

LAB 211 Assignment

Type:

Long Assignment

Code:

J1.L.P0002

LOC:

450

Slot(s):

N/A

Title

The Hotel Management - Read and Write File.

Background

- Mr. Dung wants to design a program to manage his hotels in HCM city. The hotels have properties. **Every hotel has properties** as
 - **Hotel_id**, Hotel_Name, Hotel_Room_Available, Hotel_Address, Hotel_Phone, Hotel_Rating.
- This management program needs to have primary functions such as: **printing hotel data, search Hotel, add a hotel, edit a hotel, sort Hotels by Hotel_Name.**
- Hotel information is **stored** in a **text or binary file** (named Hotel.dat).
- Let's build your idea based **OO model**. You are expected to employ features such as **abstraction, polymorphism, encapsulation, and inheritance** during the analysis and design process. This requirement is obligatory and must be satisfied for all students.

Program Specifications

Designing a hotel management program which has basic functions such as:

- 1) Adding new Hotel.
- 2) Checking exits Hotel.
- 3) Updating Hotel information.
- 4) Deleting Hotel.
- 5) Searching Hotel.
 - 5.1 Searching by Hotel_id.
 - 5.2 Searching by Hotel_name.
- 6) Displaying a hotel list (descending by Hotel_Name).
- 7) Others Quit.

*****Note: Students have to add some sample data of the hotel for the first time, like below:**

Hotel_id	Hotel_Name	Hotel_Room_Available	Hotel_Address	Hotel_Phone	Hotel_Rating
H01	Seraton	10	189 Ung Van Khiem, Ward 25, Binh Thanh District, Ho Chi Minh City	0911796099	4 star
H02	VinStar	5	200 Ung Van Khiem, Ward 25, Binh Thanh District, Ho Chi Minh City	0918940111	5 star
H03	OutString	7	300 D1, Ward 24, Binh Thanh District, Ho Chi Minh City	0988940222	6 star
H04	Betigar	8	189 Duong Quang Ham, Ward 5, Go Vap District, Ho Chi Minh City	0977940100	3 star

Features:

This system has a main menu to ask users to select functions:

✓ **Function 1: Add new hotel - 50 LOC**

- The information is inputted from the keyboard, such as: Hotel_id, Hotel_Name, Hotel_Room_Available, Hotel_Address, Hotel_Phone, Hotel_Rating.
- Remember to the constraints must be checked.
- Show a message after adding new hotel information: success or fail.
- Ask continuously create a new hotel or go back to the main menu.

✓ **Function 2: Check to exist hotel– 50 LOC**

- The system will check the ID_Hotel the first that is stored in the file Hotel.dat.
- A message “Exist Hotel” should be displayed in the case the ID_Hotel exists in the Hotel.dat file.
- Otherwise, the message “No Hotel Found!” will be display.
- This system will ask user whether he/she wants to go back to the main menu.

✓ **Function 3: Update hotel information – 50 LOC**

- Require enter the Hotel’s id_Hotel.
- If the hotel does not exist, the notification “Hotel does not exist”. Otherwise, user can start input new information of hotel and update.
- If new information is blank, then not change old information.
- Then system must print out the result of the updating.
- After updating, the program returns to the main screen.

✓ **Function 4: Delete hotel – 50 LOC**

- User can delete any hotel in the file Hotel.dat by id_hotel.
- Before the delete system must show confirm message with a message as “Do you ready want to delete this hotel”.
- Show the result of the delete: success or fail.

- After delete, the program returns to the main screen.

✓ **Function 5: Search hotel**

Create a submenu that allows the user to select way to search: search by Hotel_id or Hotel_name.

5.1: Search by Hotel_Id – 50 LOC

- User input hotel_id want to search.
- The system will search id of hotel in the file Hotel.dat and return all hotel that has name contain the search string.
- After that, the system will show result list: all information of hotel (descend sorting by Hotel_id).

5.2: Search by Hotel_name – 50 LOC

- The user enters name of hotel.
- The system will search name of hotel in the file Hotel.dat and returns the hotel that has hotel_name same with the search string.
- Show result: all information of hotel.

✓ **Function 6: Displaying a hotel list (descending by Hotel_Name).**

- The system will show this list of hotels in the file Hotel.dat.
- Show result list: all information of hotel (descending by hotel_name).

✓ **Function 7: Exit the program.**

- The above specifications are only basic information.
- You must perform a requirements analysis step and build the application according to real requirements.
- The lecturer will explain the requirement only once on the first slot of the assignment.

The End