include <sstream>

#include <iomanip>

**using** **namespace** std;

/\***MARK: struct MenuItem** \*/

**struct** MenuItem{

string name;

**int** price;

string day;

};

/\***MARK: vector<MenuItem function** \*/

vector<MenuItem> read\_items\_from\_file()

{

vector<MenuItem> objects;

ifstream input\_file("/Applications/Studying/SP22/CSCI\_4100/Week4/week\_4\_Thao\_Pham/week\_4\_Thao\_Pham/menu.txt");

**if** (input\_file) { // if file opened successfully...

MenuItem item;

string line;

**while** (getline(input\_file, line)) {

stringstream ss(line);

getline(ss, item.name, '\t'); // get title

ss >> item.price >> item.day; // get year and stars

objects.push\_back(item); // add movie to vector

}

input\_file.close();

}

**else**

cout << "Cannot open menu.txt file.\n"

<< "Since I used XCode to make this project,\n"

<< "please check the input\_file and add the menu.txt to the header source\n"

<< "if you're using Visual Studio.\n\n";

**return** objects;

}

**int** main()

{

cout<< "Menu of the Day\n\nCOMMAND MENU\nSpecify the day using the three-letter format (mon, tue, wed, thu, fri, sat, sun). Or, enter 'exit' to exit.\n\n";

//Creating vector

vector<MenuItem> objects = read\_items\_from\_file();

//User input

cout << "Day: ";

string day\_command;

cin >> day\_command;

**while** (day\_command != "exit")

{

**for** (**int** i =0; i<objects.size(); i++)

{

// cout << objects[i].name << '\t' << objects[i].price << '\t' << objects[i].day << endl;

**if**(objects[i].day == day\_command)

cout << objects[i].name << '\t' << objects[i].price << endl;

}

cout << "\nDay: ";

cin >> day\_command;

}

cout << "\nBye!\n\n";

**return** 0;

}

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**Program Execution**

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Graphical user interface, text, application

Description automatically generated

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