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My Gym System

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Abstract

Physical fitness is very important for a healthy and tension free life. "My Gym" program is a complete gym system which cares about all of its members and their memberships, employees, and activities. It is a system that is designed to manage day to day business by allowing the user to add or remove members, search for a member by searching for their ID, or to view the list of members. The system is designed to be user friendly that requires minimal user training.

Also, it allows us to add or remove an employee which helps in storing information about employees and coaches working in the gym for the safety of trainees, besides searching for an employee and viewing list of employees. Furthermore, for ensuring the progress of the trainees, the system can follow up each member through the member's Inbody to make sure that the trainee is approaching their target within the shortest time that suits their body and health. It also views list of all Inbodies and you can search for a member's Inbody by using the member's ID so that all of the member's information appear in the search result. And finally, for providing exciting activities for members, fitness classes can be added/ removed for each member, besides searching for a fitness class and viewing list of fitness classes.

Also, the system can prevent user's mistakes as it prevents him from typing letters in the fields that are required to be filled with numbers, for maintaining the accuracy upon filling information.

Finally, any changes in the database depend on the employee since he's the only one who can access and change in it according to members' and employees' verbal requests

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1. Introduction

1.1 Purpose

The purpose of the project is to develop a software system that facilitates the data storage and data usage to store the records of the clients; their information, InBodies and Fitness classes that they attend, in order to guarantee each trainee's progress. The staff (employees) has the ability to access the database and make changes to it. Also, for the safety of trainees it gathers information about employees and trainers.

1.2 List of Definitions

InBody: It is a test that provides a comprehensive view of body composition balance.

Java.awt, javax.swing: Packages provided in java language.

BMI: (Body Mass Index)It is the measure of weight relative to the height.

PBF: Percentage of Body Fat.

1.3 Scope

Our proposed “My Gym System” is for those who own a gym business and need to organize all the data, so we created this application to store all the information needed about members and the activities inside the gym.

1.4 Overview

The system handles the information of people working and training in the gym so we provided detailed description of the application throughout this document starting from general description ,System requirements,Use case diagram

2. General Description

2.1 Product Perspective

Java and an operating system are recommended for usage of the application.

2.2 General Capabilities

The Application is capable of storing thousands of information about the members. It contains the ability of adding and removing members, Fitness classes, Inbodies and employees. It can also provide lists for all members, employees, Inbodies and fitness classes.

2.3 General Constraints

There are a few constraints that the user must be aware of, such as that all of the information is required, nothing is optional. Also, The letters cannot be entered in weight ,height or number of months of registration.

2.4 User Characteristics

This application can be used only by adults for those who run a gym business.

2.5 Environment Description

Since it is a software program therefor the place must contain a PC (a computer or a laptop) and for sure a suitable source of electricity and it must be kept away from reach of children. Also, it has to have enough memory to store information.

2.6 Assumptions and dependencies

The only person allowed to access this app and make changes is a specific employee in the gym as he takes the paper filled applications from the receptionist and transfers them to the database of the gym by storing all of the information on the app.

2.7 Other resources needed

It's recommended to use Netbeans IDE 0.2 .

The used libraries:

- Java.awt
- Java.awt.event
- Javax.swing
- Java.util

3. System Requirements

3.1 Functional Requirements

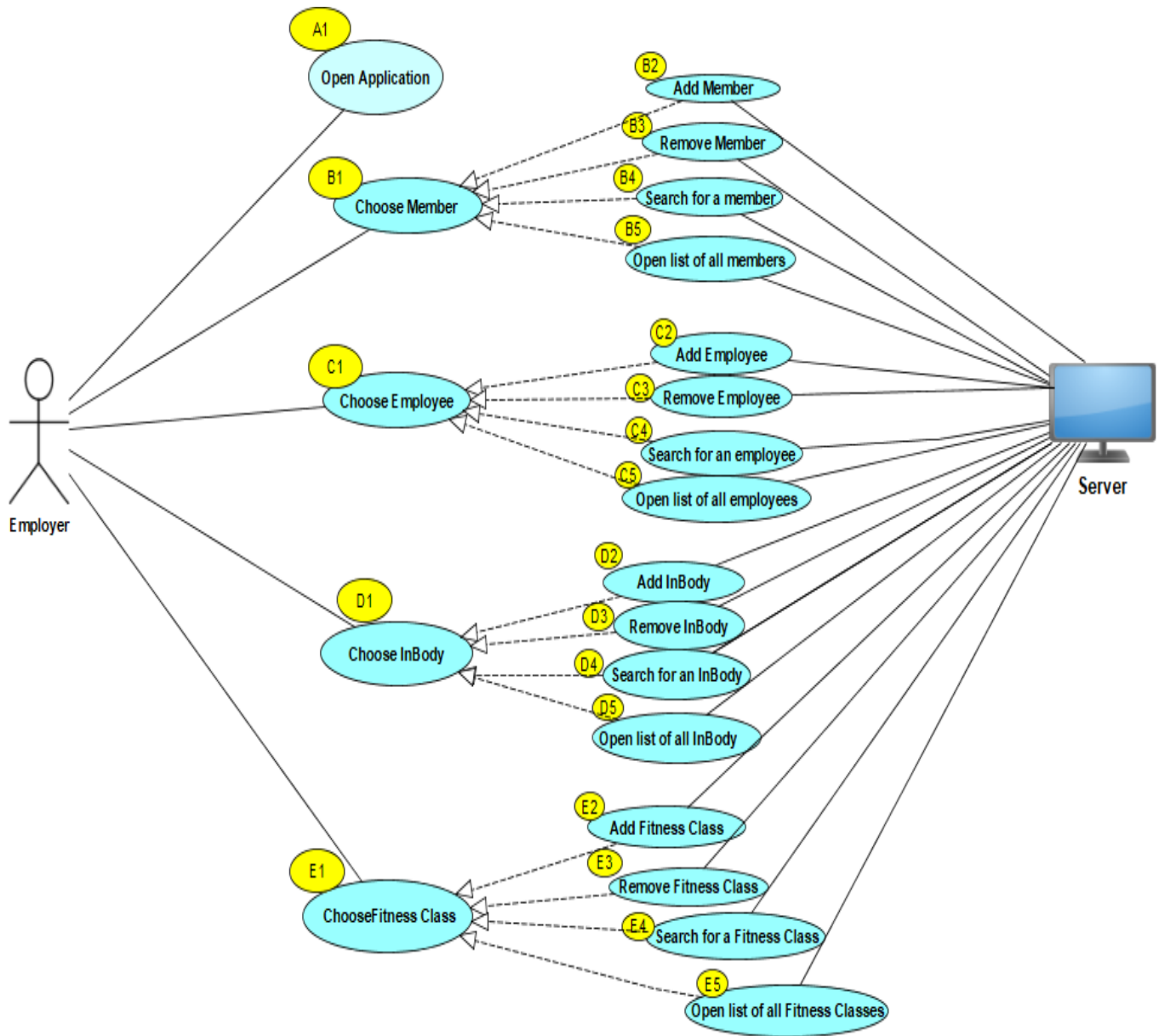
The system provides:

- Adding, removing and searching for a member.
- Adding, removing and searching for an employee.
- Adding, removing and searching for an Inbody.
- Adding, removing and searching for fitness class.
- Checking the lists of all members, employees, Inbodies and fitness classes.

3.2 Non-Functional Requirements

- Large Data memory.
- Java Language.
- Available 24 hours per day.
- User friendly.

4. Use Case Diagram



5. Narrative Description of Use Cases

1st use case:

Use case name: open app

Related requirement: B1,C1,D1,E1

Goal in context: The app opens and ready to click on menu

Pre-condition: The app must be downloaded first on the computer

Successful end condition: The app opens

Failed end condition: The app does not open

Primary actor: Employer

Secondary actor: -

Trigger: the app is loading

Included case: --

Main flow: The user opens the computer then right click choose open then the app opens

Extensions: Computer shut downs

2nd use case:

Use case name: Choose member

Related requirement: B2

Goal in context: Apply operations in member menu

Pre-condition: Open the app

Successful end condition: the menu opened so chose an option

Failed end condition: couldn't open the menu

Primary actor: Server

Secondary actor: Employer

Trigger: Decide which menu to click on

Included case: --

Main flow: The employer opens the app then decide which menu he want to click on then select from the drop down menu.

Extensions: The application freezes.

3rd use case:

Use case name: Add member

Related requirement: B1

Goal in context: The system adds the new member selected by employer

Pre-condition: Click on add member

Successful end condition: The member is registered

Failed end condition: It doesn't register the member

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: B1

Main flow: The employer opens the app then selects the add member from the drop down menu after that the system registers the member

Extensions: the system collapse

4th use case:

Use case name: Remove member

Related requirement: B1

Goal in context: The system removes the new member selected by employer

Pre-condition: Click on remove member

Successful end condition: The member is removed

Failed end condition: Couldn't remove the member

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: B1

Main flow: The employer opens the app then selects remove member from the drop down menu after that the system removes the member information

Extensions: the system collapse

5th use case:

Use case name: Search member

Related requirement: B1

Goal in context: The system searches for the member

Pre-condition: Click on search for a member

Successful end condition: The information of the member appears

Failed end condition: Couldn't search for the member

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: B1

Main flow: The employer opens the app then selects search for a member from the drop down menu after that he writes the member 's ID the system provides the member information

Extensions: the system collapse

6th use case:

Use case name: Open list of all members

Related requirement: B1

Goal in context: The system shows list of all the members

Pre-condition: Click on search for a member

Successful end condition: list of all the members is opened

Failed end condition: Couldn't open the list of all the members

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: B1

Main flow: The employer opens the app then selects list of all members from the drop down menu after that list of all the members registered in the gym appears.

Extensions: the system collapse

7th use case:

Use case name: Choose employee

Related requirement:C2

Goal in context: Apply Operations in employee menu

Pre-condition: Open the app

Successful end condition: the employee menu opened so chose an option

Failed end condition: couldn't open the menu

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: --

Main flow: The Employer opens the app then decide which menu he wants to click on then selects it

Extensions: the app freezes

8th use case:

Use case name: add employee

Related requirement:C1

Goal in context: The system adds the new employee

Pre-condition: Opens the app

Successful end condition: The employee is added

Failed end condition: The employee is not added

Primary actor: Server

Secondary actor: Employer

Trigger: waiting for the system to add the employee

Included case: C1

Main flow: The employer opens the app then selects add employee menu from the employee drop down menu after that the system registers the employee

Extensions: the system collapses

9th use case:

Use case name: Remove employee

Related requirement: C1

Goal in context: The system removes the new employee selected by employer

Pre-condition: Click on member menu

Successful end condition: The employee is removed

Failed end condition: Couldn't remove the employee

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: C1

Main flow: The employer opens the app then selects remove employee from the drop down menu after that the system removes the employee information

Extensions: the system collapse

10th use case:

Use case name: Search employee

Related requirement: C1

Goal in context: The system searches for the employee

Pre-condition: Click on search for an employee

Successful end condition: The information of the employee appears

Failed end condition: Couldn't search for the employee

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: C1

Main flow: The employer opens the app then selects search for an employee from the drop down menu after that he writes the employee 's ID the system provides the employee information

Extensions: the system collapse

11th use case:

Use case name: Open list of all employees

Related requirement: C1

Goal in context: The system shows list of all the employees

Pre-condition: Click on search for an employee

Successful end condition: list of all the employees is opened

Failed end condition: Couldn't open the list of all the employees

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: C1

Main flow: The employer opens the app then selects list of all employees from the drop down menu after that list of all the employees registered in the application appears.

Extensions: the system collapse

12th use case:

Use case name: Select InBody

Related requirement: D2

Goal in context: Apply Operations in InBody menu

Pre-condition: Open the app

Successful end condition: the InBody menu opened so chose an option

Failed end condition: couldn't open the InBody menu

Primary actor: Employer

Secondary actor: Server

Trigger: Decide which menu to click on

Included case: --

Main flow: The employer opens the app then decide which menu he want to click on then selects InBody menu

Extensions: The application freezes.

13th use case:

Use case name: Add InBody

Related requirement: D1

Goal in context: The system adds the InBody selected by employer

Pre-condition: Click on add InBody

Successful end condition: new InBody is registered

Failed end condition: It doesn't register the Inbody

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: D1

Main flow: The employer opens the app then selects add InBody from the drop down menu after that the system registers the Inbody

Extensions: the system collapse

14th use case:

Use case name: Remove InBody

Related requirement: D1

Goal in context: The system removes the new InBody selected by employer

Pre-condition: Click on InBody menu

Successful end condition: The InBody is removed

Failed end condition: Couldn't remove the InBody

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: D1

Main flow: The employer opens the app then selects remove InBody from the drop down menu ,then write InBody's ID to the InBody's Information.

Extensions: the system collapse

15th use case:

Use case name: Search InBody

Related requirement: D1

Goal in context: The system searches for the InBody

Pre-condition: Click on search for an InBody

Successful end condition: The information of the InBody appears

Failed end condition: Couldn't search for the InBody

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: C1

Main flow: The employer opens the app then selects search for an InBody from the drop down menu after that he writes the InBody 's ID then the system provides the InBody details

Extensions: the system collapse

16th use case:

Use case name: Open list of all InBodies

Related requirement: D1

Goal in context: The system shows list of all the InBodies

Pre-condition: Click on search for an InBody

Successful end condition: list of all the InBodies is opened

Failed end condition: Couldn't open the list of all the InBodies

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: D1

Main flow: The employer opens the app then selects list of all InBodies from the drop down menu after that list of all the InBodies registered in the application appears.

Extensions: the system collapse

17th use case:

Use case name: Select Fitness class

Related requirement: E2

Goal in context: Apply Operations in Fitness Class menu

Pre-condition: Open the app

Successful end condition: the Fitness class menu opened so chose an option

Failed end condition: couldn't open the Fitness Class menu

Primary actor: Employer

Secondary actor: Server

Trigger: Decide which menu to click on

Included case: --

Main flow: The employer opens the app then decide which menu he want to click on then select Fitness class menu

Extensions: The application freezes.

18th use case:

Use case name: Add Fitness Class

Related requirement: E1

Goal in context: The system adds the Fitness Class selected by employer

Pre-condition: Click on add Fitness Class

Successful end condition: new Fitness Class is registered

Failed end condition: It doesn't register the Fitness Class

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: E1

Main flow: The employer opens the app then selects add Fitness Class from the drop down menu after that the system registers the Fitness Class

Extensions: the system collapse

19th use case:

Use case name: Remove Fitness Class

Related requirement: E1

Goal in context: The system removes the new Fitness Class selected by employer

Pre-condition: Click on Fitness Class menu

Successful end condition: The Fitness Class is removed

Failed end condition: Couldn't remove the Fitness Class

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: D1

Main flow: The employer opens the app then selects remove Fitness Class from the drop down menu ,then write Fitness Class' ID then the system provides the fitness class information

Extensions: the system collapse

20th use case:

Use case name: Search Fitness Class

Related requirement: E1

Goal in context: The system searches for the Fitness Class

Pre-condition: Click on search for a fitness class

Successful end condition: The information of the fitness class appears

Failed end condition: Couldn't search for the fitness class

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: E1

Main flow: The employer opens the app then selects search for fitness class from the drop down menu after that he writes the fitness class' ID then the system provides the fitness class details

Extensions: the system collapse

21st use case:

Use case name: Open list of all fitness classes

Related requirement: E1

Goal in context: The system shows list of all the Fitness Classes

Pre-condition: Click on search for a fitness class

Successful end condition: list of all the fitness classes is opened

Failed end condition: Couldn't open the list of all the Fitness Classes

Primary actor: Server

Secondary actor: Employer

Trigger: the app is loading

Included case: E1

Main flow: The employer opens the app then selects list of all Fitness classes from the drop down menu after that list of all the Fitness classes registered in the application appears.

6. Requirements validation

Functional requirements:

- Adding, removing and searching for a member.
- Adding, removing and searching for an employee.
- Adding and removing and searching for an InBody.
- Adding, removing and searching for fitness class.
- Checking the lists of all members, employees, Inbodies and fitness classes.

Requirements Traceability Matrix

Req. ID	1	2	3	4	5
1					
2					
3	✓				
4	✓				
5	✓	✓	✓	✓	

8. Class Model

Stage 1:

Menu lists on top of the window of System of the gym control the selection of what we want to do, either with members, employees, fitness classes or inbodies.

Stage 2:

Menu lists on top of the window of System of the gym control the selection of what we want to do, either with members, employees, fitness classes or inbodies. Each menu list drop menu items when clicked to give us the facilities provided for the pressed menu list. Member menu list helps us add member and view list of members. Employee menu list helps us add employee and view list of employees. Fitness class menu list helps us

add fitness class and view list of fitness class. And finally, Inbody menu list help us add inbody and view list of inbodies.

Each menu list closes when something is selected from it and a new window of the selected item opens. If nothing is clicked, the window's shape stays the way it has opened.

Stage 3:

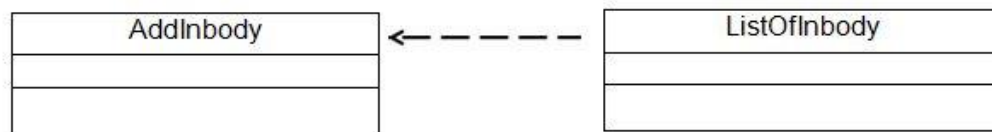
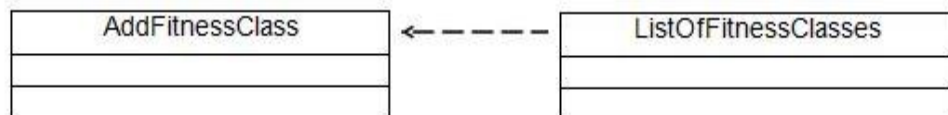
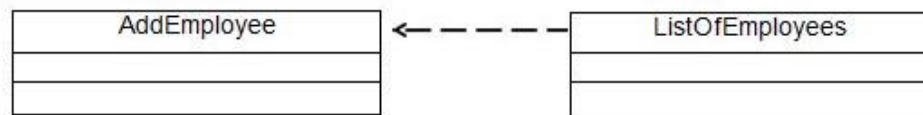
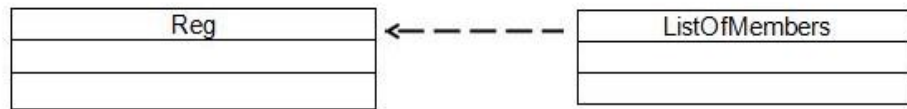
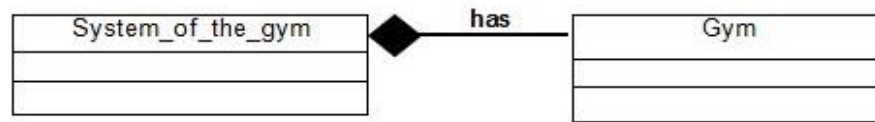
The nouns that can be identified are: **menu lists, top of the window, System of the gym, selection, menu items, clicked, facilities, add member, list of members, add employee, list of employees, add fitness class, list of fitness classes, add inbody, list of inbodies, selected, new window, shape.**

Exclude nouns that lie outside the problem boundary: **top of the window, selection, facilities, selected.**

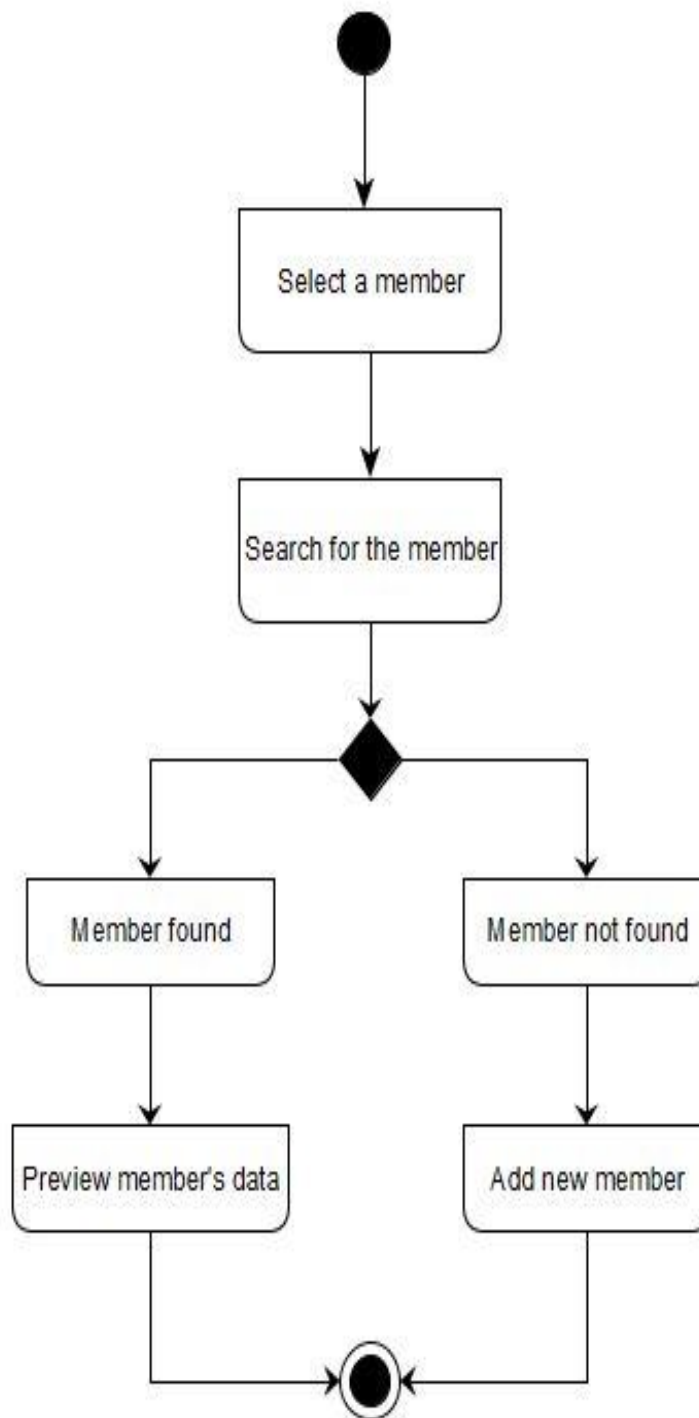
Exclude abstract nouns that represent ideas or quantities that have no physical existence, these may become attributes: **menu lists, menu items, clicked, new window, shape.**

Hence, candidate classes are: **System of the gym, gym, add member, list of members, add employee, list of employees, add fitness class, list of fitness classes, add Inbody, list of Inbodies.**

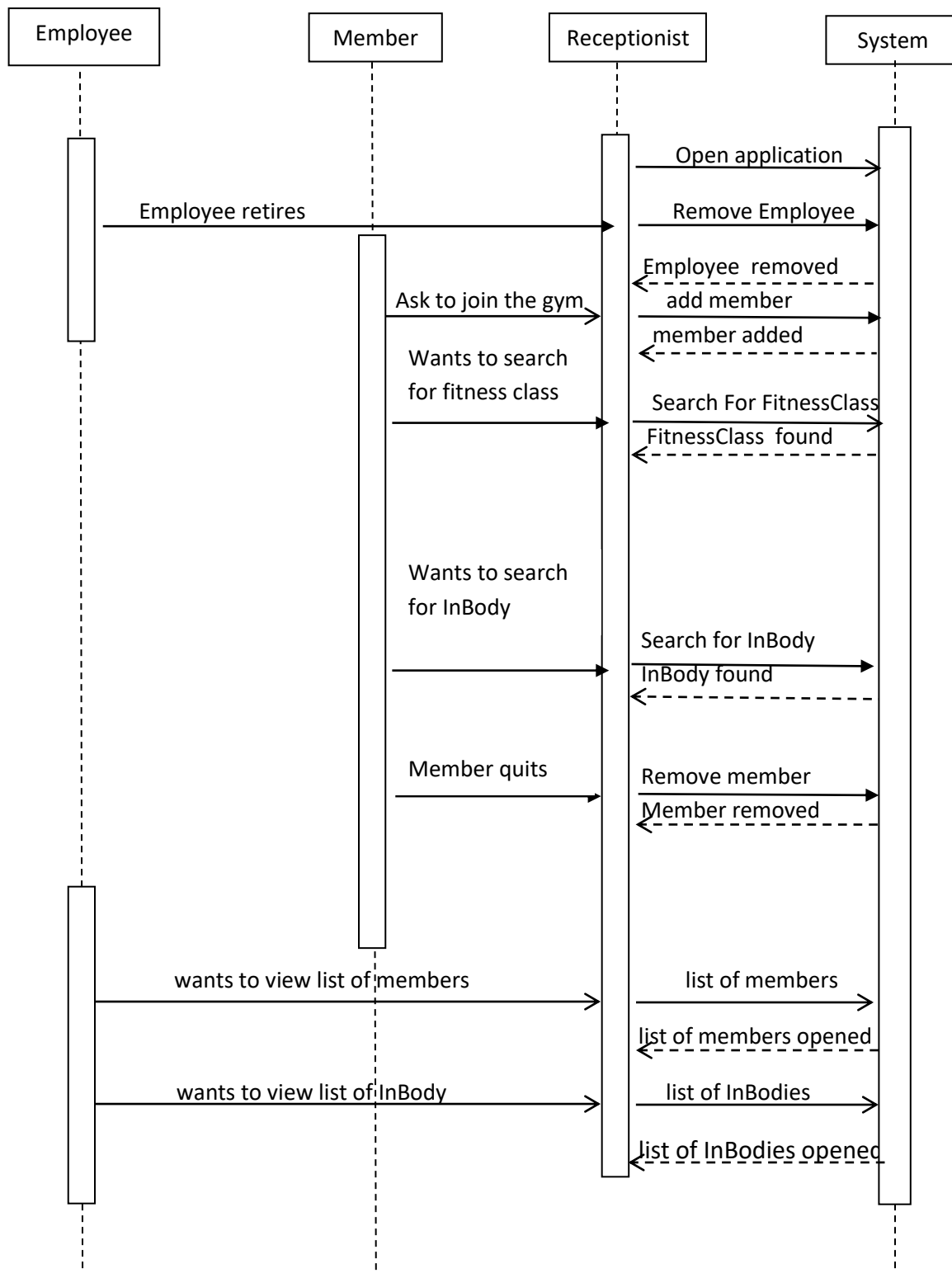
Class Diagram



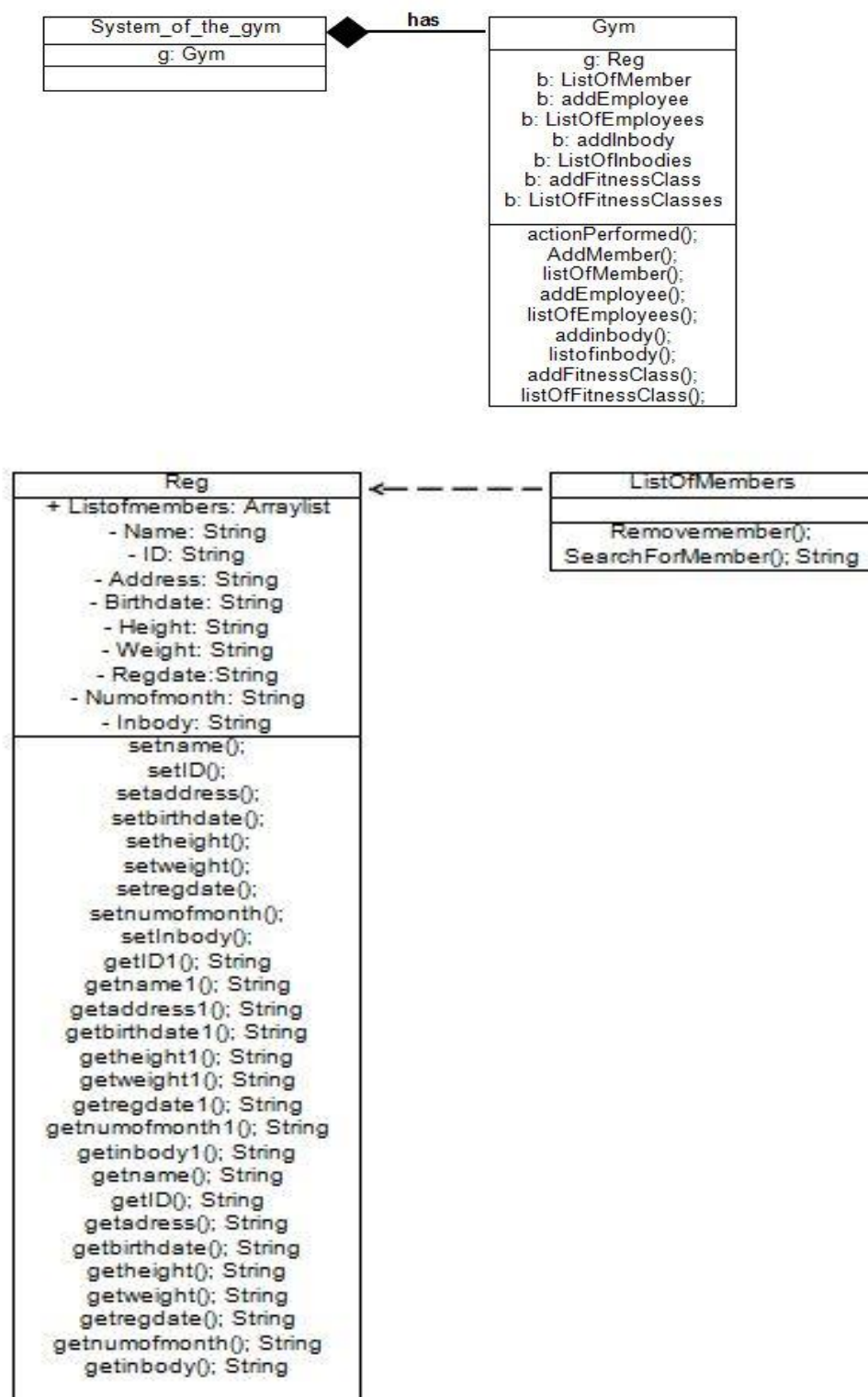
9. State diagram

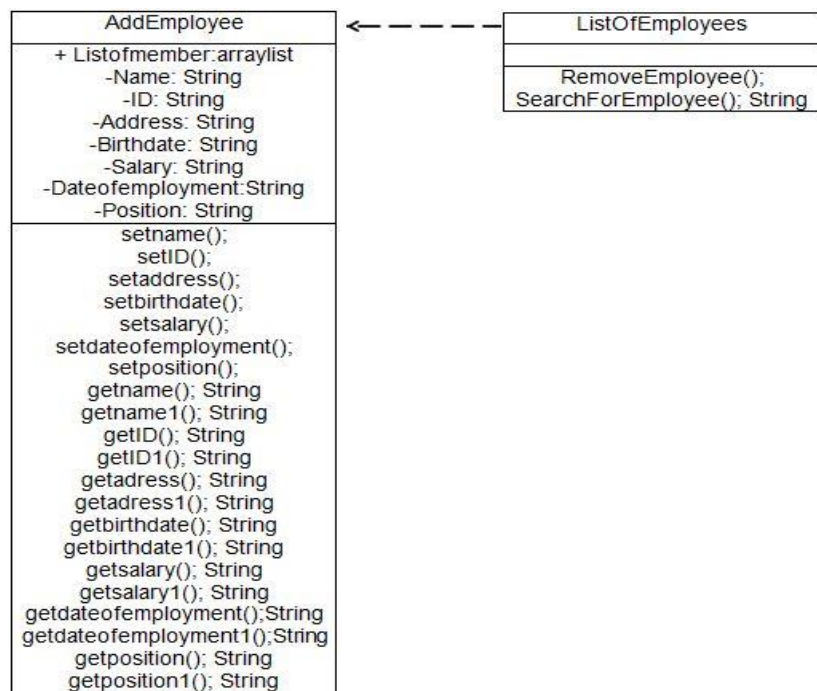
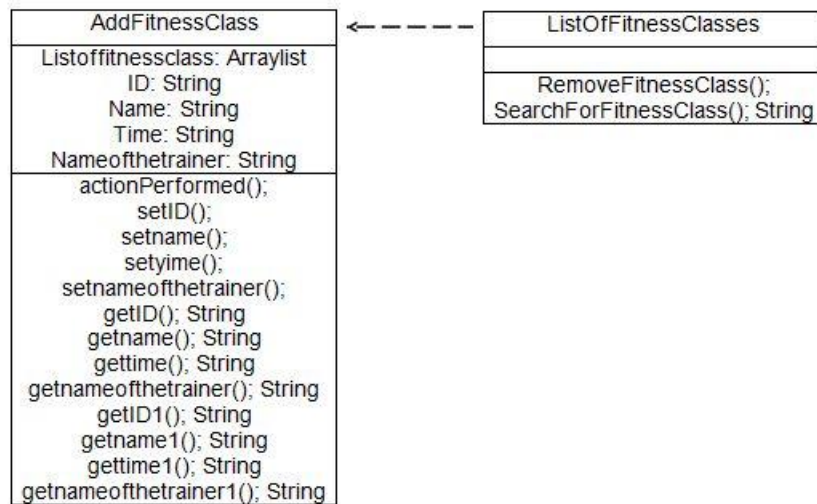


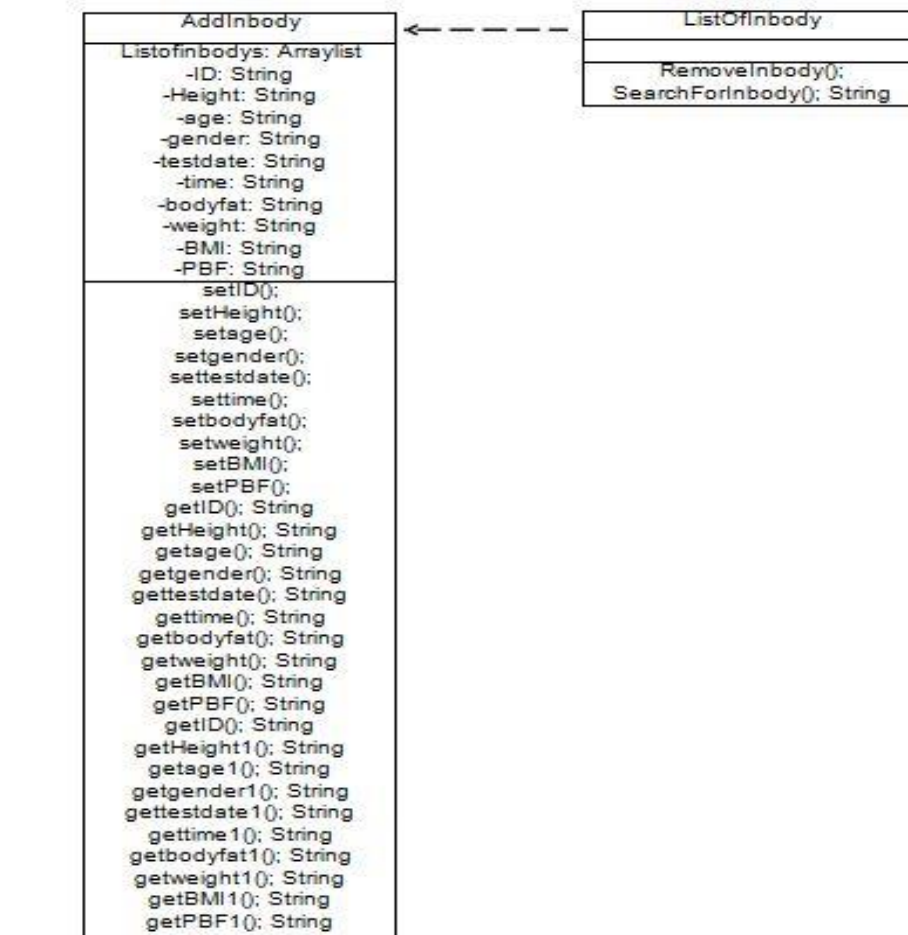
10. Interaction (Sequence) diagram



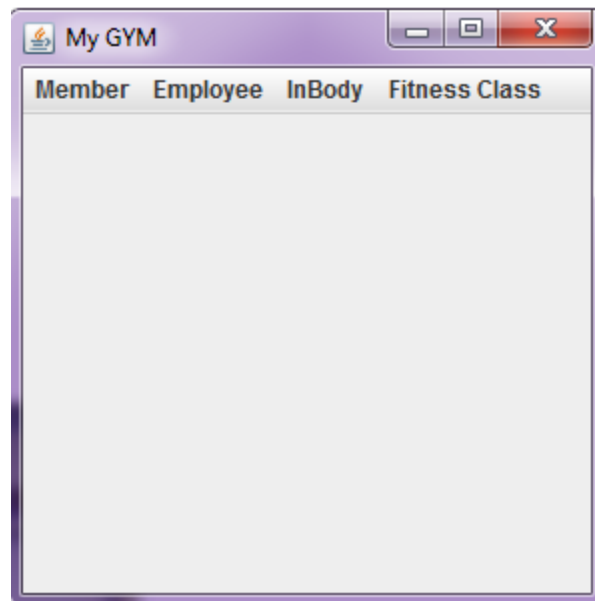
11. Detailed class diagram







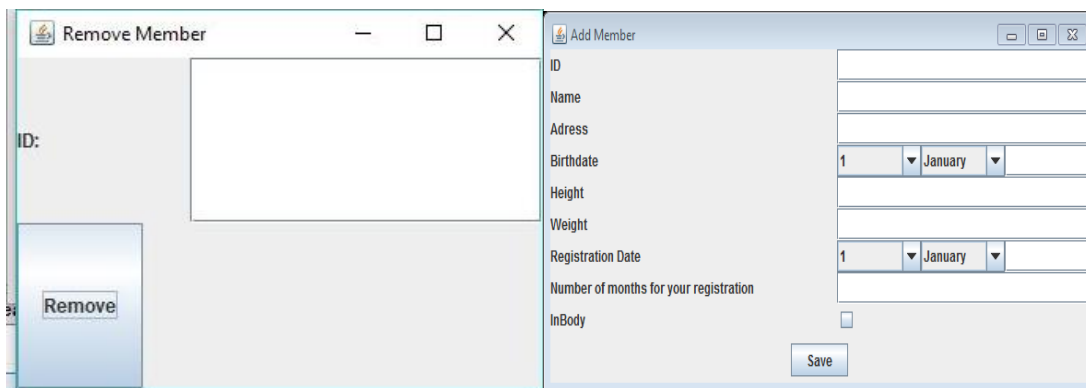
11. User Interface Design:



System home page

Purpose: The starting point of the My GYM system.

User Interaction: The user should choose from the four options above what he wants to deal with.



Search For Employee

ID:

search

Your Search Result :

List Of Employees

ID	Name	Address	Birthdate	Salary	Date of Emplo...	Position

Purpose : The user can add new employee, remove an old one, search for one, and open a list of all employees working in the gym.

User Interaction : The user should fill the data of the employee and add/remove/search for him.

Add InBody

ID

Height

Age

Gender

Test Date

Time

Body Fat Mass

Weight

BMI

PBF

Male

1

January

1

am

Monday

save

Remove inBody

ID:

Remove

Search For Inbody

ID:

search

Your Search Result :

List Of Inbody

ID	Height	Age	Gender	Test Dat...	Time	Body Fat	Weight	BMI	PBF

32

Purpose : The user can add inbody for a member, remove an old one, search for one, and open a list of all inbody for all members enrolled in the gym.

User Interaction : The user should fill the data of the member and add/remove/search for his info.

The screenshot shows a web application window titled "Add Fitness Class". The window has a standard title bar with a minus button, a maximize button, and a close button. The main content area is a form with a light gray background. On the left side, there are four labels: "ID", "Name", "Time Of The Class", and "Name Of The Trainer". To the right of each label is a corresponding input field. The "ID" field is a single-line text input. The "Name" field is a multi-line text area. The "Time Of The Class" field is a dropdown menu with a light gray background, showing the selected value "1", "am", and "Monday". The "Name Of The Trainer" field is a multi-line text area. At the bottom center of the form is a "save" button.

Remove Fitness Class

ID:

Remove

Search For Fitness Class

ID:

search

Your Search Result:



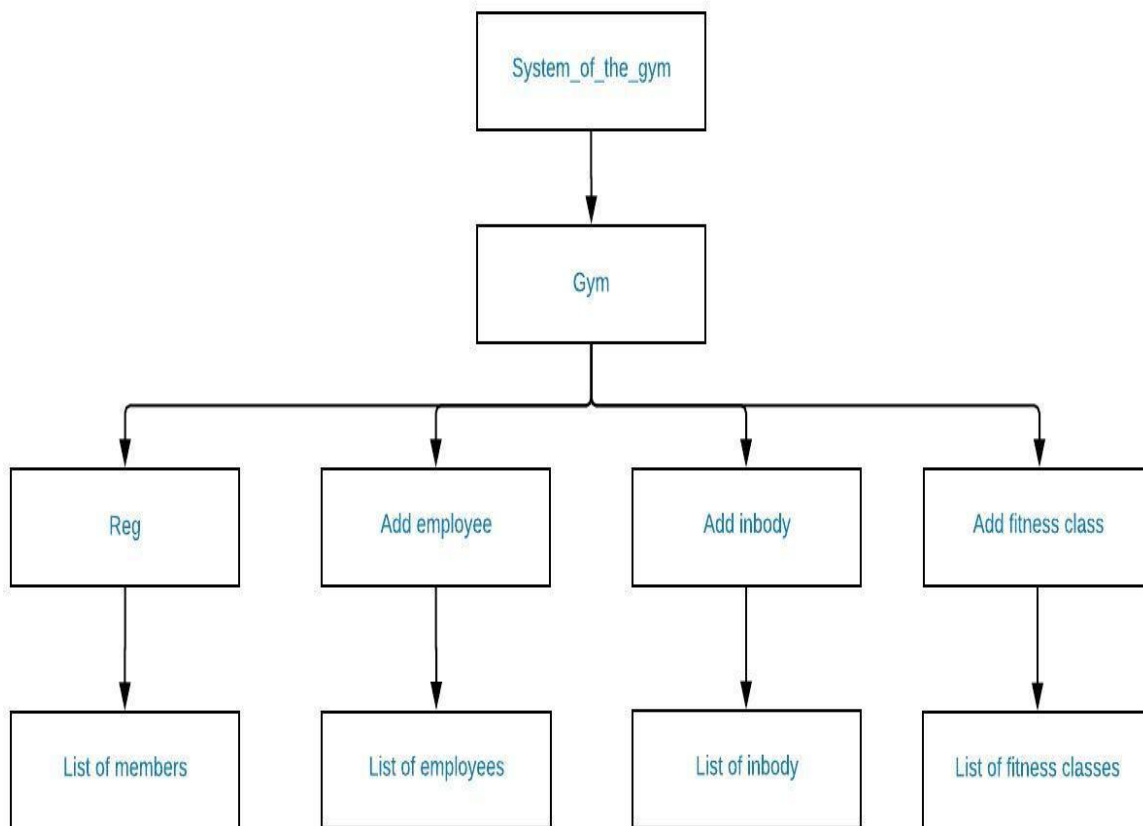
The screenshot shows a Java Swing window titled "List Of Fitness Classes". The window has a standard title bar with minimize, maximize, and close buttons. Inside the window, there is a table with four columns. The column headers are "ID", "Name", "Time", and "Name Of The Trainer". The table is currently empty, showing only the header row. The background of the window is a light blue color.

ID	Name	Time	Name Of The Trainer
----	------	------	---------------------

Purpose : The user can add a fitness class for a member, remove an old one, search for one, and open a list of all fitness classes available in the gym.

User Interaction : The user should fill the data of the fitness class and add/ remove/ search for a fitness class.

12. Client-Object Relation Diagram:



Client-Object relation diagram

13. Detailed Design:

Void system home page (void)

{

While(True)

{

If (Member button is clicked)

{

The user should choose to add, remove, search, or open a list of all members;

```

    If (add new member is chosen)
    {
        Registration window opens;

        The user should start the new member's id, name and other info then click
save;

        The new member should be added to the array list of members;
    }

    If (remove member is chosen)
    {
        Remove member window opens;

        The user should enter the Id of the member he wants to remove then click
remove;

        The member should be removed from the array list of members;
    }

    If (Search for a member is chosen)
    {
        A window should appear asking the user to enter the Id of the member;

        The user should enter the Id and click search;

        All the member's info should appear in a text box;
    }

    If (List of members is chosen)
    {
        A window should appear that has a list of all members and their info;
    }
}

If (Employee button is clicked)
{
    The user should choose to add, remove, search, or open a list of all employees;

```

```

    If (add new employee is chosen)
    {
        New employee window opens;

        The user should enter the new employee's id, name and other info then click
save;

        The new employee should be added to the array list of employees;
    }

    If (remove employee is chosen)
    {
        Remove employee window opens;

        The user should enter the Id of the employee he wants to remove then click
remove;

        The employee should be removed from the array list of members;
    }

    If (Search for an employee is chosen)
    {
        A window should appear asking the user to enter the Id of the employee;

        The user should enter the Id and click search;

        All the employee's info should appear in a text box;
    }

    If (List of employees is chosen)
    {
        A window should appear that has a list of all employees and their info;
    }
}

    If (Inbody button is clicked)
    {

```

```

The user should choose to add, remove, search, or open a list of inbody;
If (add new inbody is chosen)
{
    inbody window opens;

    The user should enter the member's id and inbody info then click save;

    The member's inbody should be added to the array list of inbody;
}
If (remove inbody is chosen)
{
    Remove inbody window opens;

    The user should enter the Id of the member he wants to remove his inbody
then click remove;

    The inbody should be removed from the array list of inbody;
}
If (Search for inbody is chosen)
{
    A window should appear asking the user to enter the Id of the member;

    The user should enter the Id and click search;

    All the member's inbody info should appear in a text box;
}
If (List of inbody is chosen)
{
    A window should appear that has a list of all members' ids and their inbody
info;

}
}
If (Fitness class button is clicked)
{

```

```

    The user should choose to add, remove, search, or open a list of fitness classes;
    If (add new fitness class is chosen)
    {
        Fitness class window opens;

        The user should enter info about the fitness class and the trainer then click
save;

        The new fitness class should be added to the array list of fitness classes;
    }
    If (remove fitness class is chosen)
    {
        Remove fitness class window opens;

        The user should enter the id of the fitness class he wants to remove then click
remove;

        The fitness class should be removed from the array list of fitness classes;
    }
    If (Search for a fitness class is chosen)
    {
        A window should appear asking the user to enter the Id of the fitness class;

        The user should enter the Id and click search;

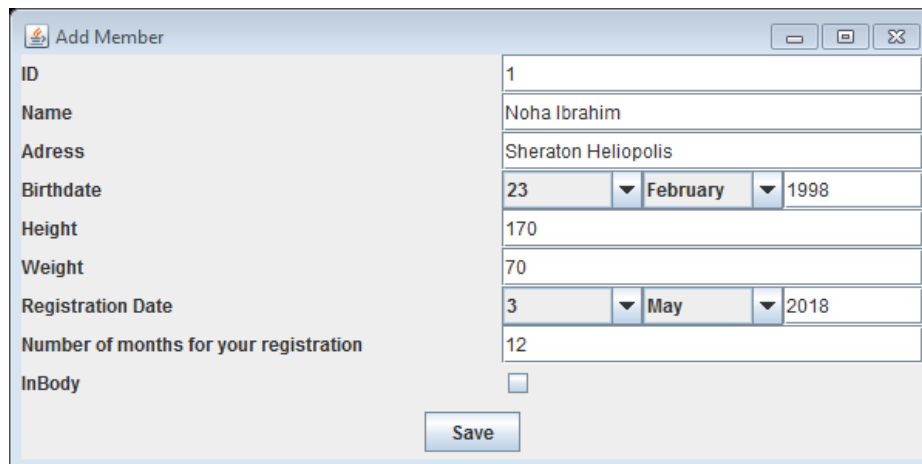
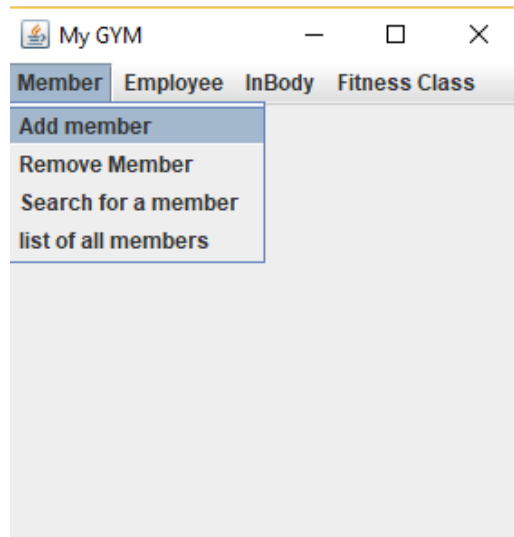
        All the fitness class's info should appear in a text box;
    }
    If (List of fitness classes is chosen)
    {
        A window should appear that has a list of all fitness classes and their
info;

    }
}
}

```

14. Testing:

i. Add new member:

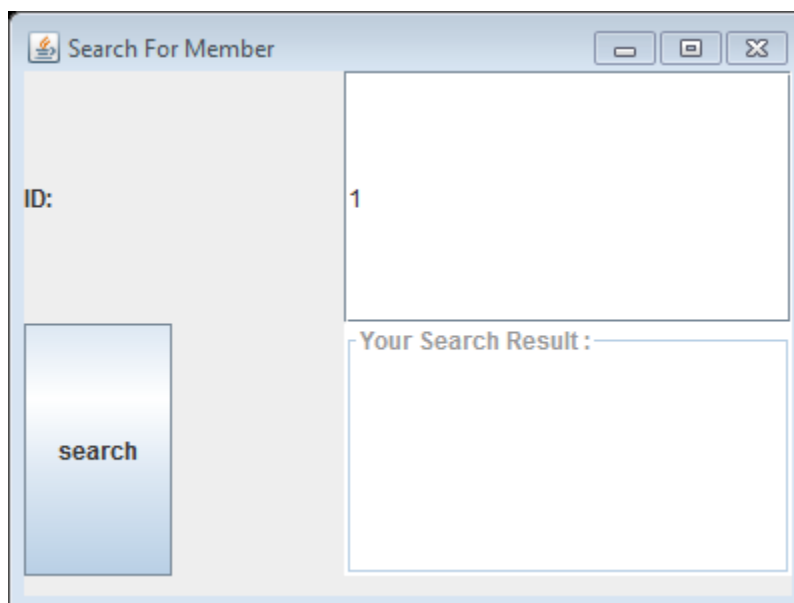
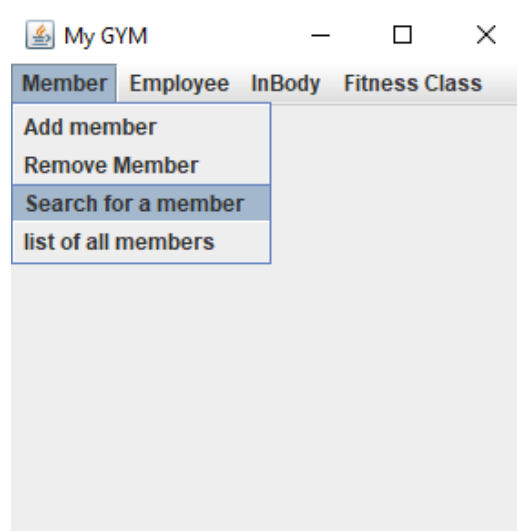


The screenshot shows a window titled "Add Member" with a standard Windows interface (minimize, maximize, close buttons). It contains a form with the following fields and values:

Field	Value
ID	1
Name	Noha Ibrahim
Address	Sheraton Heliopolis
Birthdate	23 February 1998
Height	170
Weight	70
Registration Date	3 May 2018
Number of months for your registration	12
InBody	<input type="checkbox"/>

At the bottom right of the form is a "Save" button.

iii. Search for a member

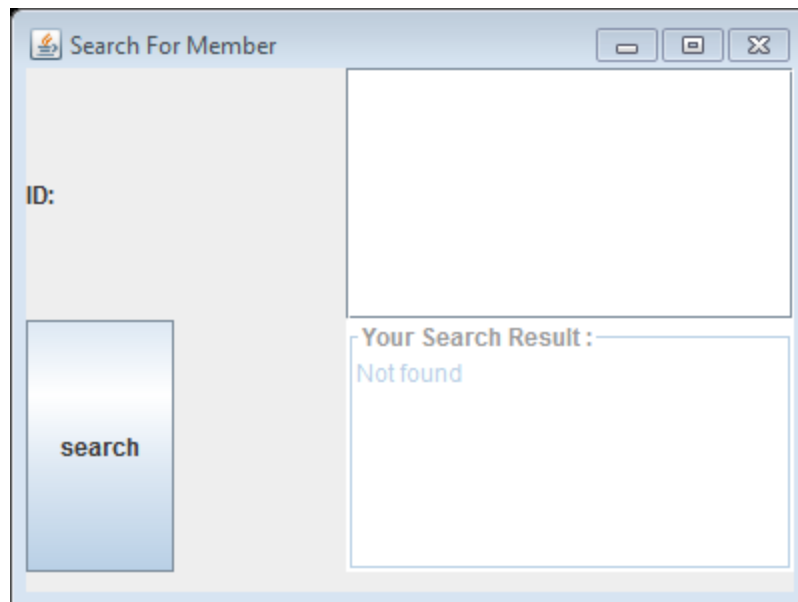


The screenshot shows a window titled "Search For Member". On the left, there is a label "ID:" and a blue button labeled "search". On the right, there is a large empty text area at the top and a box labeled "Your Search Result :". The search result box contains the following text:

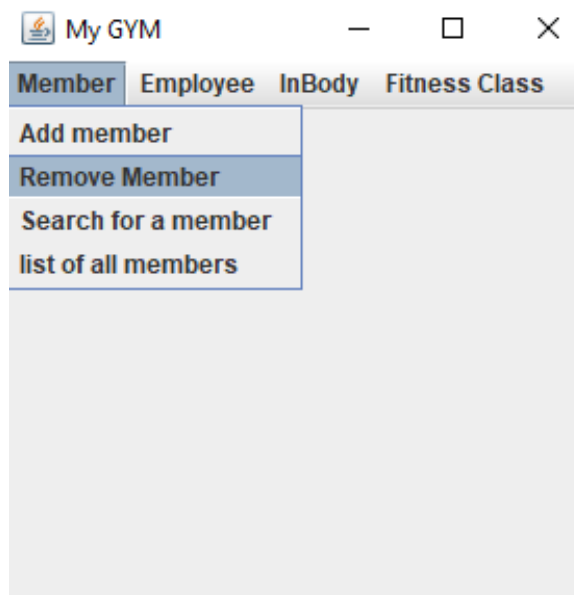
ID :1
Name :Noha Ibrahim
Adress :Sheraton Heliopolis
Birthdate :23/February/1998
Height :170
Weight :70
Registration date :3/May/2018

iv. Search for a member that is not on the list:

The screenshot shows the same "Search For Member" window. The "ID:" label is now followed by the number "2". The "search" button is still present. The "Your Search Result :" box is now empty, indicating that no member was found for ID 2.



v. Remove member:



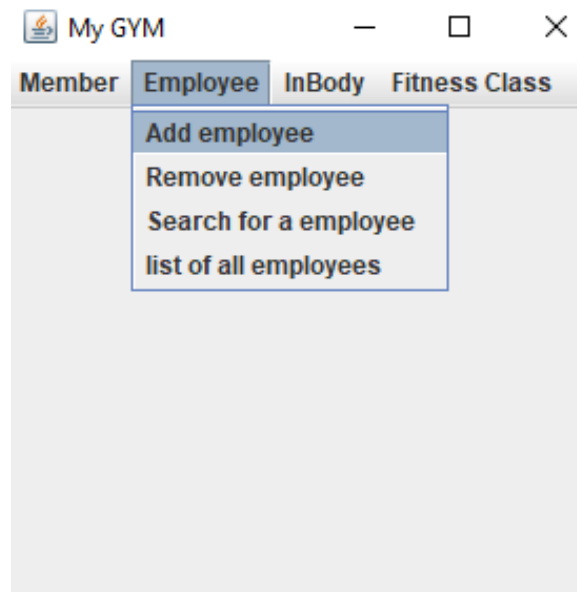
Remove Member

ID: 1

Remove

[illegible]

vi. Add employee:



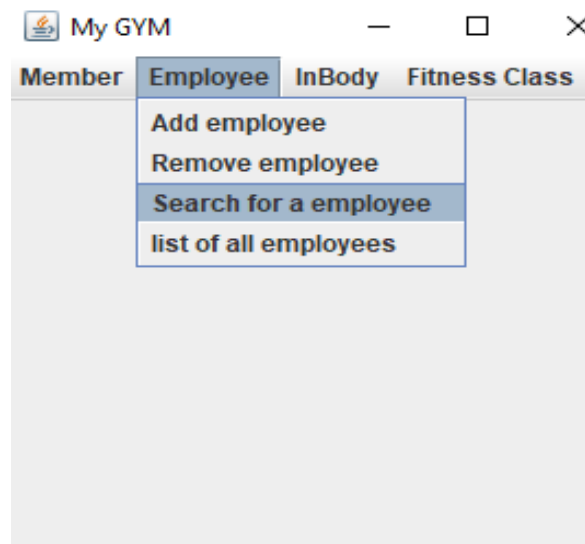
The screenshot shows the 'Add Employee' dialog box. It has a title bar with a logo, the text 'Add Employee', and standard window controls. The dialog contains several input fields for employee information:

- ID : 1
- Name : Yara Hossam
- Adress : Maadi
- Birthdate : 6 July 1997
- Salary : 2000
- Date of Employment : 5 April 2016
- Position : Coach

A 'save' button is located at the bottom right of the dialog.

ID	Name :	Adress :	Birthdate :	Salary :	Date of Emplo...	Postion :
1	Yara Hossam	Maadi	6/July/1997	2000	5/April/2016	Coach

vii. Search for employee:



Search For Employee

ID: 1

search

Your Search Result :

Search For Employee

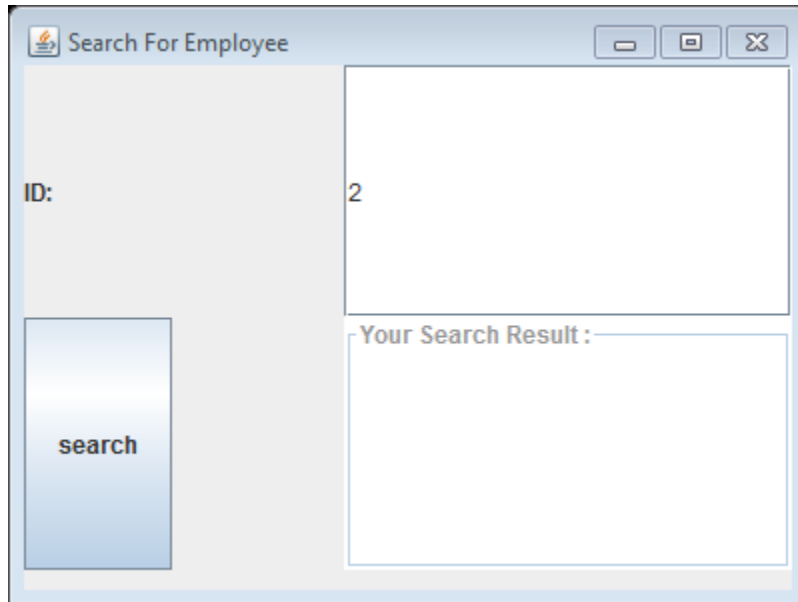
ID:

search

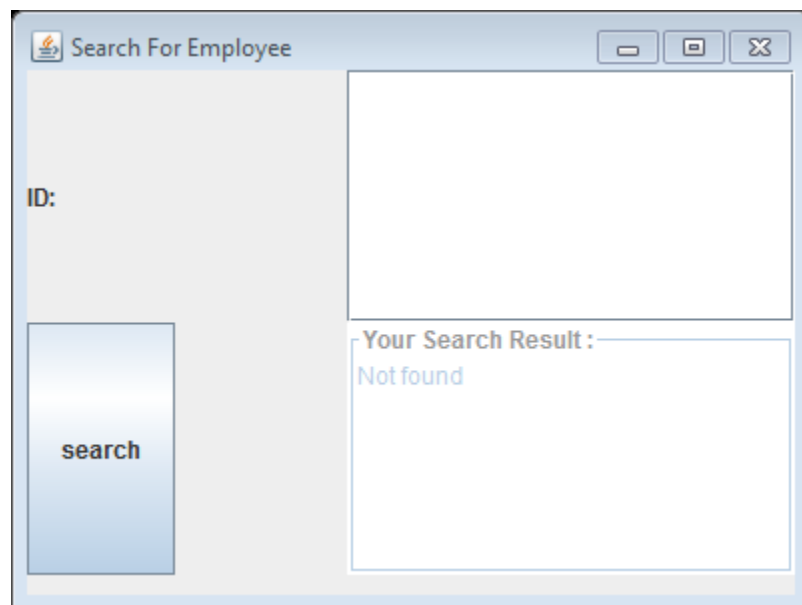
Your Search Result :

1
Yara Hossam
Maadi
6/July/1997
5/April/2016
Coach
2000

viii. Search for an employee that is not on the list:

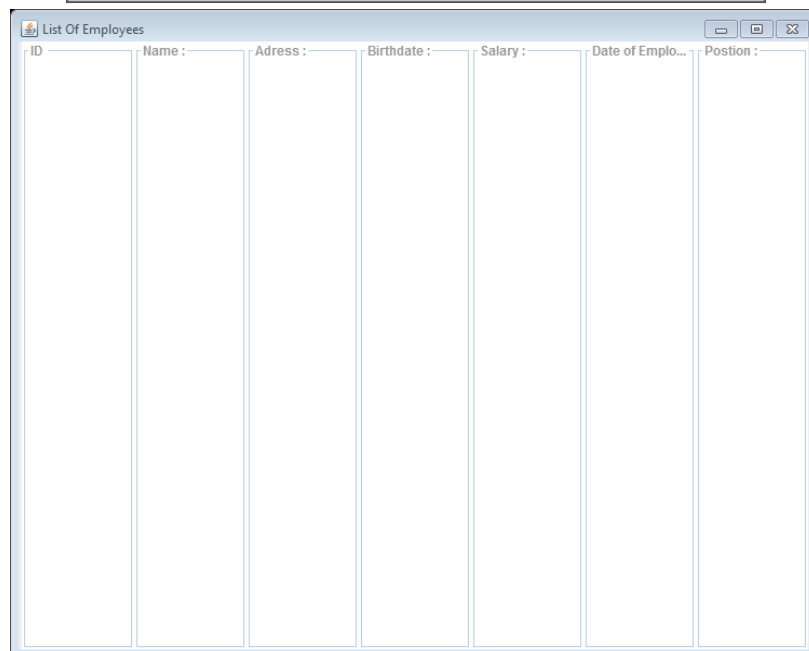
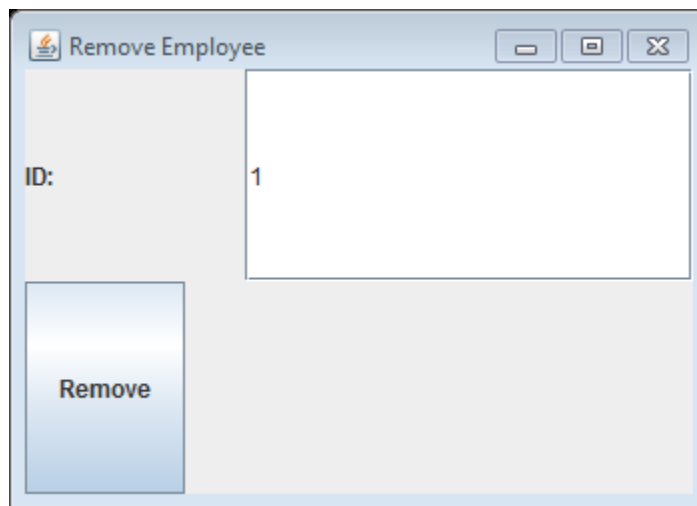
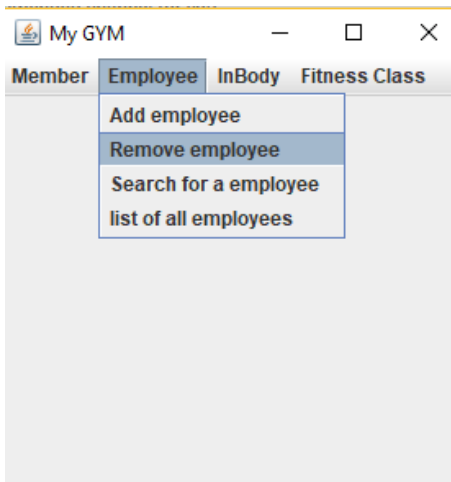


The screenshot shows a window titled "Search For Employee" with a standard Windows-style title bar (minimize, maximize, close buttons). The window is divided into two main sections. On the left, there is a label "ID:" followed by a text input field containing the number "2". Below this input field is a blue button with the text "search". On the right side of the window, there is a large empty rectangular area, and below it, a section labeled "Your Search Result : " followed by another empty rectangular area.



The screenshot shows the same "Search For Employee" window. The "ID:" input field still contains "2", and the "search" button is visible. In the "Your Search Result :" section, the text "Not found" is displayed in a light blue color.

ix. Remove employee



x. Add fitness class:

Add Fitness Class

ID

1

Name

Cardio

Time Of The Class

3

▼

pm

▼

Monday

▼

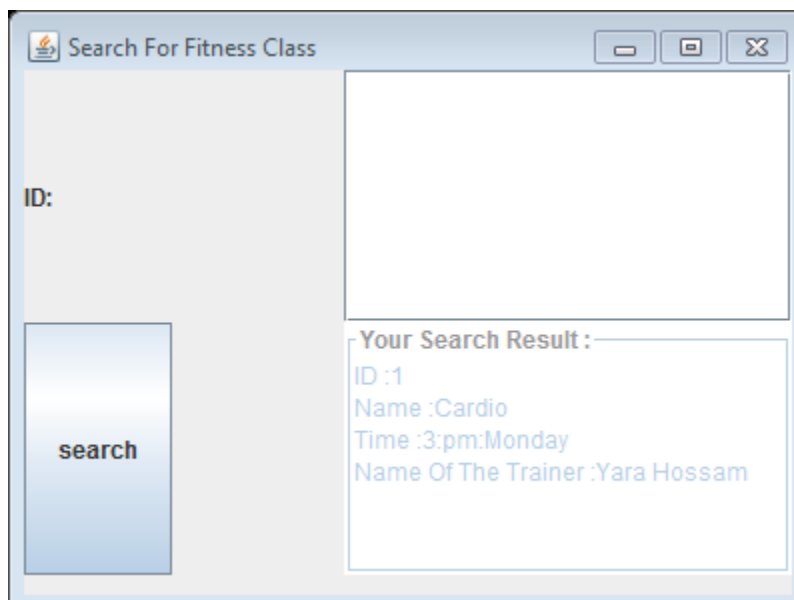
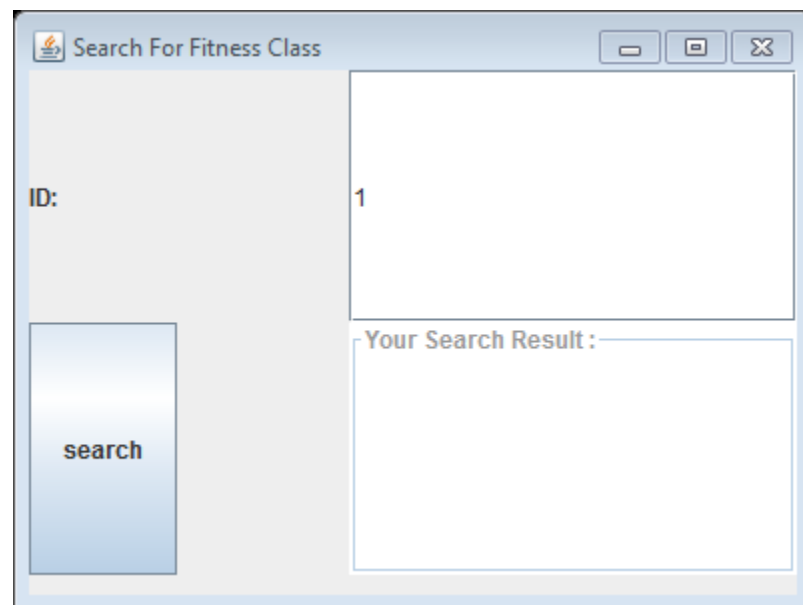
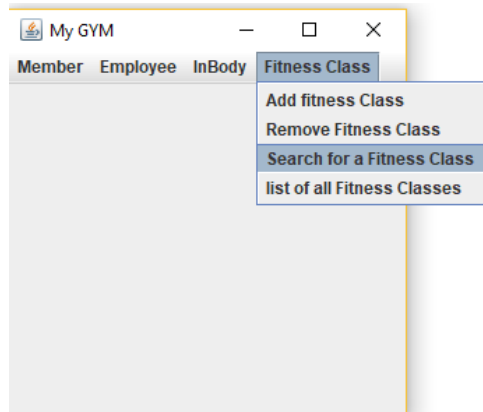
Name Of The Trainer

Yara Hossam

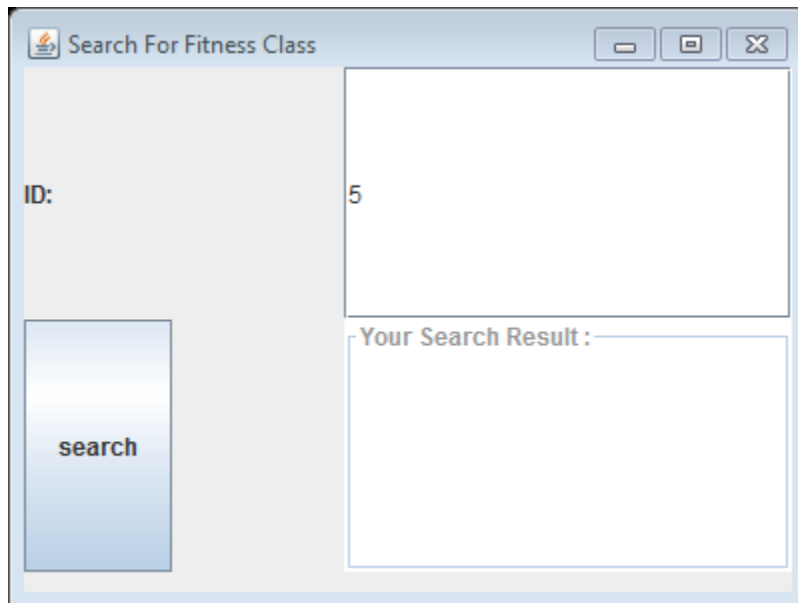
save

ID :	Name :	Time :	Name Of The Trainer :
1	Cardio	3:pm:Monday	Yara Hossam

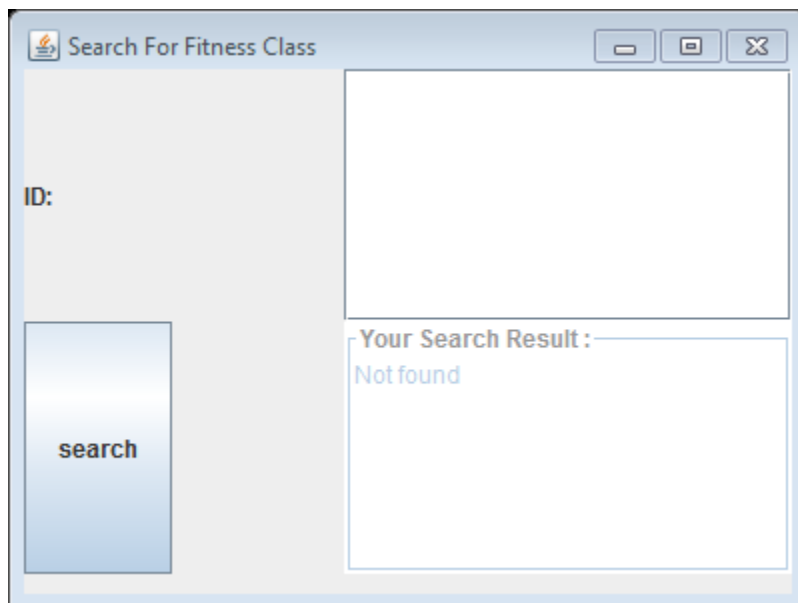
xi. Search for a fitness class:



xii. Search for a fitness class that is not on the list:

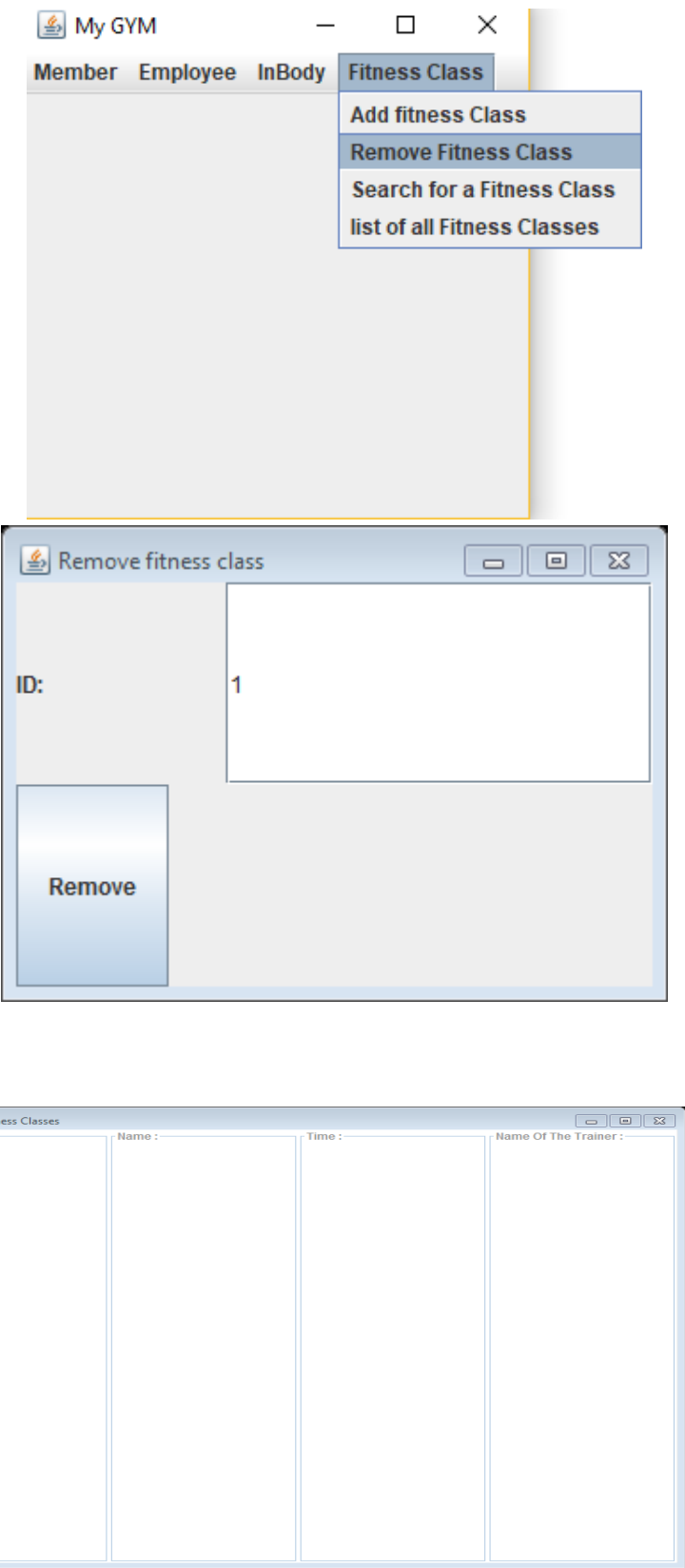


The screenshot shows a window titled "Search For Fitness Class" with standard Windows window controls (minimize, maximize, close). The window is divided into two main sections. On the left, there is a label "ID:" followed by a text input field containing the number "5". Below the input field is a blue button labeled "search". On the right, there is a large empty rectangular area for the search results, and below it, a label "Your Search Result :" followed by another empty rectangular area.

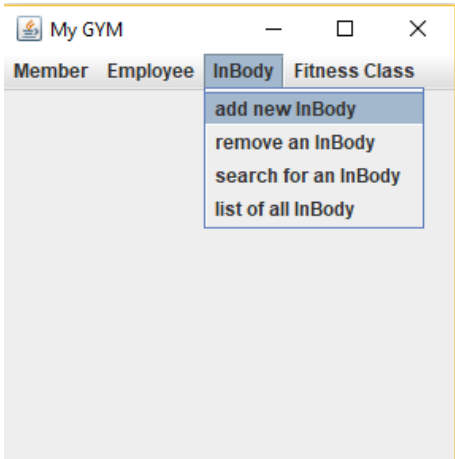


The screenshot shows the same "Search For Fitness Class" window. The "ID:" input field is empty. The "search" button is still present. The large rectangular area for search results is now empty. Below the "Your Search Result :" label, the text "Not found" is displayed in a light blue color.

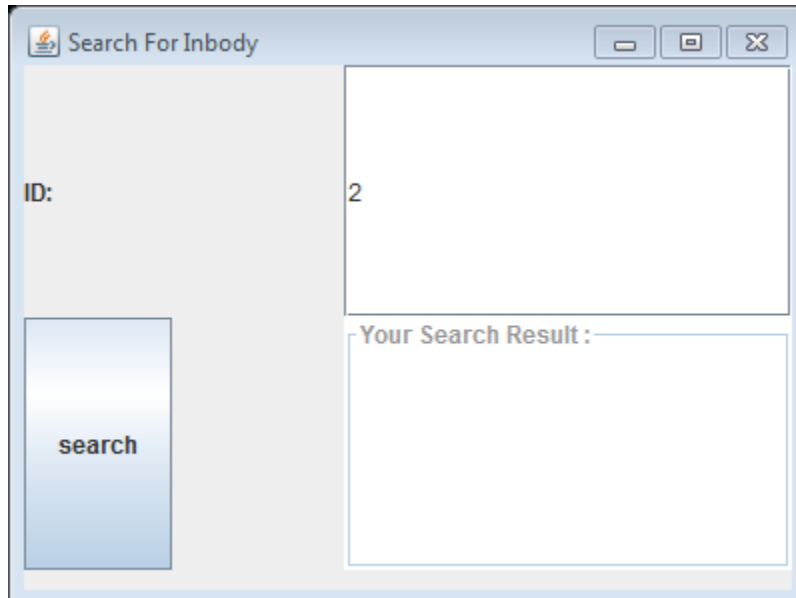
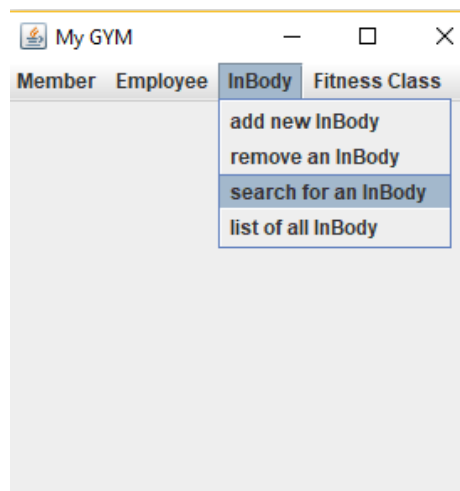
xiii. Remove fitness class:



xiv. Add InBody:

A screenshot of a form titled "Add InBody". It contains several input fields for user data: ID (2), Height (170), Age (20), Gender (Male), Test Date (5 January 2018), Time (1 pm Monday), Body Fat Mass (50), Weight (80), BMI (15), and PBF (25). A "save" button is at the bottom right.A screenshot of a table titled "List Of Inbody". The table has 11 columns: ID, Height, Age, Gender, Test Date, Time, Body Fat, Weight, BMI, and PBF. The first row contains the data from the "Add InBody" form: 2, 170, 20, Male, 5/January/2018, 1:pm:Monday, 50, 80, 15, 25. The rest of the table is empty.

xv. Search for InBody:



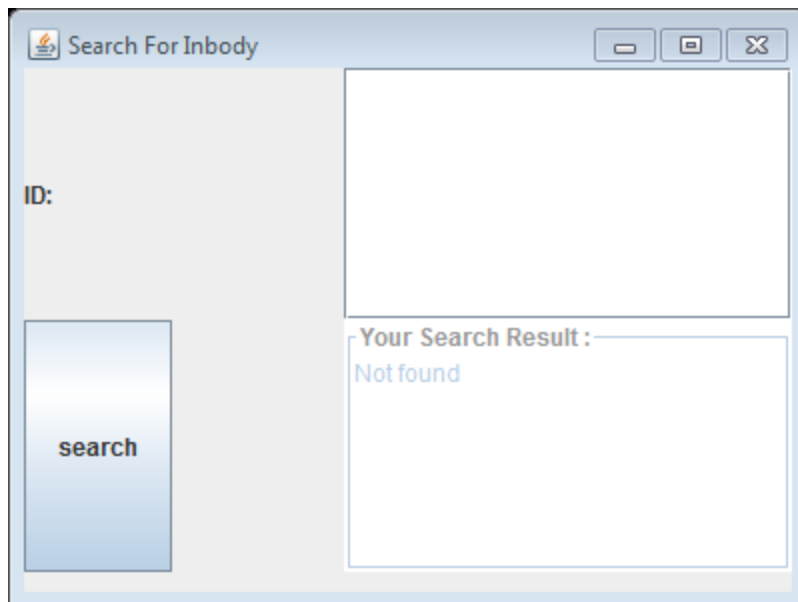
The screenshot shows a window titled "Search For Inbody" with a search input field labeled "ID:" and a "search" button. The search results are displayed in a box on the right, showing the following information:

Your Search Result :

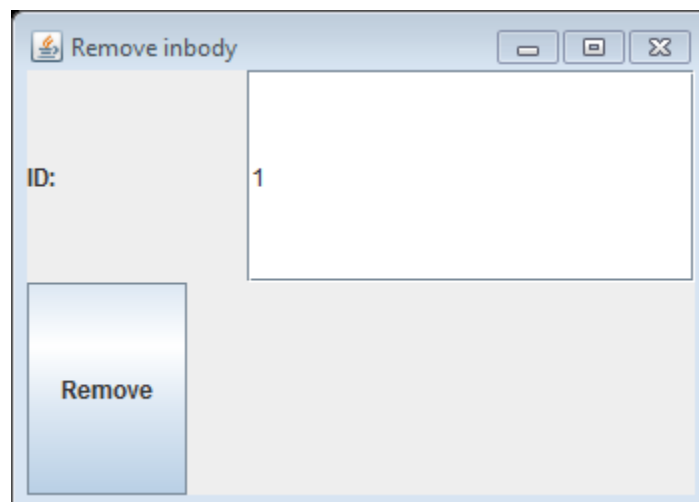
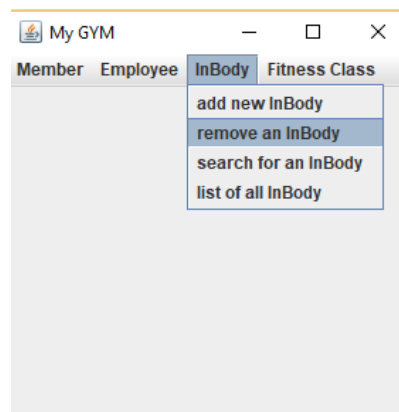
- ID :2
- Height :170
- Age :20
- Gender :Male
- Test Date :5/January/2018
- Time :1:pm:Monday
- Body Fat :50

xvi. Search for inbody that is not in the list:

The screenshot shows the same "Search For Inbody" window. The search input field now contains the value "1". The search results box on the right is empty, indicating that no results were found for this ID.



xvii. Remove InBody:



ID :	Height :	Age :	Gender :	Test Dat...	Time :	Body Fat :	Weight :	BMI :	PBF :

15.Estimated Project Cost:

PERS = 1
 RCPX = 1
 RUSE = 0.5
 PDIF = 1
 PREX = 1
 FCIL = 1
 SCED = 1

- $M = PERS \times RCPX \times RUSE \times PDIF \times PREX \times FCIL \times SCED = 0.5$

Precedentedness = 1

Development flexibility = 4

Architecture/risk solution= 3

Team cohesion =5

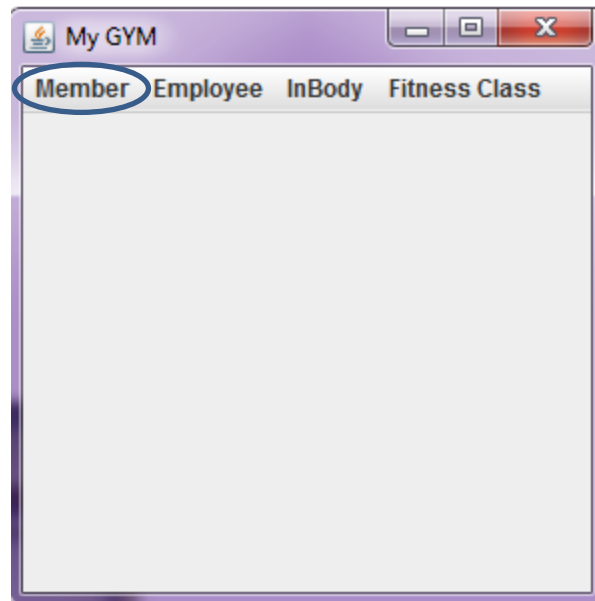
Process maturity =3

- $B = (\text{sumOfFactors}/100) + 1.01 = 1.17$
- $PM = A \times \text{Size}^B \times M = 2.94 \times 2.47^{1.17} \times 0.5 = 4.23$

16. User guide:

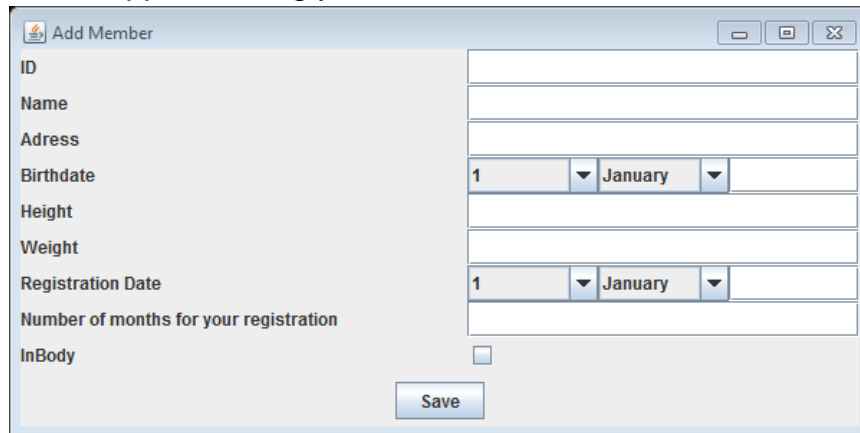
1. Add / remove / search for a member / open a list of all members:

- 1- Choose member:
- 2- A list including add member, remove member, search for a member, list of members will appear.



- **To add member:**

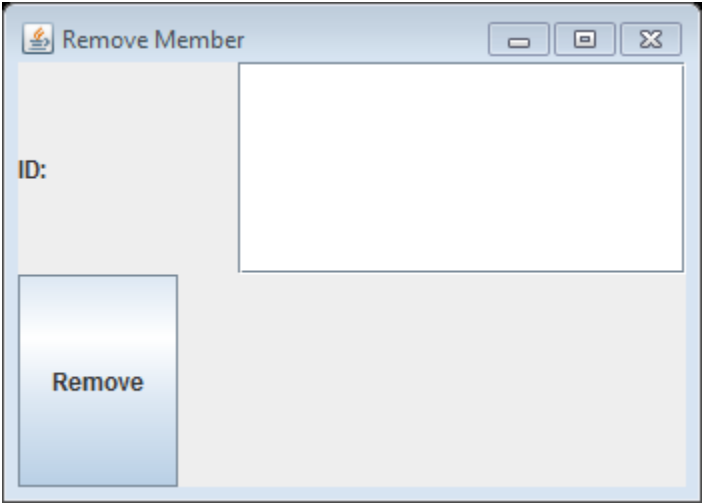
- 1) Choose add member.
- 2) A window will appear asking you to fill in member's info.

A screenshot of a form titled 'Add Member'. The form contains the following fields: 'ID' (text input), 'Name' (text input), 'Address' (text input), 'Birthdate' (date picker with '1' selected for the day and 'January' for the month), 'Height' (text input), 'Weight' (text input), 'Registration Date' (date picker with '1' selected for the day and 'January' for the month), 'Number of months for your registration' (text input), and 'InBody' (checkbox). A 'Save' button is located at the bottom right of the form.

- 3) Fill in the info.
- 4) Click save.

- **To remove member:**

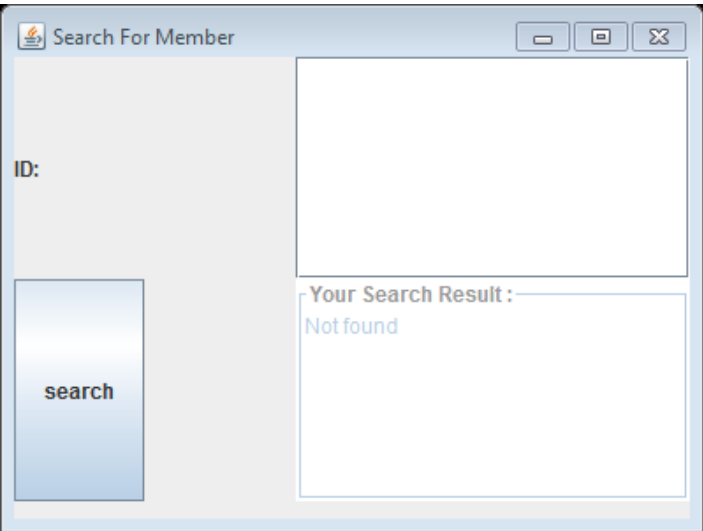
- 1) Chose remove member.
- 2) A window will appear asking you to enter the member's id.

A screenshot of a software window titled "Remove Member". The window has a standard Windows-style title bar with minimize, maximize, and close buttons. The main area is divided into two sections. The top section has a label "ID:" followed by a large, empty rectangular text input field. The bottom section contains a single blue button with the word "Remove" in white text.

- 3) Enter the member's id.
- 4) Click remove.

- **To search for a member:**

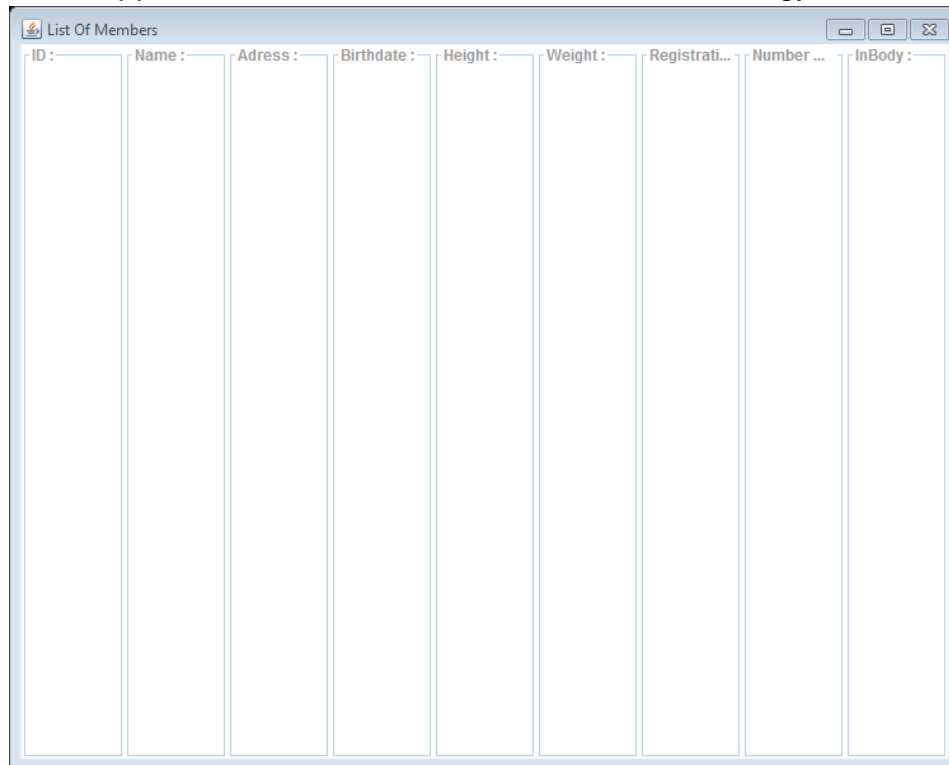
- 1) Choose search for a member.
- 2) A window will appear asking you to enter member's id.

A screenshot of a software window titled "Search For Member". The window has a standard Windows-style title bar with minimize, maximize, and close buttons. The main area is divided into two sections. The top section has a label "ID:" followed by a large, empty rectangular text input field. The bottom section contains a blue button with the word "search" in white text. To the right of the button, there is a text label "Your Search Result :" followed by a rectangular area containing the text "Not found" in blue.

- 3) Enter the member's id.
- 4) Click search.

- **To open a list of all members:**

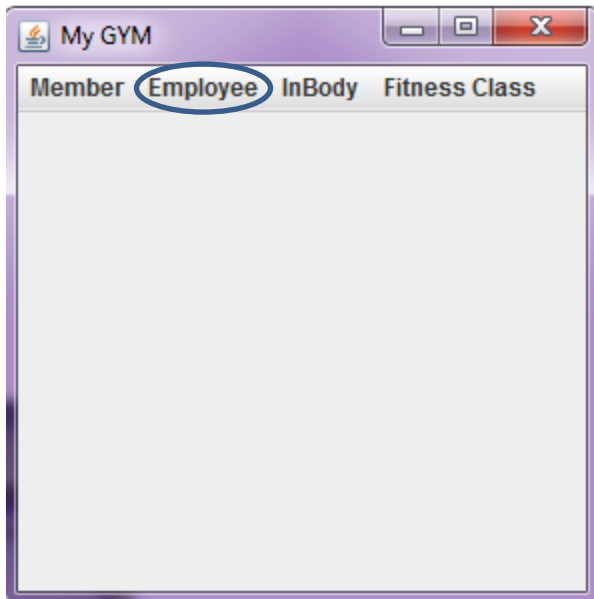
- 1) Choose list of members
- 2) A window will appear with a list of all members enrolled in the gym.



ID :	Name :	Adress :	Birthdate :	Height :	Weight :	Registrati...	Number ...	InBody :
------	--------	----------	-------------	----------	----------	---------------	------------	----------

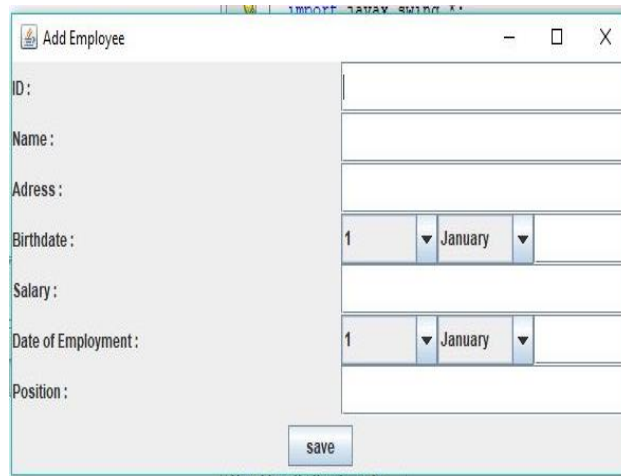
2. Add / remove / search for a member / open a list of all employees:

- 1- Choose employee:
- 2- A list including add employee, remove member, search for a member, list of employees will appear.



- **To add employee:**

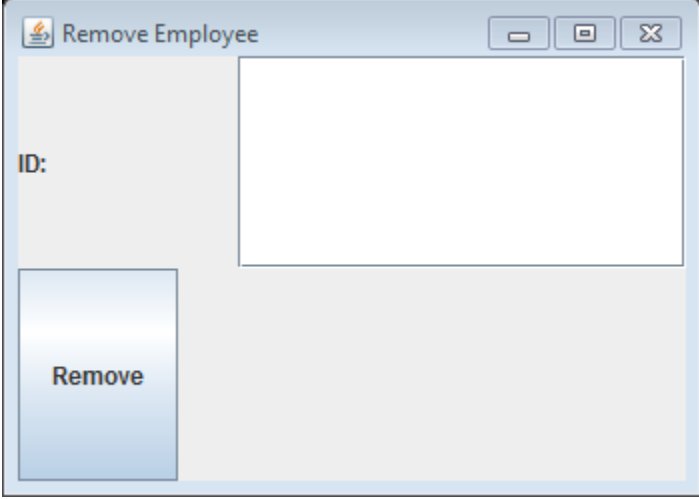
- 1) Choose add employee.
- 2) A window will appear asking you to fill in employee's info.

A screenshot of a dialog box titled "Add Employee". The dialog box contains several input fields and dropdown menus. The fields are labeled: "ID:", "Name:", "Address:", "Birthdate:", "Salary:", "Date of Employment:", and "Position:". The "Birthdate:" and "Date of Employment:" fields have dropdown menus for the day (showing "1") and the month (showing "January"). At the bottom right of the dialog box is a button labeled "save".

- 3) Fill in the info.
- 4) Click save.

- **To remove employee:**

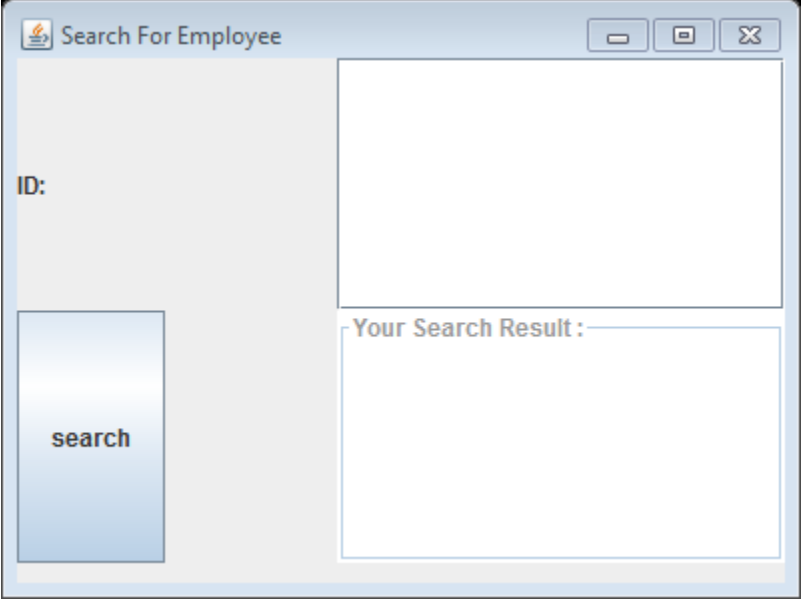
- 1) Chose remove employee.
- 2) A window will appear asking you to enter the employee's id.

A screenshot of a Windows-style dialog box titled "Remove Employee". The dialog box has a light blue header bar with the title and standard window controls (minimize, maximize, close). The main area is divided into two sections: on the left, a light gray panel with the label "ID:"; on the right, a white rectangular input field. Below the "ID:" label is a blue button with the text "Remove" in white. The background of the dialog box is a light gray gradient.

- 3) Enter the member's id.
- 4) Click remove.

- **To search for an employee:**

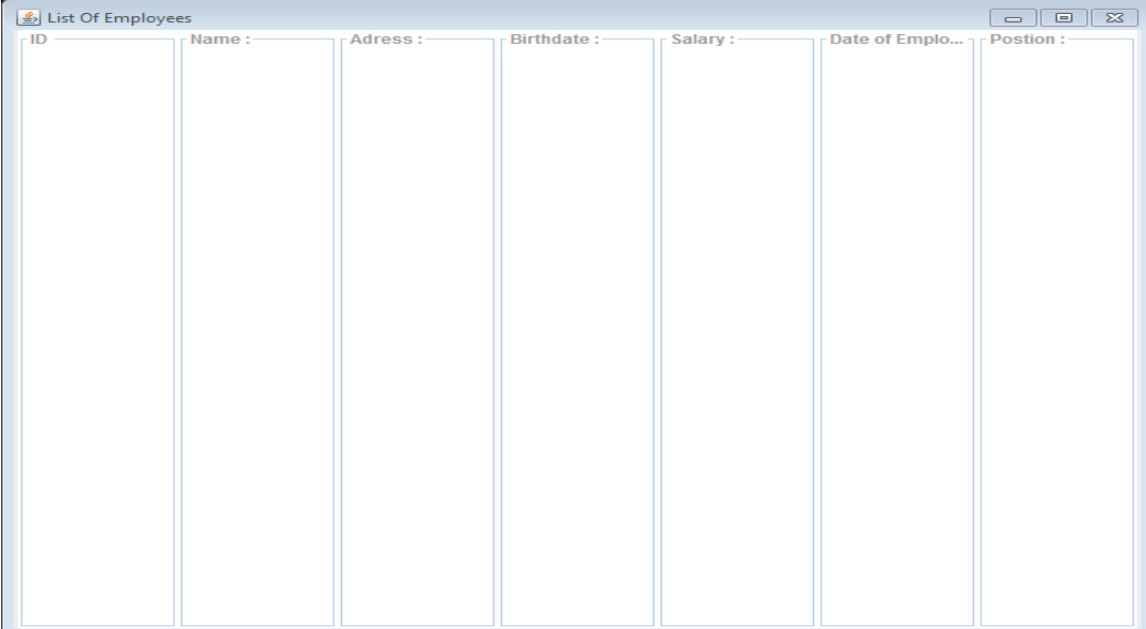
- 1) Choose search for a employee.
- 2) A window will appear asking you to enter employee's id.



- 3) Enter the member's id.
- 4) Click search.

- **To open a list of all employees:**

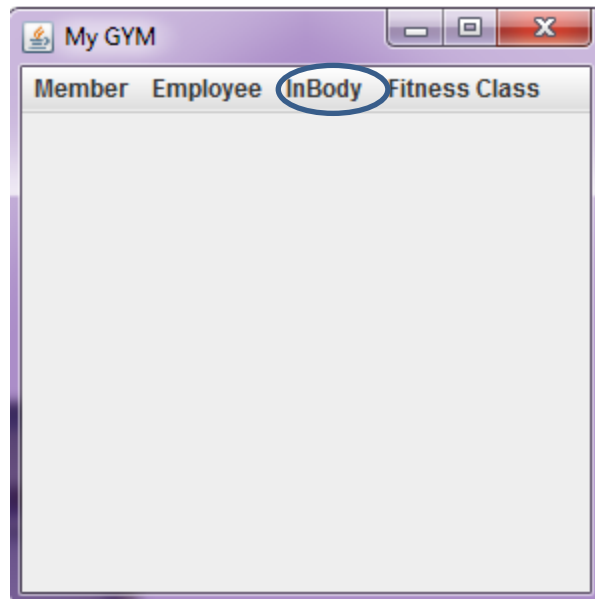
- 1) Choose list of employees.
- 2) A window will appear with a list of all employees working in the gym.



ID	Name :	Adress :	Birthdate :	Salary :	Date of Emplo...	Postion :
----	--------	----------	-------------	----------	------------------	-----------

2. Add / remove / search for inbody / open a list of inbody:

- 1- Choose inbody.
- 2- A list including add inbody, remove inbody, search for inbody, list of inbody will appear.



• To add InBody:

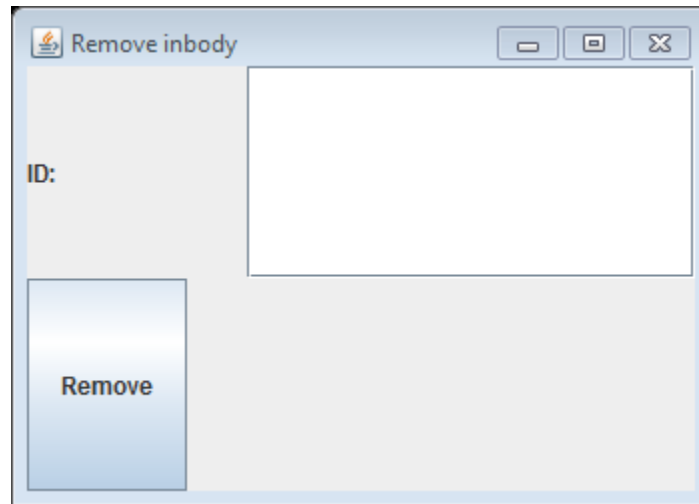
- 1) Choose add inbody.
- 2) A window will appear asking you to fill in mebmbe's inbody info.

A screenshot of a web form titled 'Add InBody'. The form has a light blue header bar with a small icon on the left and window controls on the right. The form is divided into two main sections. On the left, there is a list of labels for the form fields: 'ID', 'Height', 'Age', 'Gender', 'Test Date', 'Time', 'Body Fat Mass', 'Weight', 'BMI', and 'PBF'. On the right, there are corresponding input fields. The 'ID' field is a single text box. The 'Height' field is a text box. The 'Age' field is a text box. The 'Gender' field is a dropdown menu with 'Male' selected. The 'Test Date' field is a date picker with '1' selected for the day, 'January' for the month, and an empty box for the year. The 'Time' field is a time picker with '1' selected for the hour, 'am' for the period, and 'Monday' for the day of the week. The 'Body Fat Mass', 'Weight', 'BMI', and 'PBF' fields are text boxes. At the bottom right of the form, there is a 'save' button.

- 3) Fill in the info.
- 4) Click save.

- **To remove InBody:**

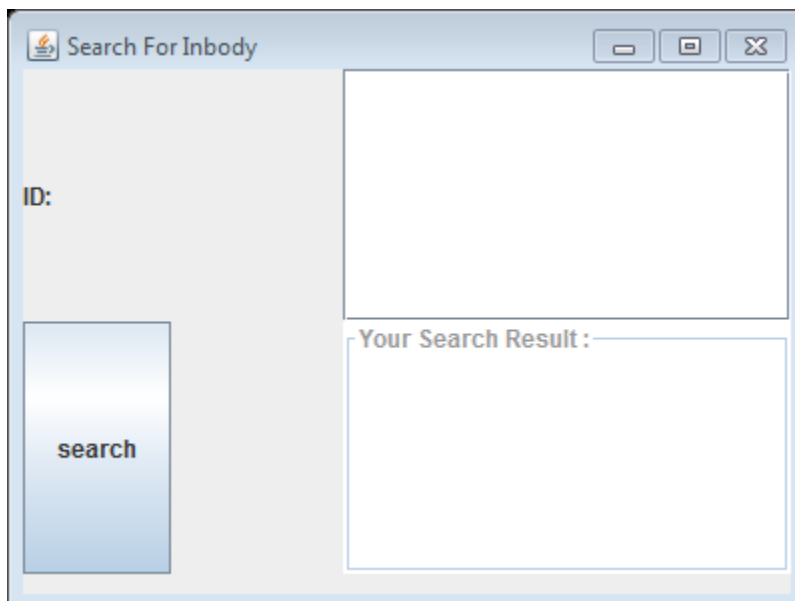
- 1) Chose remove inbody.
- 2) A window will appear asking you to enter the member's id.



- 3) Enter the member's id.
- 4) Click remove.

- **To search for an InBody:**

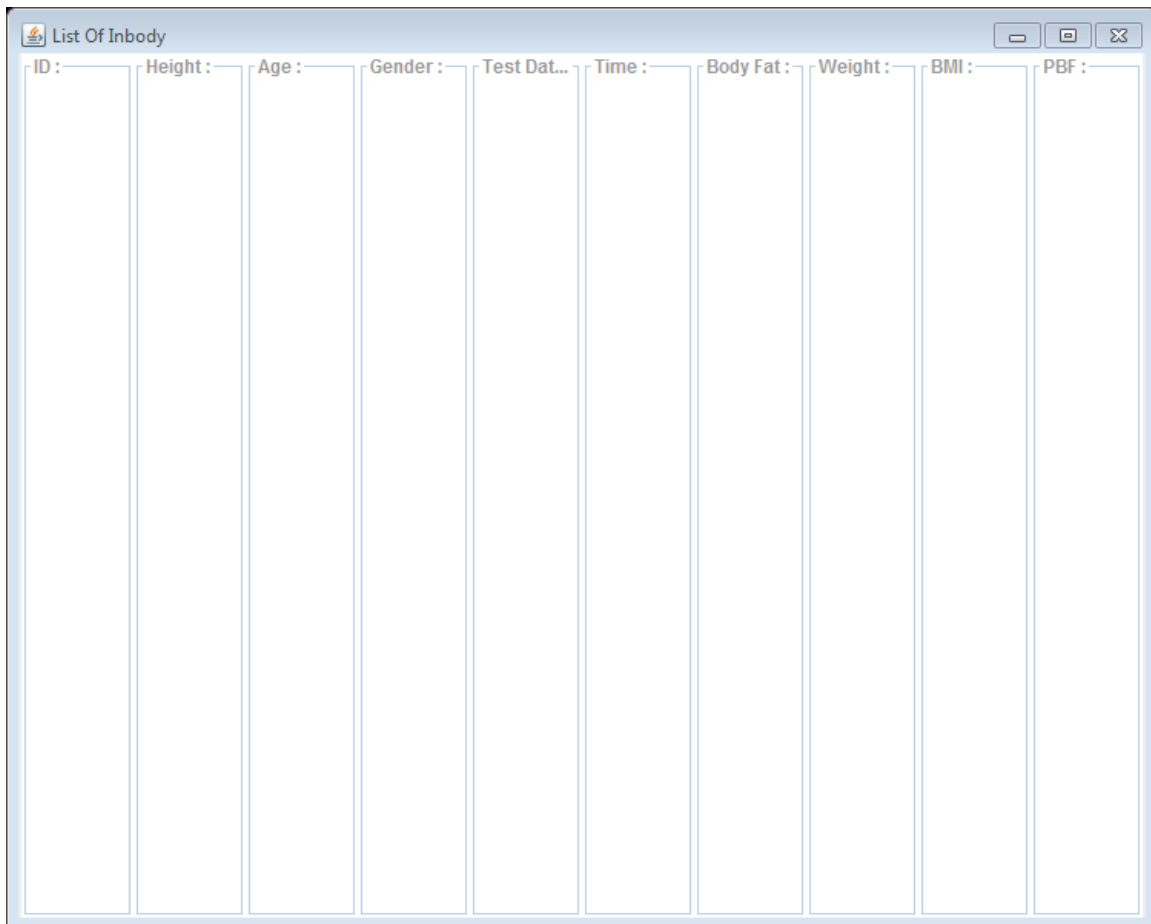
- 1) Choose search for inbody.
- 2) A window will appear asking you to enter member's id.



- 3) Enter the member's id.
- 4) Click search.

- **To open a list of all InBody:**

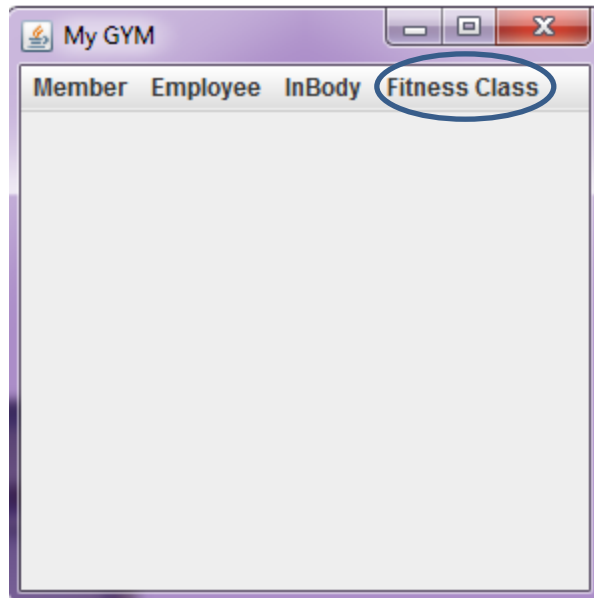
- 1) Choose list of inbody.
- 2) A window will appear with a list of all members' inbody in the gym.



ID :	Height :	Age :	Gender :	Test Dat...	Time :	Body Fat :	Weight :	BMI :	PBF :
------	----------	-------	----------	-------------	--------	------------	----------	-------	-------

3.Add / remove / search for a fitness class / open a list of all fitness classes:

- 1- Choose fitness class:
- 2- A list including add fitness class, remove fitness class, search for a fitness class, list of fitness classes will appear.



- **To add fitness class:**

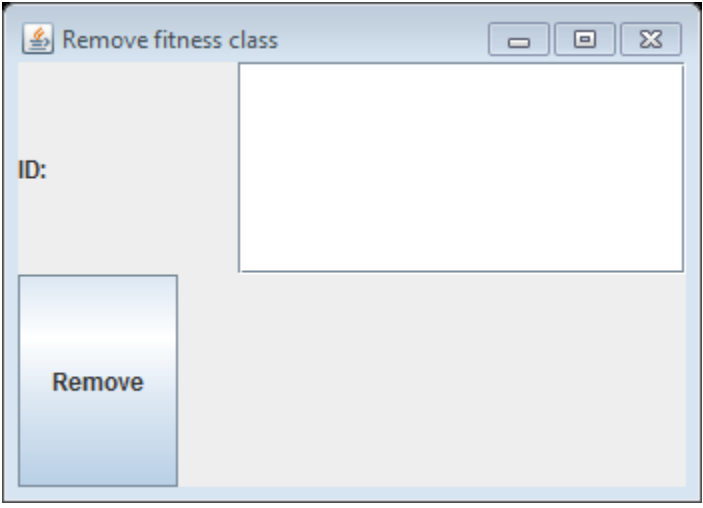
- 1) Choose add fitness class.
- 2) A window will appear asking you to fill in fitness class's info.

A screenshot of a form titled 'Add Fitness Class' with a light blue header and standard window controls. The form is divided into two main sections. The left section is a gray sidebar with labels for 'ID', 'Name', 'Time Of The Class', and 'Name Of The Trainer'. The right section contains input fields: a text box for 'ID', a text box for 'Name', a time selection area for 'Time Of The Class' (with dropdowns for '1', 'am', 'Monday', and a final dropdown arrow), and a text box for 'Name Of The Trainer'. At the bottom right of the form is a 'save' button.

- 3) Fill in the info.
- 4) Click save.

- **To remove fitness class:**

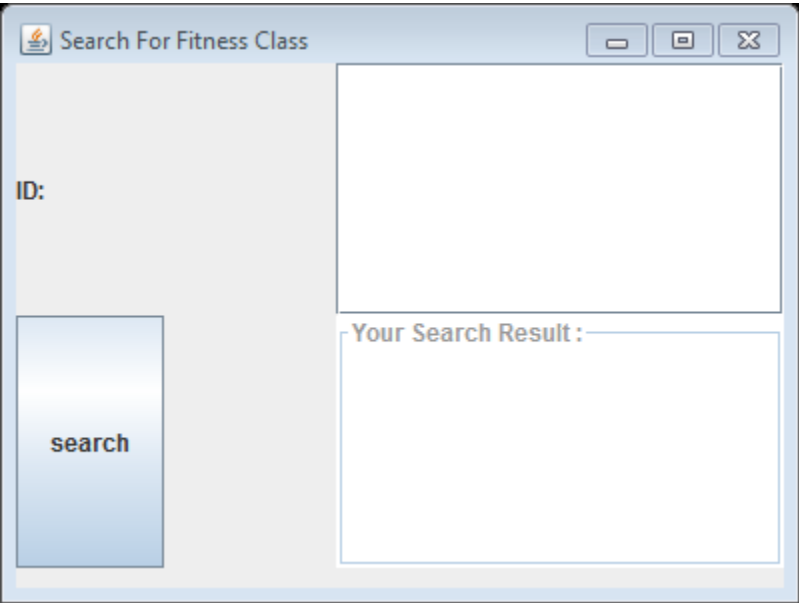
- 1) Chose remove fitness class.
- 2) A window will appear asking you to enter the fitness class 's id.

A screenshot of a software window titled "Remove fitness class". The window has a standard Windows-style title bar with minimize, maximize, and close buttons. Inside the window, there is a label "ID:" on the left side. To the right of the label is a large, empty rectangular text input field. Below the "ID:" label is a blue rectangular button with the word "Remove" written in white text.

- 3) Enter the fitness class's id.
- 4) Click remove.

- **To search for a fitness class:**

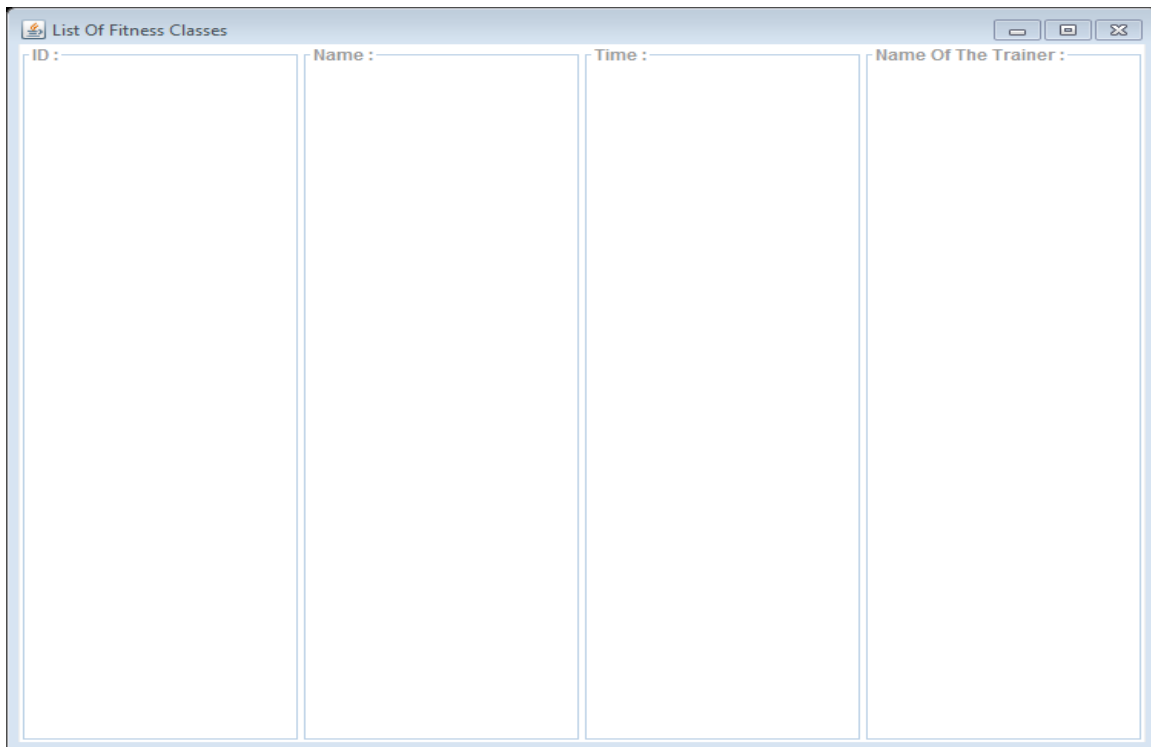
- 1) Choose search for a fitness class.
- 2) A window will appear asking you to enter fitness class's id.

A screenshot of a software window titled "Search For Fitness Class". The window has a standard Windows-style title bar with minimize, maximize, and close buttons. Inside the window, there is a label "ID:" on the left side. To the right of the label is a large, empty rectangular text input field. Below the "ID:" label is a blue rectangular button with the word "search" written in white text. To the right of the "search" button is another large, empty rectangular text input field, which is preceded by the label "Your Search Result :".

- 3) Enter the fitness class's id.
- 4) Click search.

- **To open a list of all fitness class:**

- 1) Choose list of fitness classes.
- 2) A window will appear with a list of all fitness classes in the gym.



ID :	Name :	Time :	Name Of The Trainer :
------	--------	--------	-----------------------