



**Comsats University Islamabad**

# Lab Project Report

GYM MANAGEMENT SYSTEM

**Submitted by:**

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**Course:** CSC241 OOP

**Instructor:** Mr. Muzaffar Iqbal

# Project Report

## (GYM MANAGEMENT SYSTEM)

### Introduction:

This project is presented by Kashif Abbas Kazmi, Muhammad Sarim and Muhammad Abdullah as their semester project. It is a **Gym Management System** with the following features:

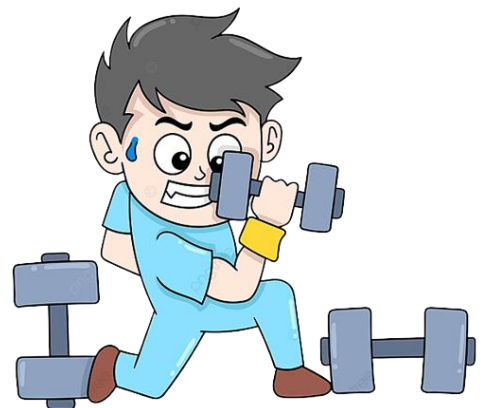
- I. Login
- II. Change Credentials
- III. Main Menu
  - a. Accounts
  - b. Members
  - c. Trainers
  - d. Machines
  - e. Booking
  - f. Reports



This is specifically designed for administrative use, where full authority rests in the hands of the owner. We have created four text files (AdminInfo, Members, trainer, Machines).

### Main Features:

- I. To access an application, a user must first authenticate in to our system using their username and password. The user is denied access when a login attempt fails. They serve as a security mechanism to guard against unauthorized access to sensitive information.
- II. Gym management system can be useful if you've had trouble keeping track of members, trainers, machines, and booking information.



This software is more engaging and practical to use because it has tools for adding, viewing, searching, and deleting any entity record or data.

- III. The automatic generation of registration numbers is another characteristic that attracts attention. Any entity will automatically receive a registration number from the system, which will also check to make sure it hasn't already been used by another party. If this is the case, the application won't stop until a unique registration number is generated.
- IV. Another feature of booking is that after a member has booked a machine once, the program will prevent them from booking it again. The program will also limit a machine's ability to book more than 8 bookings at once because we only allow 8 bookings per machine.
- V. We've included an accounts module that allows the admin to quickly add a member's outstanding balance to them individually or to all of them at once, as well as pay that balance.
- VI. The Report module allows the admin to produce valuable reports.

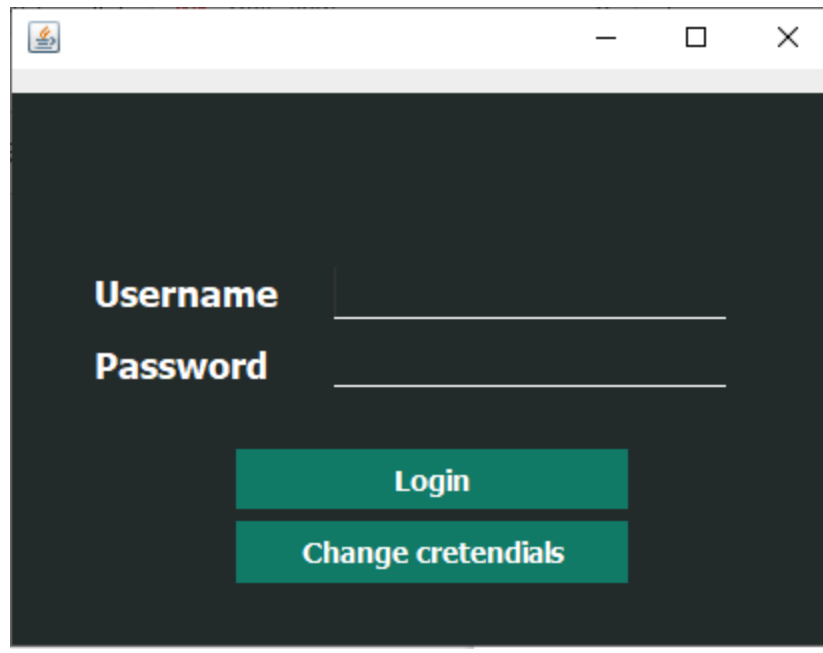
#### **Task contribution:**

Kashif Abbas Kazmi	Machine, Payment, Report (50%), Gym (33%)
Muhammad Sarim	Member, Admin, Report (50%), Gym (33%)
Muhammad Abdullah	Trainer, Person, Gym (33%)

#### **Class Diagram:**

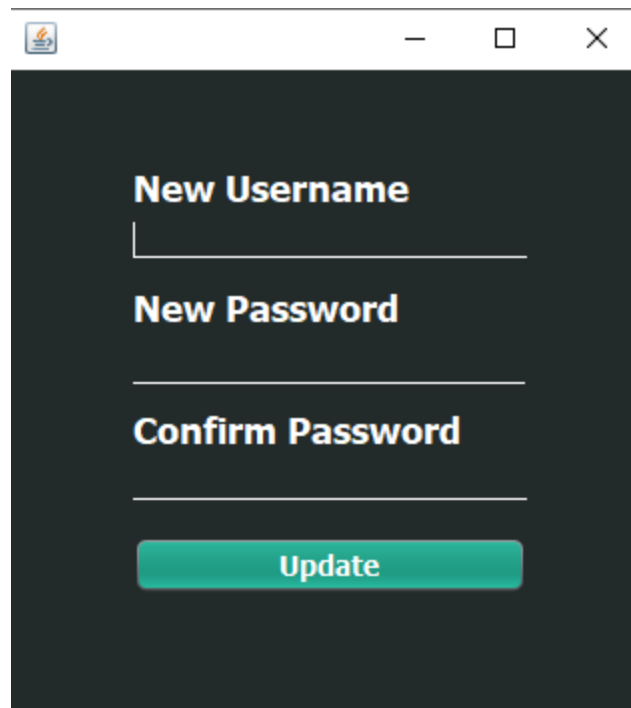
#### **Outputs:**

##### **1. Login:**



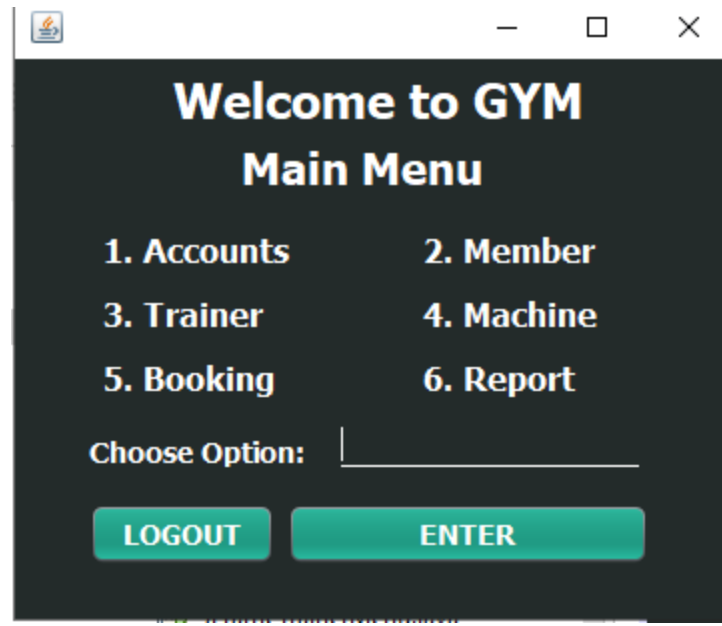
A screenshot of a login window with a dark background. It features two input fields labeled 'Username' and 'Password'. Below these fields are two green buttons: 'Login' and 'Change cretendials' (note the typo).

## 2. Change Credentials:



A screenshot of a 'Change Credentials' window with a dark background. It contains three input fields labeled 'New Username', 'New Password', and 'Confirm Password'. Below these fields is a single green button labeled 'Update'.

## 3. Main Menu



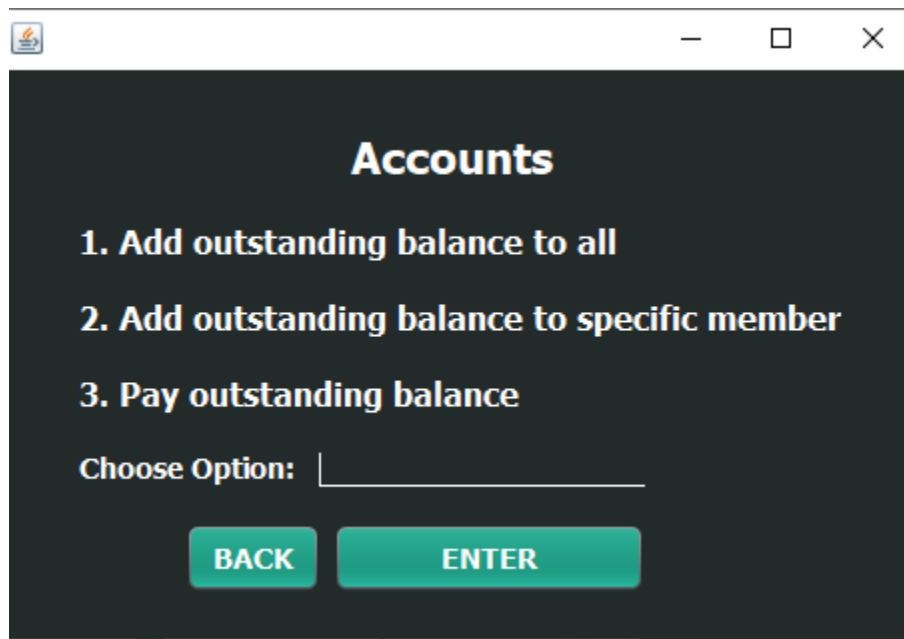
**Welcome to GYM**  
**Main Menu**

- 1. Accounts
- 2. Member
- 3. Trainer
- 4. Machine
- 5. Booking
- 6. Report

Choose Option:

**LOGOUT** **ENTER**

#### 4. Accounts Menu



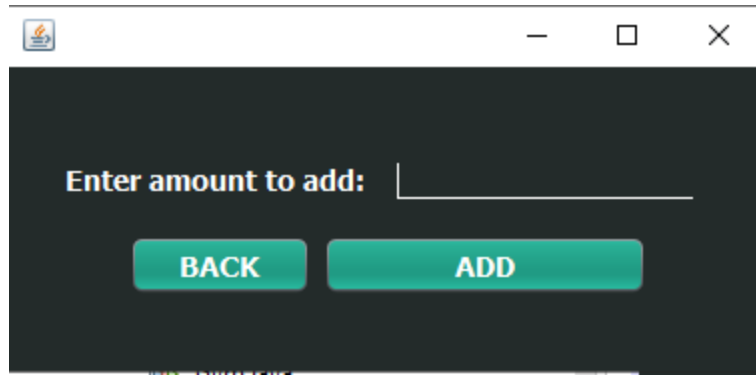
**Accounts**

- 1. Add outstanding balance to all
- 2. Add outstanding balance to specific member
- 3. Pay outstanding balance

Choose Option:

**BACK** **ENTER**

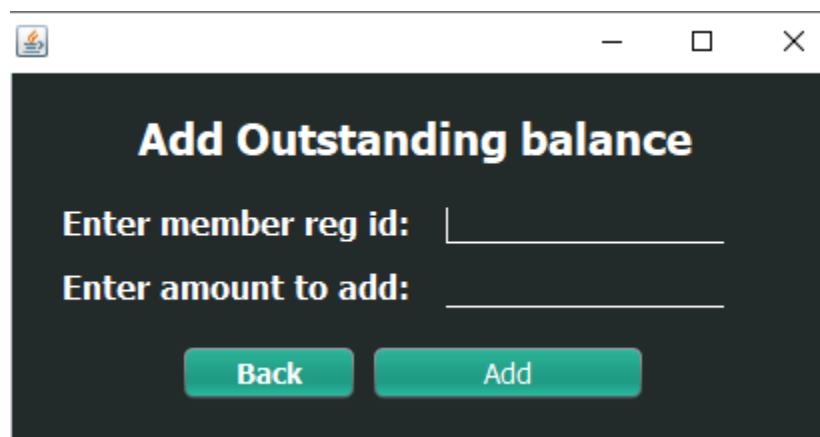
#### 5. Add Outstanding Balance to all



Enter amount to add:

BACK ADD

#### 6. Add Outstanding Balance to Specific Member



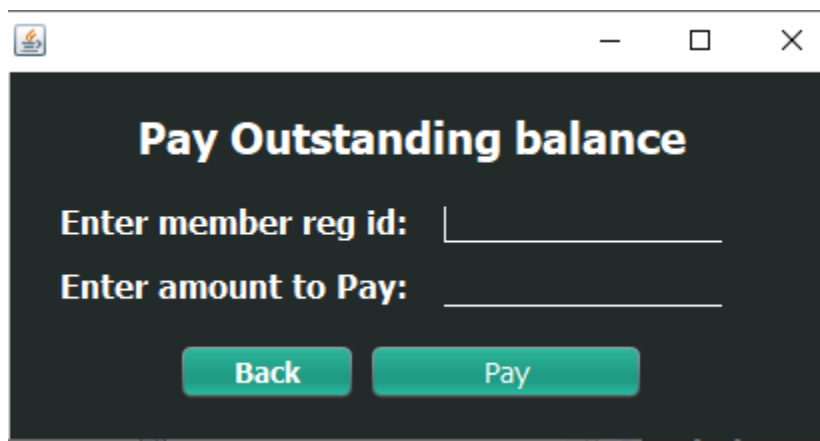
**Add Outstanding balance**

Enter member reg id:

Enter amount to add:

Back Add

#### 7. Pay Outstanding Balance



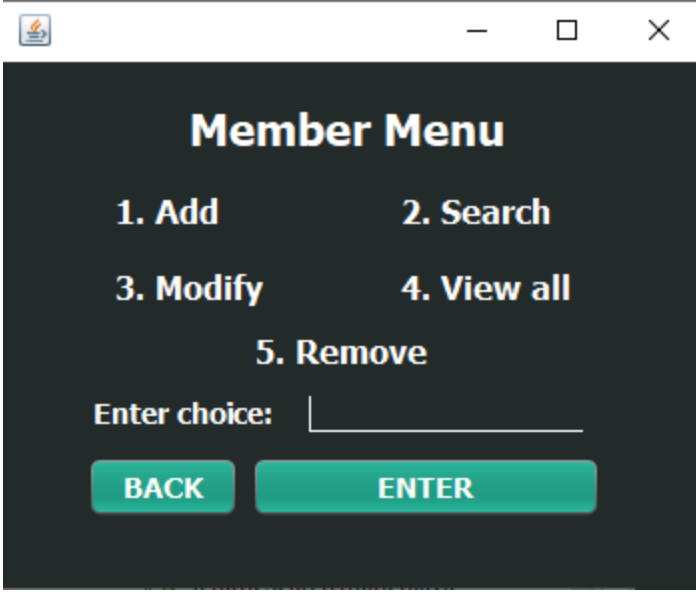
**Pay Outstanding balance**

Enter member reg id:

Enter amount to Pay:

Back Pay

#### 8. Members Menu



**Member Menu**

1. Add                      2. Search


3. Modify                  4. View all

5. Remove

Enter choice:

BACK      ENTER

## 9. Add Member

— □ ×

## Add Member

Reg no.  Generate number

Name:

Gmail:

Phone no (03XX-XXXXXXX):

Address:

Date of join(MM-DD-YYYY): Select Select Select

Date of birth(MM-DD-YYYY): Select Select Select

Gender: ☐ Male ☐ Female ☐ Other

Height:

Weight:

Fitness goal: ☐ Weight loss ☐ Muscle gain ☐ Shredding

Out standing balance:

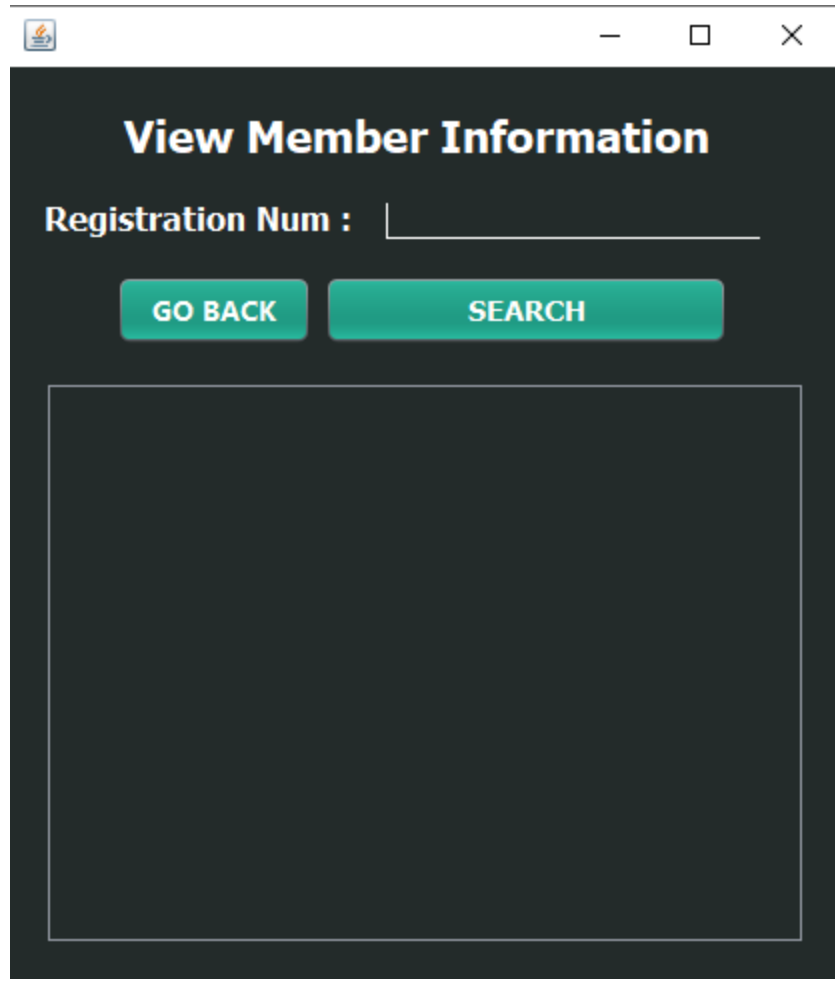
Credit card account holder:

Credit card number:

Back SAVE

### 10. Search Member





The screenshot shows a web browser window with a dark-themed interface. The title bar at the top contains a small icon on the left and standard window control buttons (minimize, maximize, close) on the right. The main content area has a black background. At the top, the text "View Member Information" is displayed in a large, bold, white font. Below this, the label "Registration Num :" is followed by a white text input field. Underneath the input field are two teal-colored buttons with white text: "GO BACK" on the left and "SEARCH" on the right. A large, empty rectangular box with a thin white border occupies the lower half of the page, likely intended for displaying member details.

## 11. Modify Member

## Modify Member Information

Search member with reg id: \_\_\_\_\_

SEARCH MEMBER

**\*Write data in those fields which you want to update, otherwise leave empty it before save\***

Name: \_\_\_\_\_

Gmail: \_\_\_\_\_

Phone no(0000-0000000): \_\_\_\_\_

Address: \_\_\_\_\_

Gender: ☐ Male ☐ Female ☐ Other

Height: \_\_\_\_\_

Weight: \_\_\_\_\_

Fitness goal: ☐ Weight loss ☐ Muscle gain ☐ Shredding

Out standing balance: \_\_\_\_\_

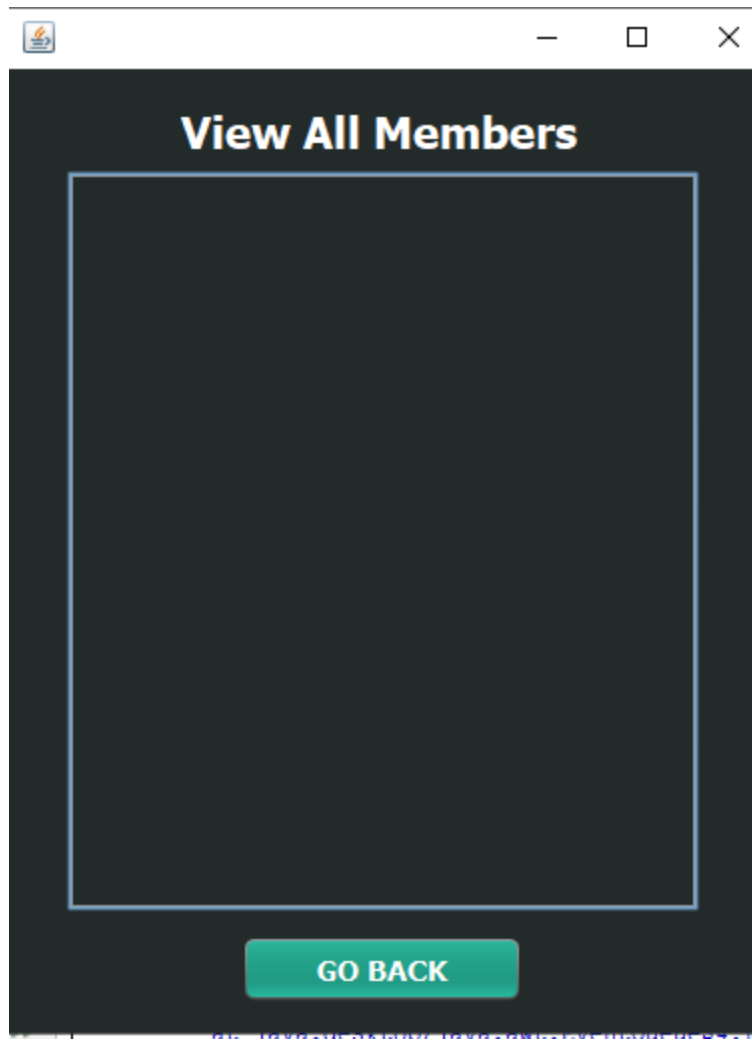
Credit card account holder: \_\_\_\_\_

Credit card number: \_\_\_\_\_

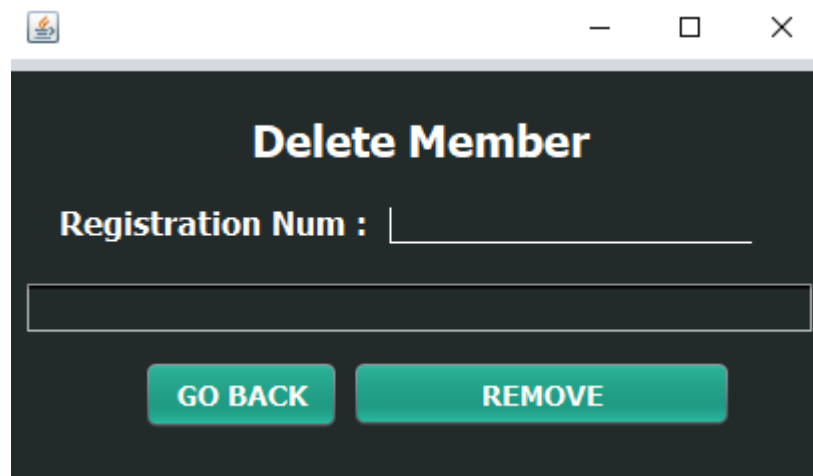
Back

SAVE

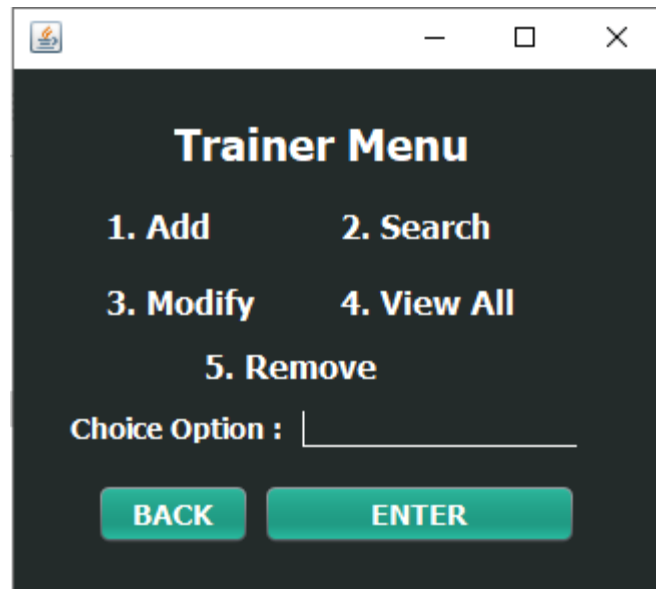
### 12. View All Members



### **13. Remove Member**



### **14. Trainer Menu**



A screenshot of a software window titled "Trainer Menu". The window has a dark gray background and a white title bar with standard Windows window controls (minimize, maximize, close). The menu items are listed in white text: "1. Add", "2. Search", "3. Modify", "4. View All", and "5. Remove". Below the menu items is a label "Choice Option :" followed by a text input field. At the bottom of the window are two green buttons with white text: "BACK" and "ENTER".

**Trainer Menu**

1. Add      2. Search

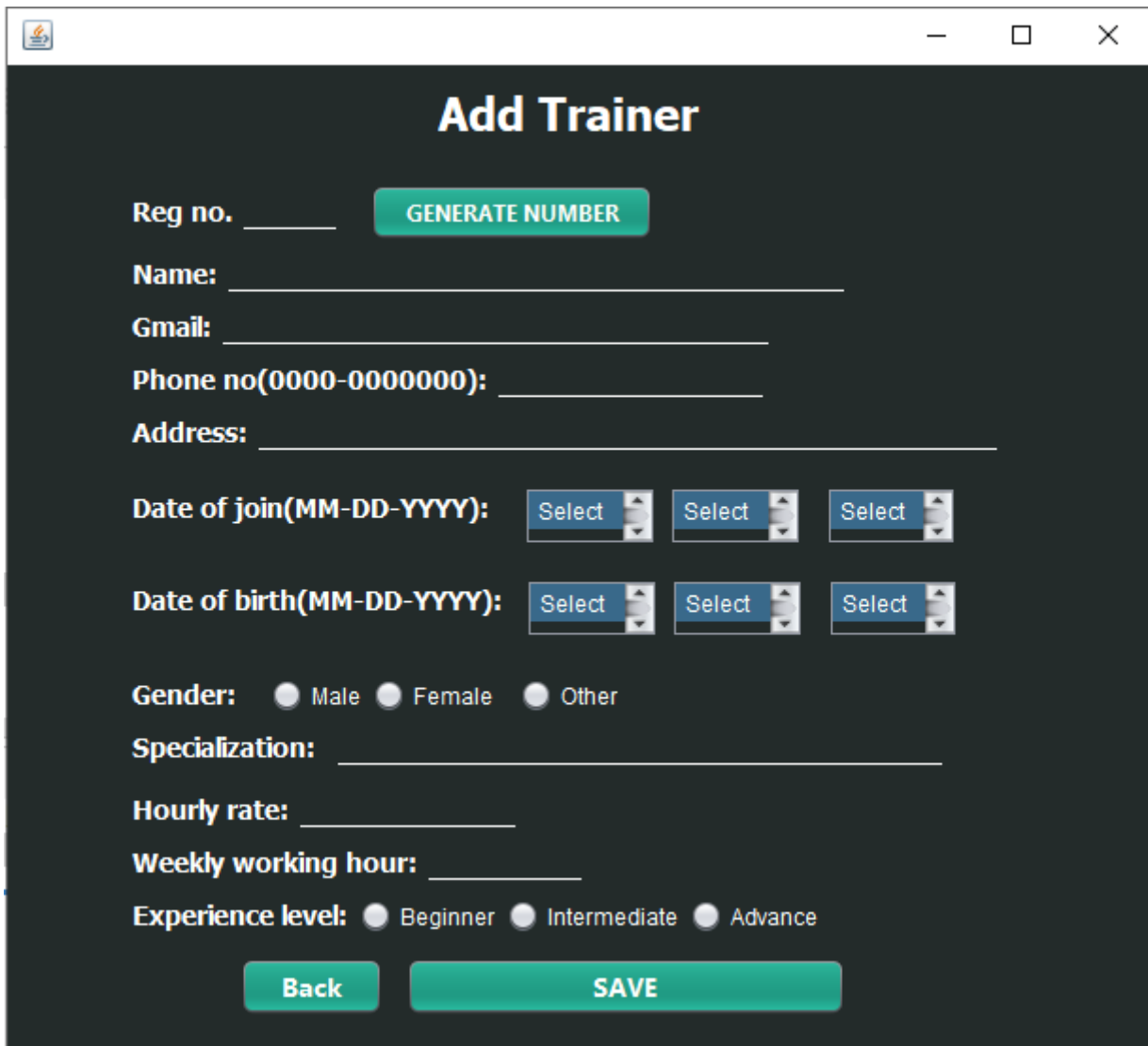
3. Modify    4. View All

5. Remove

Choice Option :

BACK      ENTER

### 15. Add Trainer



**Add Trainer**

Reg no. \_\_\_\_\_ **GENERATE NUMBER**

Name: \_\_\_\_\_

Gmail: \_\_\_\_\_

Phone no(0000-0000000): \_\_\_\_\_

Address: \_\_\_\_\_

Date of join(MM-DD-YYYY): **Select** **Select** **Select**

Date of birth(MM-DD-YYYY): **Select** **Select** **Select**

Gender: ☐ Male ☐ Female ☐ Other

Specialization: \_\_\_\_\_

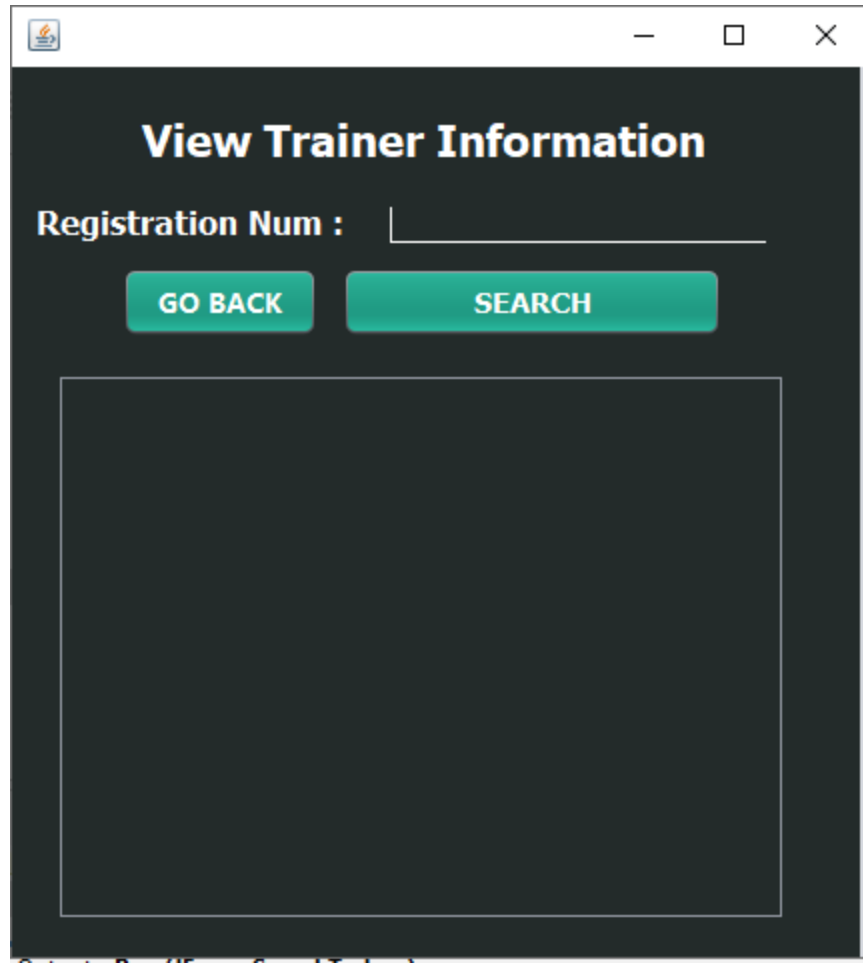
Hourly rate: \_\_\_\_\_

Weekly working hour: \_\_\_\_\_

Experience level: ☐ Beginner ☐ Intermediate ☐ Advance

**Back** **SAVE**

## 16. Search Trainer



The screenshot shows a web application window titled "View Trainer Information". The interface has a dark background. At the top, the title "View Trainer Information" is displayed in a large, bold, white font. Below the title, there is a label "Registration Num :" followed by a white text input field. Underneath the input field, there are two green buttons with white text: "GO BACK" on the left and "SEARCH" on the right. Below these buttons is a large, empty white rectangular box, likely intended for displaying the search results or a list of trainers.

### 17.Modify Trainer

## Modify Trainer Information

Search member with reg id: \_\_\_\_\_

SEARCH TRAINER

**\*Write data in those fields which you want to update, otherwise leave empty it before save\***

**Name:** \_\_\_\_\_

**Gmail:** \_\_\_\_\_

**Phone no(0000-0000000):** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Gender:** ☐ Male ☐ Female ☐ Other

**Specialization:** \_\_\_\_\_

**Hourly rate:** \_\_\_\_\_

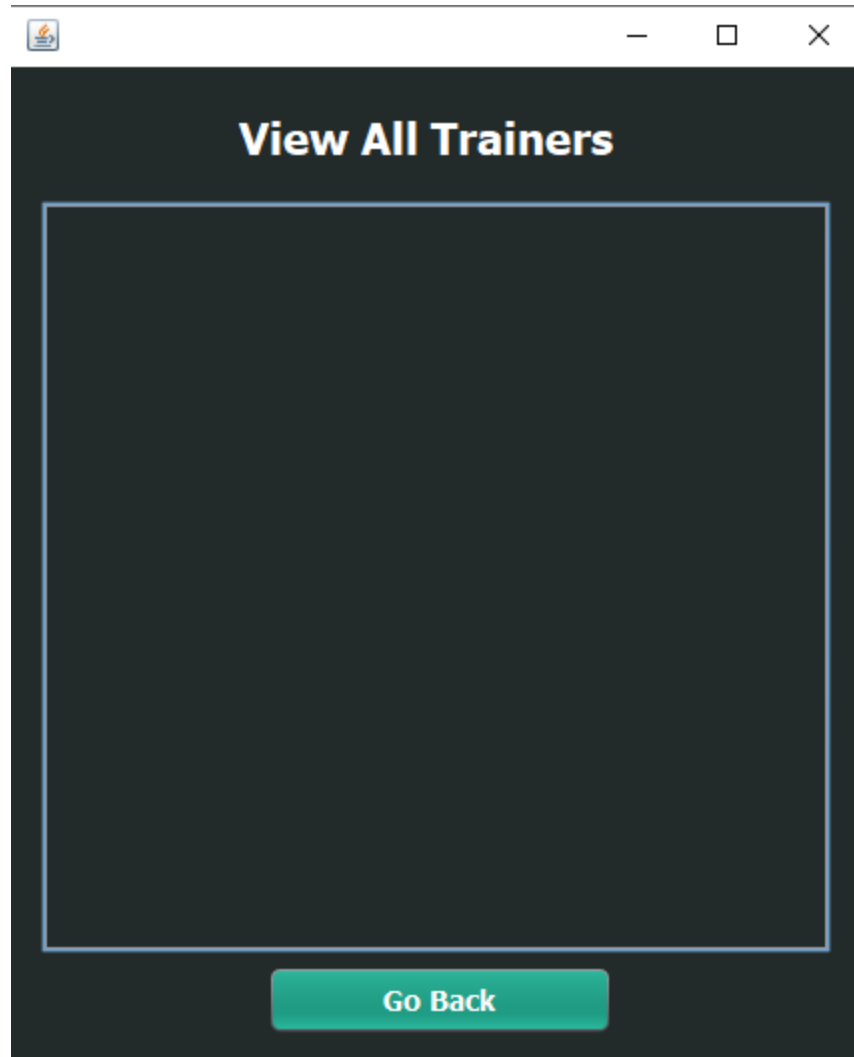
**Weekly working hour:** \_\_\_\_\_

**Experience level:** ☐ Beginner ☐ Intermediate ☐ Advance

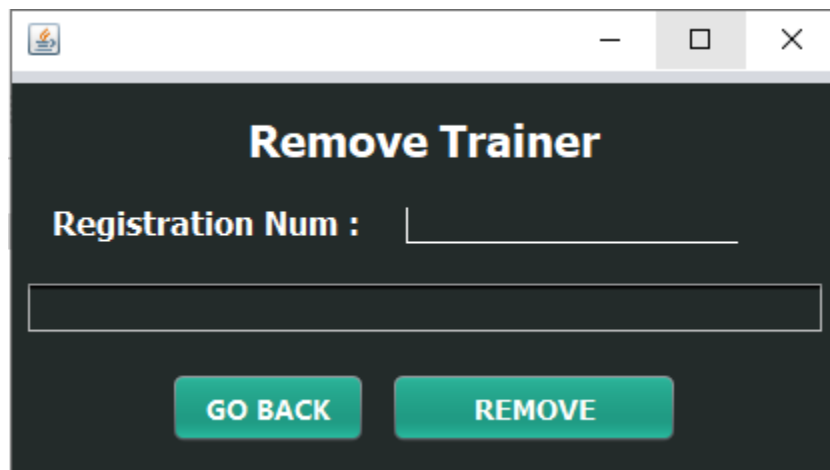
Back

SAVE

### 18. View All

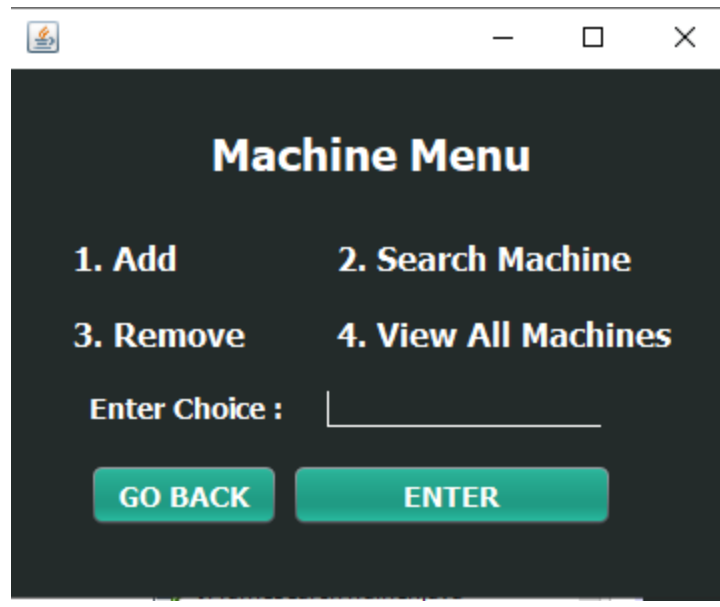


### 19. Remove Trainer



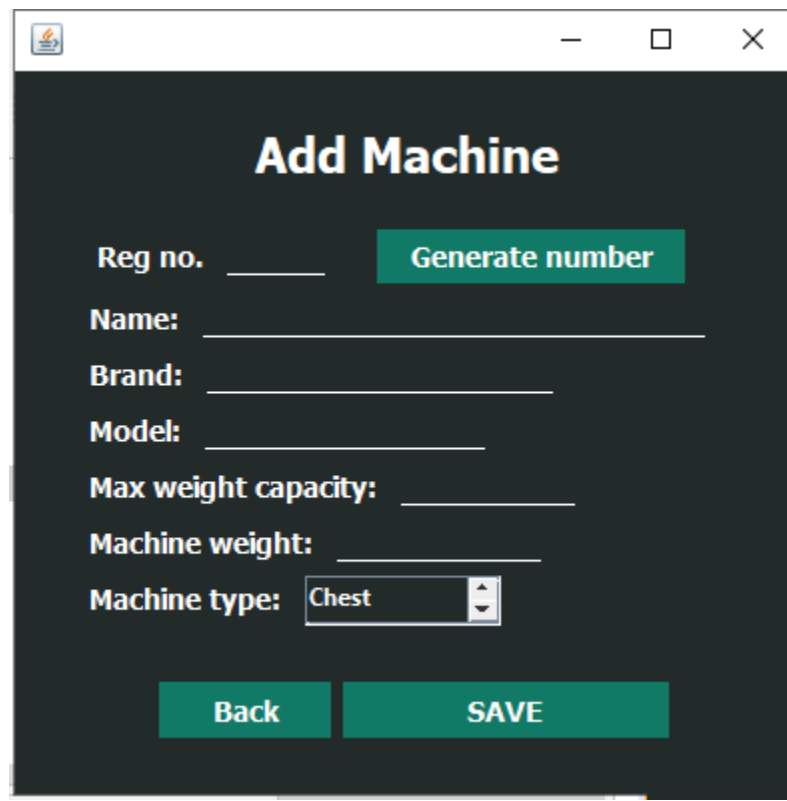
### 20. Machine Menu





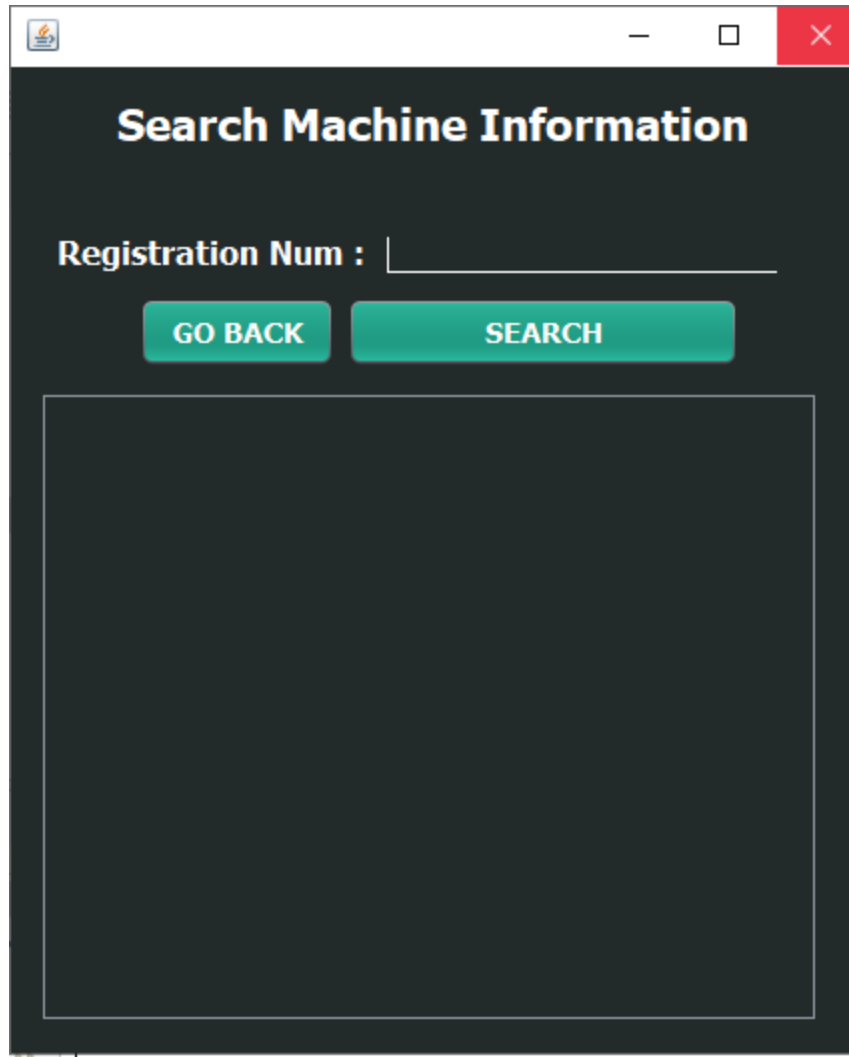
A screenshot of a web application window titled "Machine Menu". The window has a dark background with white text. It displays four numbered options: 1. Add, 2. Search Machine, 3. Remove, and 4. View All Machines. Below these options is a text input field labeled "Enter Choice :". At the bottom, there are two green buttons: "GO BACK" and "ENTER".

## 21. Add Machine



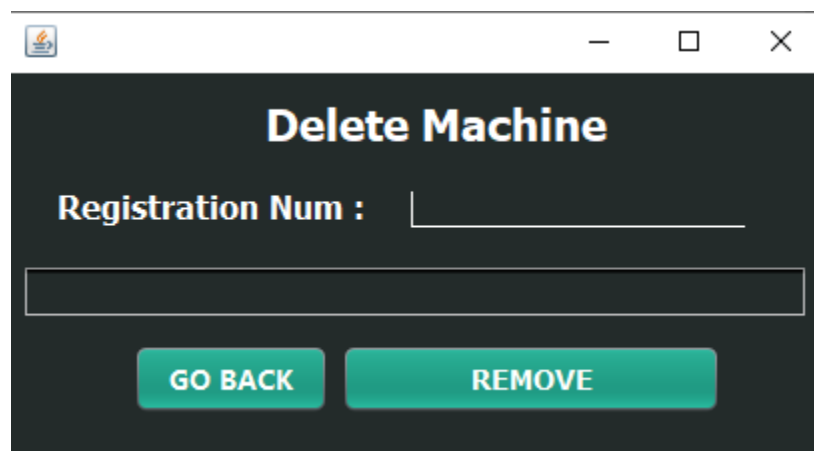
A screenshot of a web application window titled "Add Machine". The window has a dark background with white text. It contains several input fields: "Reg no." with a "Generate number" button, "Name:", "Brand:", "Model:", "Max weight capacity:", "Machine weight:", and "Machine type:" with a dropdown menu showing "Chest". At the bottom, there are two green buttons: "Back" and "SAVE".

## 22. Search Machine



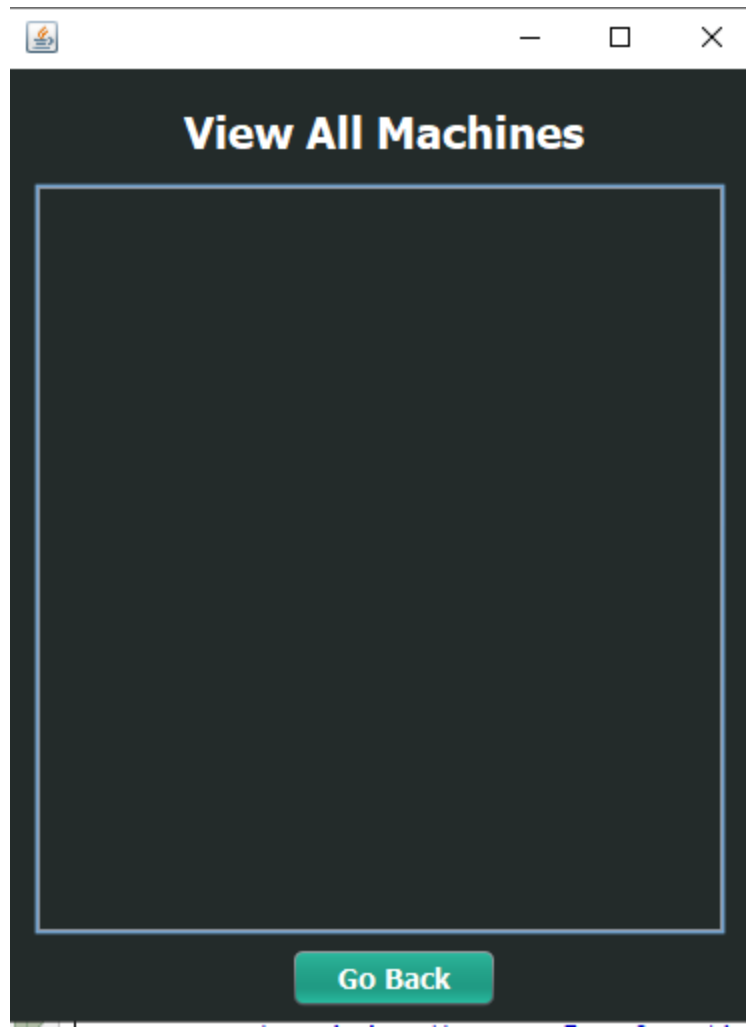
A screenshot of a software window titled "Search Machine Information". The window has a dark gray background. At the top, the title is in white bold text. Below the title, there is a label "Registration Num :" followed by a white text input field. Underneath the input field, there are two green buttons with white text: "GO BACK" on the left and "SEARCH" on the right. Below the buttons is a large, empty white rectangular area, likely a placeholder for search results.

### 23. Remove Machine

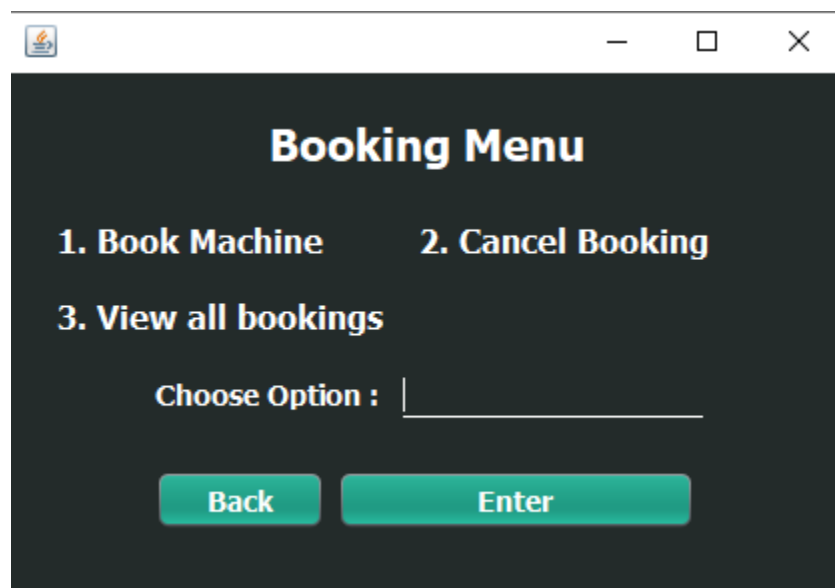


A screenshot of a software window titled "Delete Machine". The window has a dark gray background. At the top, the title is in white bold text. Below the title, there is a label "Registration Num :" followed by a white text input field. Underneath the input field is a long, empty white rectangular box. At the bottom, there are two green buttons with white text: "GO BACK" on the left and "REMOVE" on the right.

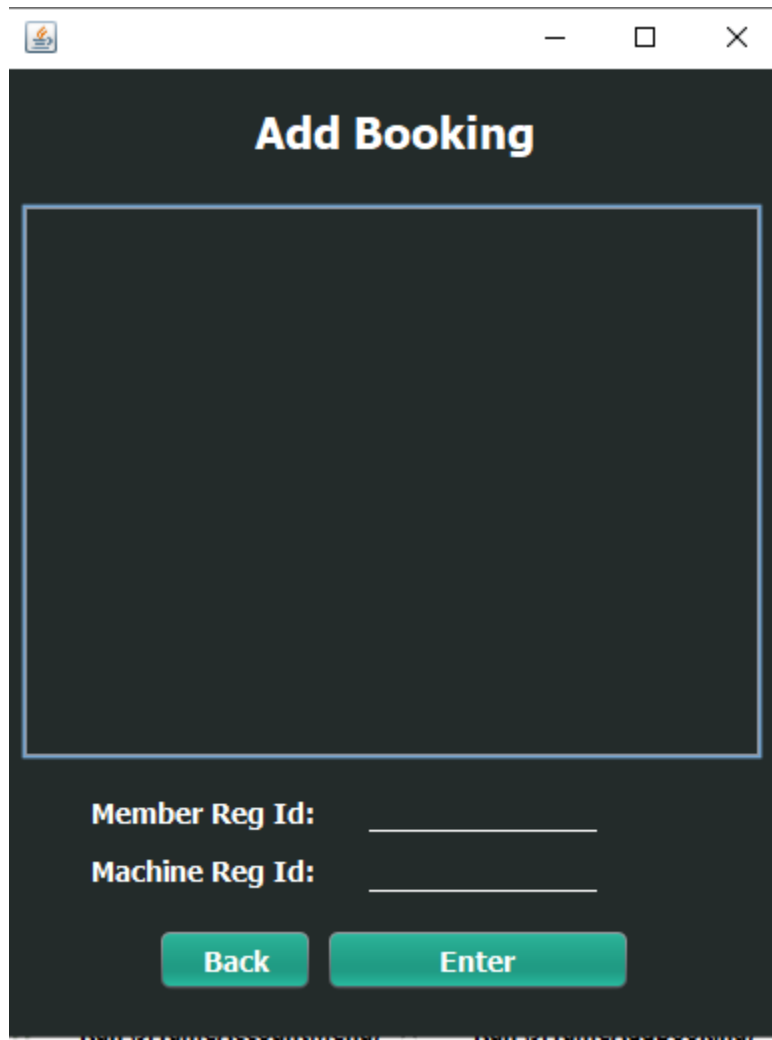
### 24. View all Machines:



## 25. Booking Menu

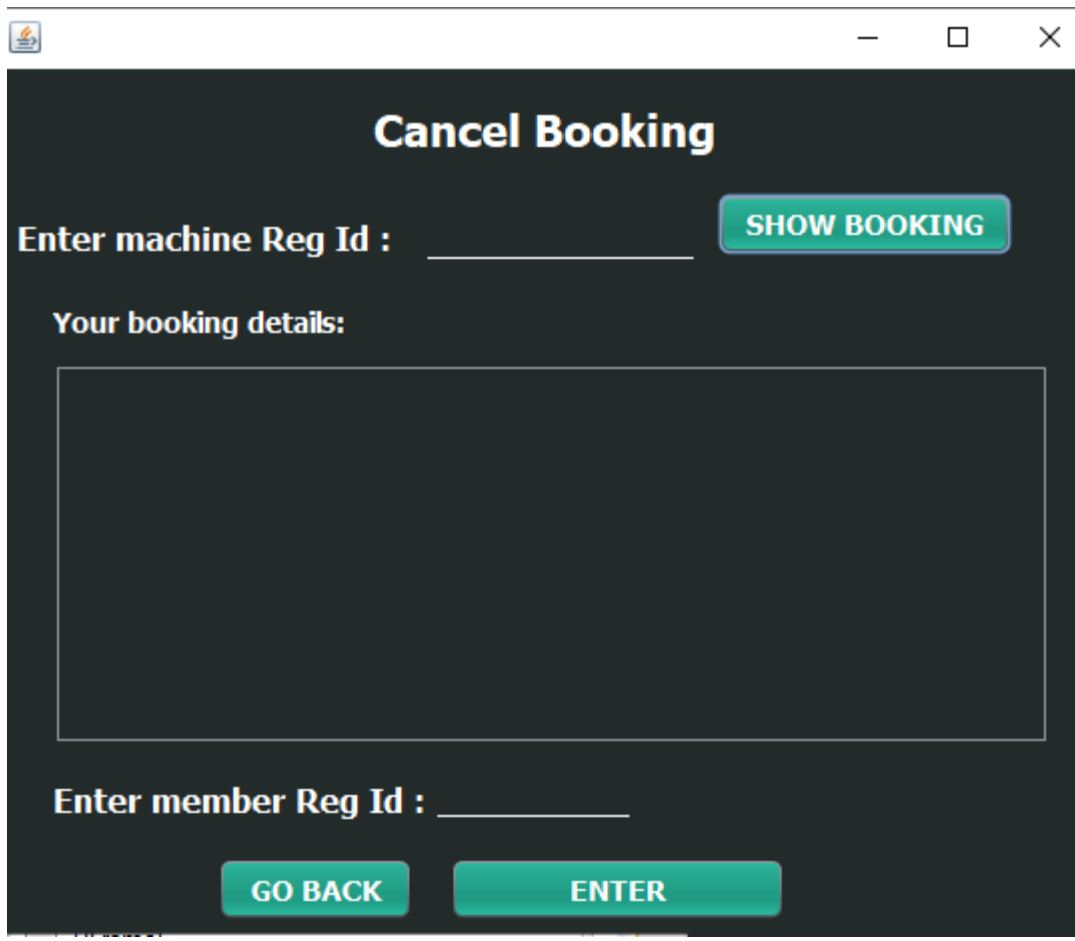


## 26. Book Machine



The screenshot shows a window titled "Add Booking" with a dark background. At the top, the title "Add Booking" is displayed in a bold, white font. Below the title is a large, empty rectangular area with a light blue border, likely intended for a photo or a detailed description of the booking. At the bottom of the window, there are two input fields: "Member Reg Id:" and "Machine Reg Id:", each followed by a white underline. Below these fields are two green buttons: "Back" and "Enter".

## 27. Cancel booking



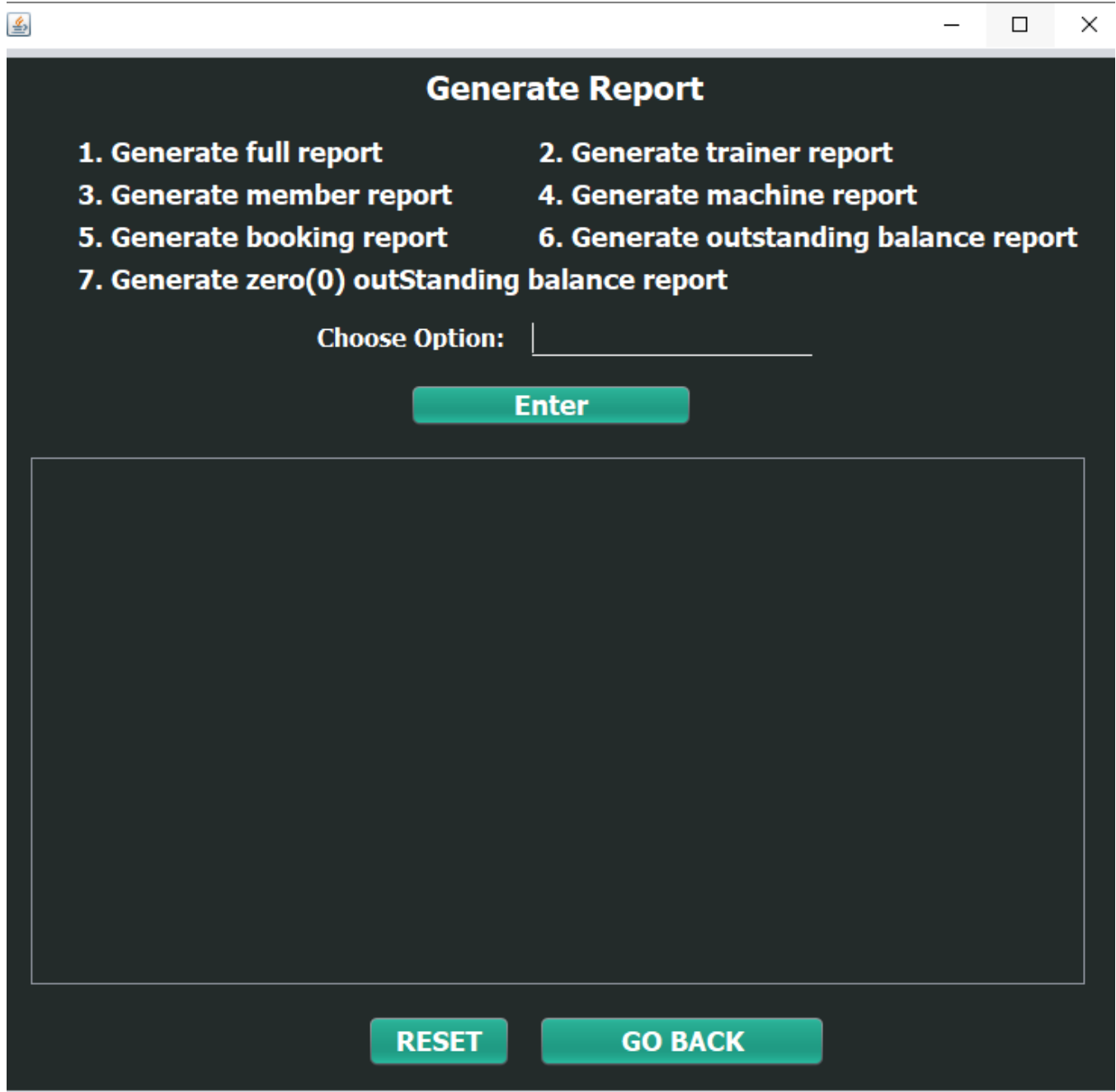
A screenshot of a web application window titled "Cancel Booking". The window has a dark gray background and a light gray border. At the top, the title "Cancel Booking" is displayed in a bold, white font. Below the title, there is a form with the following elements:

- A label "Enter machine Reg Id :" followed by a text input field.
- A green button labeled "SHOW BOOKING" to the right of the input field.
- A label "Your booking details:" followed by a large, empty rectangular box with a light gray border.
- A label "Enter member Reg Id :" followed by a text input field.
- Two green buttons at the bottom: "GO BACK" and "ENTER".

## 28. View all Bookings



## 29. Report Menu



**Generate Report**

1. Generate full report
2. Generate trainer report
3. Generate member report
4. Generate machine report
5. Generate booking report
6. Generate outstanding balance report
7. Generate zero(0) outStanding balance report

Choose Option:

**Enter**

**RESET** **GO BACK**