

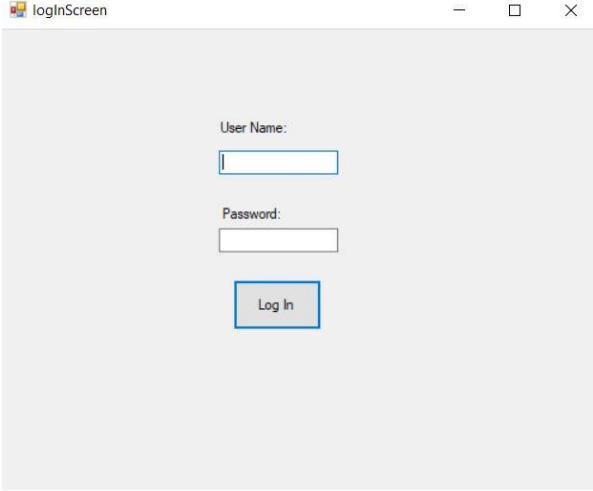
## Lab Activity – 5

### Objectives

- To learn Labels
- To learn Buttons
- To learn event mechanism
- To design an control panel
- To add new features to the XOX game

### Exercise

In this lab, you will add some new features to the XOX game you did in Lab activity 4. You need to add a login screen to the XOX game. An example interface of the login screen is given below;



There are 2 types of users, “admin” and “user”. The user name and password information for admin and user type is given below;

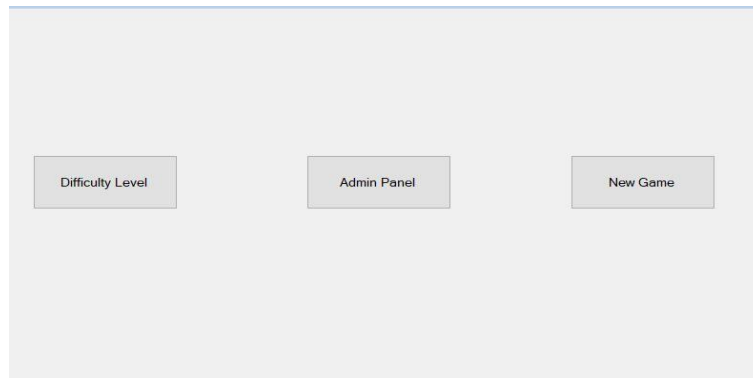
Username = “admin”

Password = “admin”

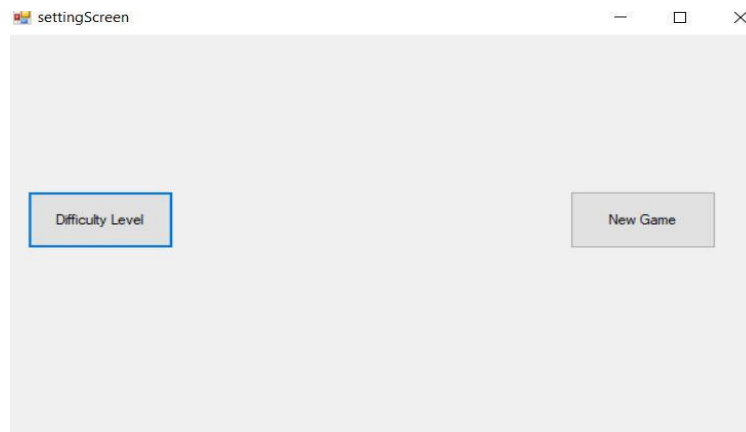
Username = “user”

Password = “user”

If the credentials for admin is entered in the login screen, than a new panel should appear on the screen. An example of the interface is given below;



If the credentials for user is entered in the login screen, than a new panel should appear on the screen. An example of the interface is given below;

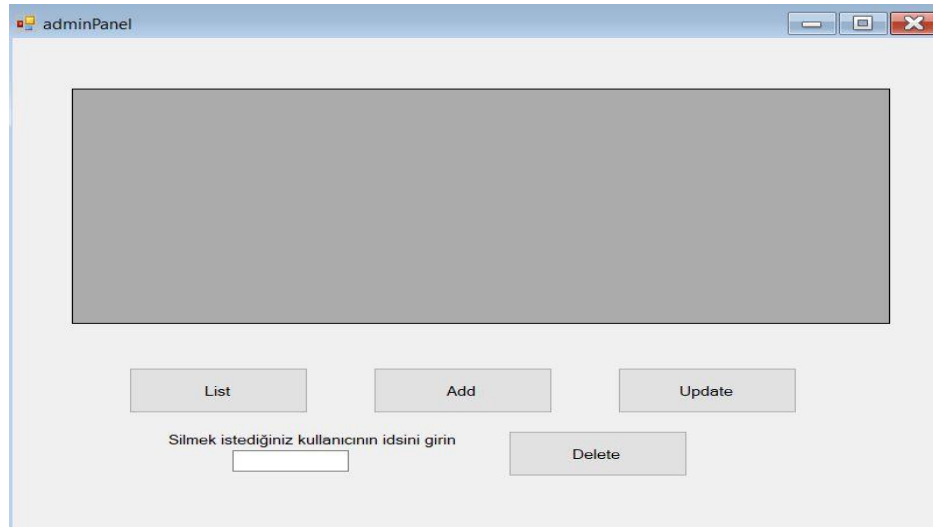


So as the credentials change, ther interface the application shows change. The admin panel button should only be visible if the admin logs the system, other than that the application must show only “difficulty level” and “ new game “ buttons.

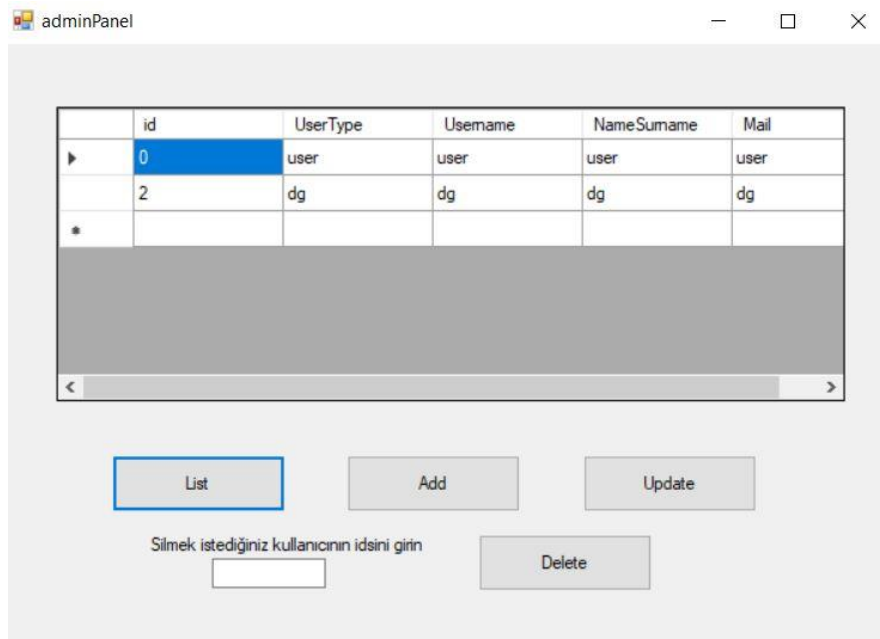
If the user clicks “new game” button, the game you coded in lab assignment 4 should start and the user should be able to play it.

If the user clicks “difficulty level” button, it is not supposed to do anything (for now), just put it there for the visual.

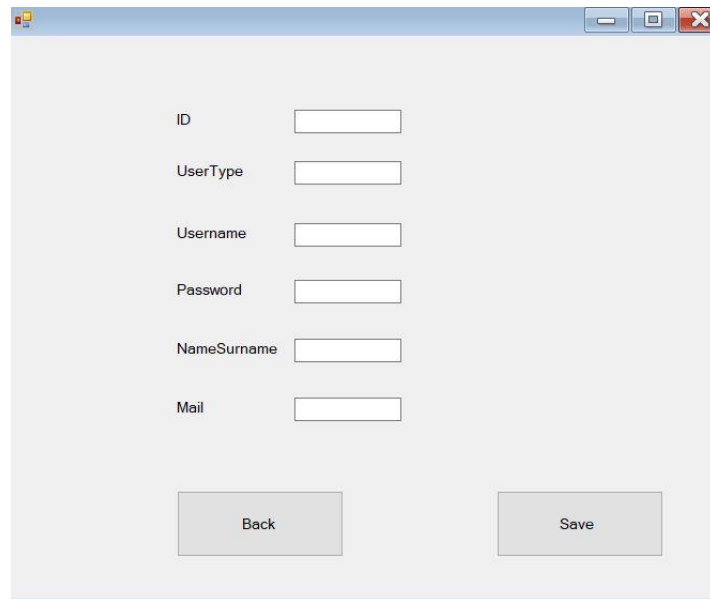
If the user clicks “admin panel” button, a new screen should appear, an example of how the admin panel should look is given below;



The user information should be saved on a “xml” file after “add” or “update” operations. The first button is the “List” button, when the user clicks the button it should list the recorded information on the xml file on a DataGridView. An example is shown below;



If the user clicks “Add” or “Update” button a new screen should appear. An example of how the interface should look like is given;



The image shows a web application window with a light gray background. It contains a form with six text input fields, each preceded by a label: 'ID', 'UserType', 'Username', 'Password', 'NameSurname', and 'Mail'. The fields are empty. Below the fields are two buttons: 'Back' on the left and 'Save' on the right. The window has a standard title bar with minimize, maximize, and close buttons.

If the user clicks “Add” button the screen should appear like this(empty textboxes). If the user clicks “Update” this screen should come with the boxes filled with information about the user which has been selected for update operation. To use the “Update” button the user should first list the users, make a selection from the list and then click the “Update” button for it to function, other than that it should give an error message “Please make a selection”.

If the user clicks “Back” button the application should load the previous screen. (Admin Panel Screen).

### **User information:**

ID, userType, userName, userSurname, passWord, userMail

These are the variables you should take from the user as input when the “Add” button is clicked. Remember you should save these in an “.xml” file when a user is added or update the “.xml” file when a user is updated.

### **Take into consideration:**

- The application should show the “Admin Panel” button only if the admin credentials are entered on the login screen. Other than that it should not be visible for other users.
- The “Update” button in the admin panel only should work, if a row is selected from the list and then clicked. Other than that it should give an error message “Please make a selection”.
- “Difficulty Level” button is there only for visual. It will not have any function for now, just add the visual for it.
- “Add” and “Update” buttons screen interfaces are same but remember, when the user clicks “Update” button the panel should come with the textboxes prefilled with the selected users information. When user clicks “Add” the textboxes should appear blank.

- When “Delete” button is clicked, the textbox that needs to be filled with username should be filled with the username for it to function. If it is blank, it should give an error message “Please enter a username for delete operation”. If the username is not in the list for delete operation, than it should give an message ”The user could not been found”. If the delete operation is succesfull, than it should display the message “Succesfully deleted”.

### **What is Expected**

- Create proper user interface
- Apply object-oriented programming principles
- The user information when added, should be saved to a “studentNumber.xml” (last 8 digit) file created by the application.
- Report simply with step-by-step images and explanations of what has been completed
- Upload report (only .pdf) and complete project file (only .zip/.rar)
- The titles of the report and project files will be “<student number>\_<student name>\_lab<no>.<file format>”  
(for example, 152120230000\_firstname\_lastname\_lab5.pdf)  
(for example, 152120230000\_firstname\_lastname\_lab5.zip)
- Cheating is at your own initiative, but you also accept the consequences!