CSE212: SOFTWARE DEVELOPMENT METHODOLOGIES

YEDITEPE UNIVERSITY

SPRING 2023

ASSIGNMENT 10 – DUE DATE MAY 17ᵀᴴ, 2023

Below, you can find the description of your tenth assignment, which also includes its output in the *Application Walkthrough* section.

In this assignment, you are expected to improve your existing Hotel Reservation System by incorporating a graphical user interface where the users can use mouse and keyboard to input data and get graphical responses.

When the application is executed, the screen below should be displayed to the user (see Fig 1). Here, please pay attention to the main components that is incorporated using JFrame; there is a menu bar with three options - namely *File*, *New* and *Help*- and three buttons, as well as a text area.
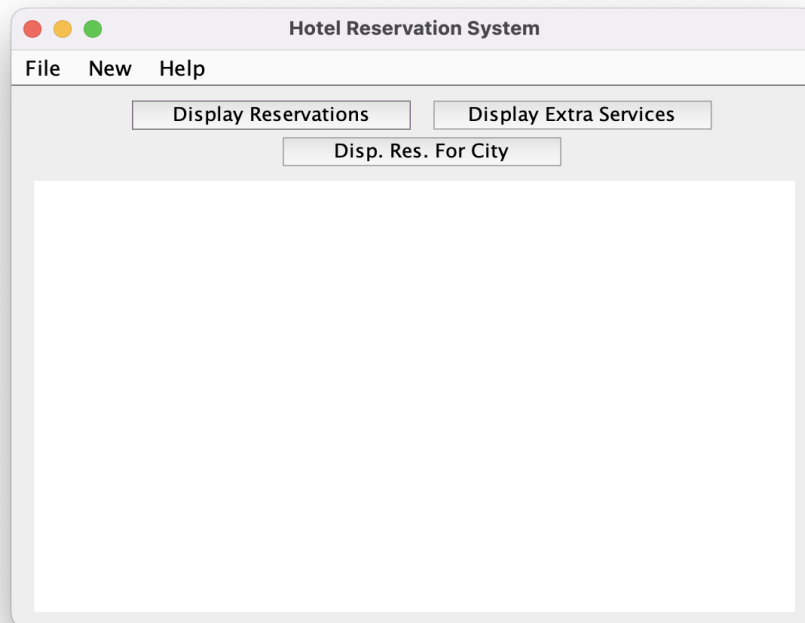

Fig 1. Hotel reservation system graphical user interface

The *New* item in the menu bar, should give the user an option to create a new Reservation or Extra Service (see Fig 2a). If the user decides to add a new Reservation, s/he should be prompted to insert the *City Name, Hotel Name, Reservation Month, Reservation Start* and *Reservation End* variables regarding the Reservation (see Fig 2b and 2c). Once all the variables are collected and the reservation is generated, if the user clicks on the *Display Reservations* button, all reservations that have been created so far should be displayed in the text area (see Fig 2d).
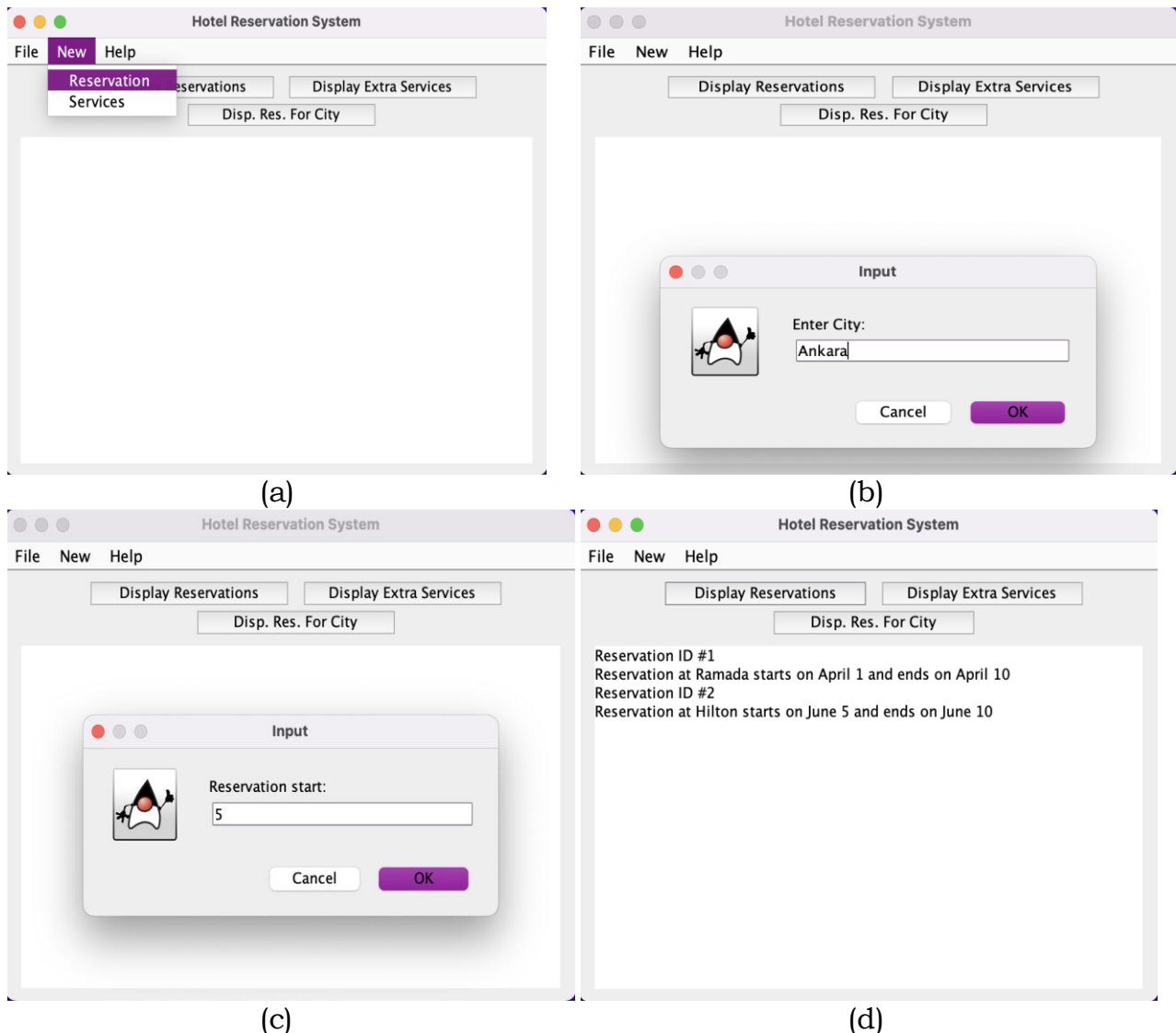

(a)   (b)

(c)   (d)

Fig 2. Adding a new reservation using graphical interface

If the user selects the *Services* option from the menu as can be seen in Fig 2a, a JOptionPane should pop up and ask the user whether s/he wants to include *Laundry Service* or *Spa Service* (see Fig 3a) to an existing reservation. If the user selects the Laundry option by typing in 1, the user needs to provide the *Reservation ID* to add the Laundry Service (see Fig 3b) to and also punch in the

number of clothes s/he would like to use the *Laundry Service* for. Similarly, if the user chooses the Spa option, by inserting the number 2, a *Reservation ID* should be requested by the application along with the number of days s/he would like get the *Spa Service* (see Fig3c). Furthermore, if the user clicks on the *Display Extra Services* button, all of the *Extra Services* that have been added so far should be displayed in the text area (see Fig 3d).

(a)   (b)
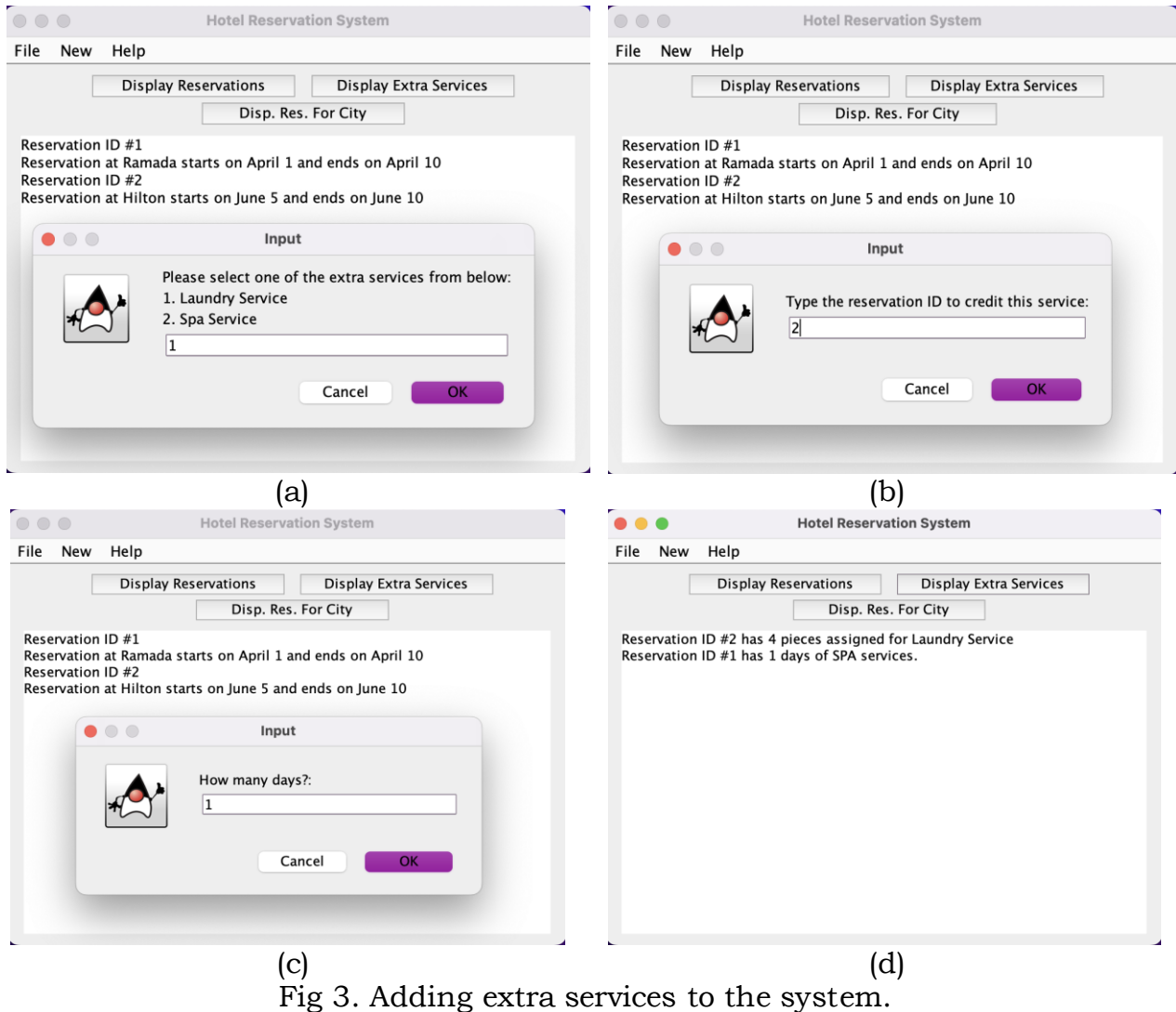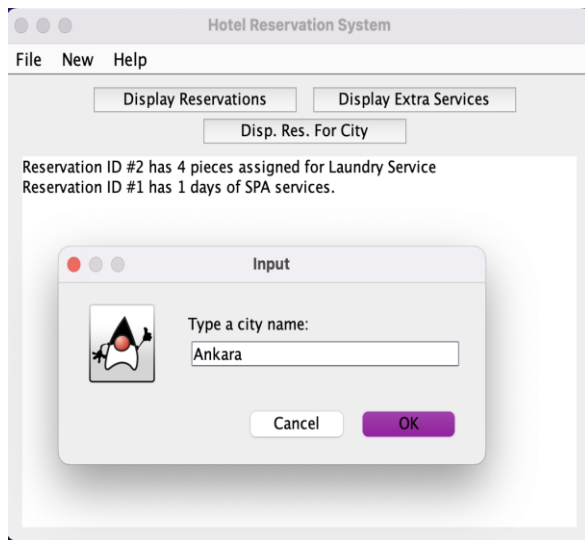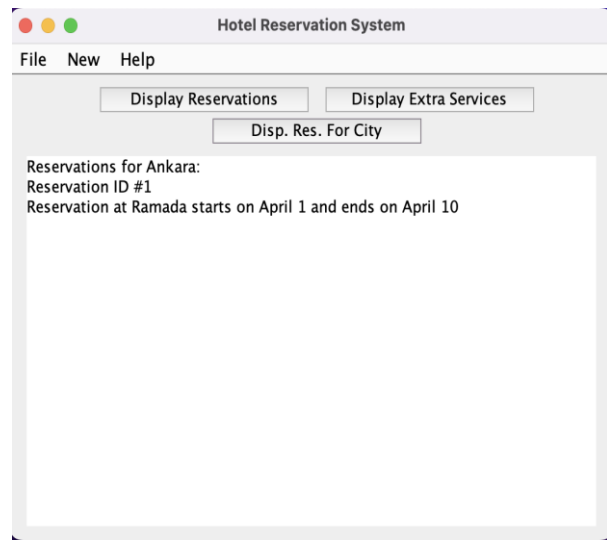
(c)   (d)

Fig 3. Adding extra services to the system.

Last but not least, if the user clicks on the *Disp. Res. For City* button, the application should ask the user to provide a city name (see Fig4a) and once the city is confirmed with a press on the *Enter* button or a mouse click on the *OK* button; all reservations for that city should be displayed in the text area (see Fig4b).

(a)   (b)

Fig 4. Displaying reservation information for a specific city.

For other menu bar items, if the user presses on *File*, then it should show the Exit option. On the other hand, if the user clicks on the Help menu item, s/he should be presented with two options: *Contents* and *About*. The *Contents* option should trigger a pop up that describes how to use the application and the *About* option should trigger a pop up window which contains information about the developer (you are free to write anything you like in these windows).

Submit your assignments in a zip file, which has your student number as name, through the YULEARN (https://yulearn.yeditepe.edu.tr) latest by the end of Thursday, May 18th, 2023.