Exercise 9-2: Inventory Time

#include <iostream>

#include <string>

#include <iomanip>

using namespace std;

struct inventory\_item

{

int num;

string name;

int quantity;

double price;

double totalCost;

};

void main()

{

const int SIZE = 3;

inventory\_item array[SIZE];

int numCounter = 1;

for (int i = 0; i < SIZE; i++)

{

array[i].num = numCounter;

cout << "Product #" << array[i].num << endl;

cout << "Enter product name: ";

cin >> array[i].name;

cout << "Enter product quantity: ";

cin >> array[i].quantity;

cout << "Enter product price: $";

cin >> array[i].price;

array[i].totalCost = array[i].quantity \* array[i].price;

cout << endl << "Product info..." << endl;

cout << "Product #" << array[i].num << endl;

cout << "Product name: " << array[i].name << endl;

cout << "Quantity: " << array[i].quantity << endl;

cout << "Price per item: $" << fixed;

cout << setprecision(2) << array[i].price << endl;

cout << "Total cost : $" << fixed;

cout << setprecision(2) << array[i].totalCost << endl << endl;

numCounter++;

}

system("pause");

}

Exercise 9-4: An Array of Restaurants

#include <iostream>

#include <string>

#include <iomanip>

using namespace std;

struct restaurant

{

string name;

string cuisine;

string price;

double rating;

};

void searchListCuisine(const int SIZE, restaurant array[]);

void searchListRatings(const int SIZE, restaurant array[]);

void main()

{

const int SIZE = 10;

restaurant array[SIZE];

char answer;

char quitKey;

for (int i = 0; i < SIZE; i++)

{

cout << "Enter restaurant Name: ";

std::getline(std::cin, array[i].name);

cout << "Enter restaurant Cuisine: ";

std::getline(std::cin, array[i].cuisine);

cout << "Enter restaurant Price Range: ";

cin >> array[i].price;

cout << "Enter restaurant rating: ";

cin >> array[i].rating;

while (array[i].rating < 1 || array[i].rating > 5)

{

cout << "You have to enter a rating from 1-5." << endl;

cout << "Enter restaurant rating: ";

cin >> array[i].rating;

}

cin.ignore();

cout << endl << "restaurant info..." << endl;

cout << "Name: " << array[i].name << endl;

cout << "Cuisine: " << array[i].cuisine << endl;

cout << "Price Range: " << array[i].price << endl;

cout << "Rating: " << array[i].rating << endl << endl;

}

do

{

cout << "How would you like to search for restaurants?" << endl;

cout << "Type 'C' for cuisine or 'R' for ratings: ";

cin >> answer;

cout << endl;

if (answer == 'c' || answer == 'C')

{

searchListCuisine(SIZE, array);

}

else if (answer == 'r' || answer == 'R')

{

searchListRatings(SIZE, array);

}

cout << "Would you like to continue? 'Y' for yes, 'N' for no. >> ";

cin >> quitKey;

system("cls");

} while (quitKey == 'y' || quitKey == 'Y');

system("pause");

}

void searchListCuisine(const int SIZE, restaurant array[])

{

string searchCuisine;

for (int i = 0; i < SIZE; i++)

{

cout << array[i].cuisine << endl;

}

cout << endl << "Which type of cuisine are you looking for? >> ";

cin.ignore();

std::getline(std::cin, searchCuisine);

cout << endl;

for (int i = 0; i < SIZE; i++)

{

if (searchCuisine == array[i].cuisine)

{

cout << array[i].name << endl;

cout << array[i].cuisine << endl;

cout << array[i].price << endl;

cout << array[i].rating << endl << endl;

}

}

}

void searchListRatings(const int SIZE, restaurant array[])

{

double searchRatings;

for (int i = 0; i < SIZE; i++)

{

cout << array[i].rating << endl;

}

cout << endl << "Which particular rating are you looking for? >> ";

cin >> searchRatings;

while (searchRatings < 0 || searchRatings > 5)

{

cout << "You have to enter a rating from 1-5." << endl;

cout << "Enter restaurant rating: ";

cin >> searchRatings;

}

cout << endl;

for (int i = 0; i < SIZE; i++)

{

if (searchRatings == array[i].rating)

{

cout << array[i].name << endl;

cout << array[i].cuisine << endl;

cout << array[i].price << endl;

cout << array[i].rating << endl << endl;

}

}

}