Experiment No 5

Date of performance: 24/08/2017 **Date of submission:** 26/10/2017

Title : MINI – PROJECT : Design and Implement a Real life Database Application (using JDBC)

Problem Definition : To develop a user-friendly system for the internal management of a Gym which is consisted of entities like manager, trainer, customer, rooms, class, equipment, membership and payment using Java Swings, JDBC and MySQL.

Pre-requisites : ER Modelling, SQL Commands and Normalization Rules

Software Used : MYSQL, Java Swings, NetBeans

Description :

In today's world, health and fitness plays and important role. Managing the gym to fulfill the needs of users is really important. Our system can be used for internal management of a gym branch which is hustle-free, easy and efficient. Advantages of using a system application for management rather than a manual approach may include security, accessibility, cost and data integrity.

Basic assumptions made by the implementation of the system are:

- The gym is managed by a manager who maintains the administration of the gym
- Manager will be monitoring equipments, membership and payments details
- The gym has multiple equipments and rooms
- The gym has customers with either of the three levels of membership: golden, silver & bronze
- The customer can hire additional equipments by paying the rent associated.
- The customers are entitled with only those facilities that are available with their membership level
- The trainers can organize classes for the customers which will be scheduled by the manager in the rooms at specific timings
- A customer can attend one or more classes by paying the associated fees
- Customer is entitled to pay for membership(Facilities), class and equipment
- Trainers will have a salary according to their designation

Fundamental users of the system are:

1. Customers
2. Manager

Features provided are:

- Separate login and interfaces for manager and customer
- Authentication and security control for login and data access.
  Manager:
  - Manager can view the existing customers and add a new customer with a membership level to the database. Customer once added will be automatically provided a login with no password which they can change later.
  - Manager can view the equipments and add new equipments to the gym database.
  - Manager can view the membership level and upgrade the membership of the customers, the change in payment due to upgrade in membership will be reflected in payment amount of customer directly
  - Manager can view the payment and accept the payment of the customers, which will update the payment amount of the customers in the database.
  - Manager can view the staff details and add new staff to the gym database

- Manager can view the existing class schedule and schedule a new class by adding the details to the database
- Manager can view its profile

Customer:

- Customer can view its membership and access the facilities that are available to them
- Customer can view its payment and the last payment details
- Customer can view its hired equipments (if any)
- Customer can view several classes organized by the trainers and signup for the classes
- Customer can view its profile

Limitations of the system are:

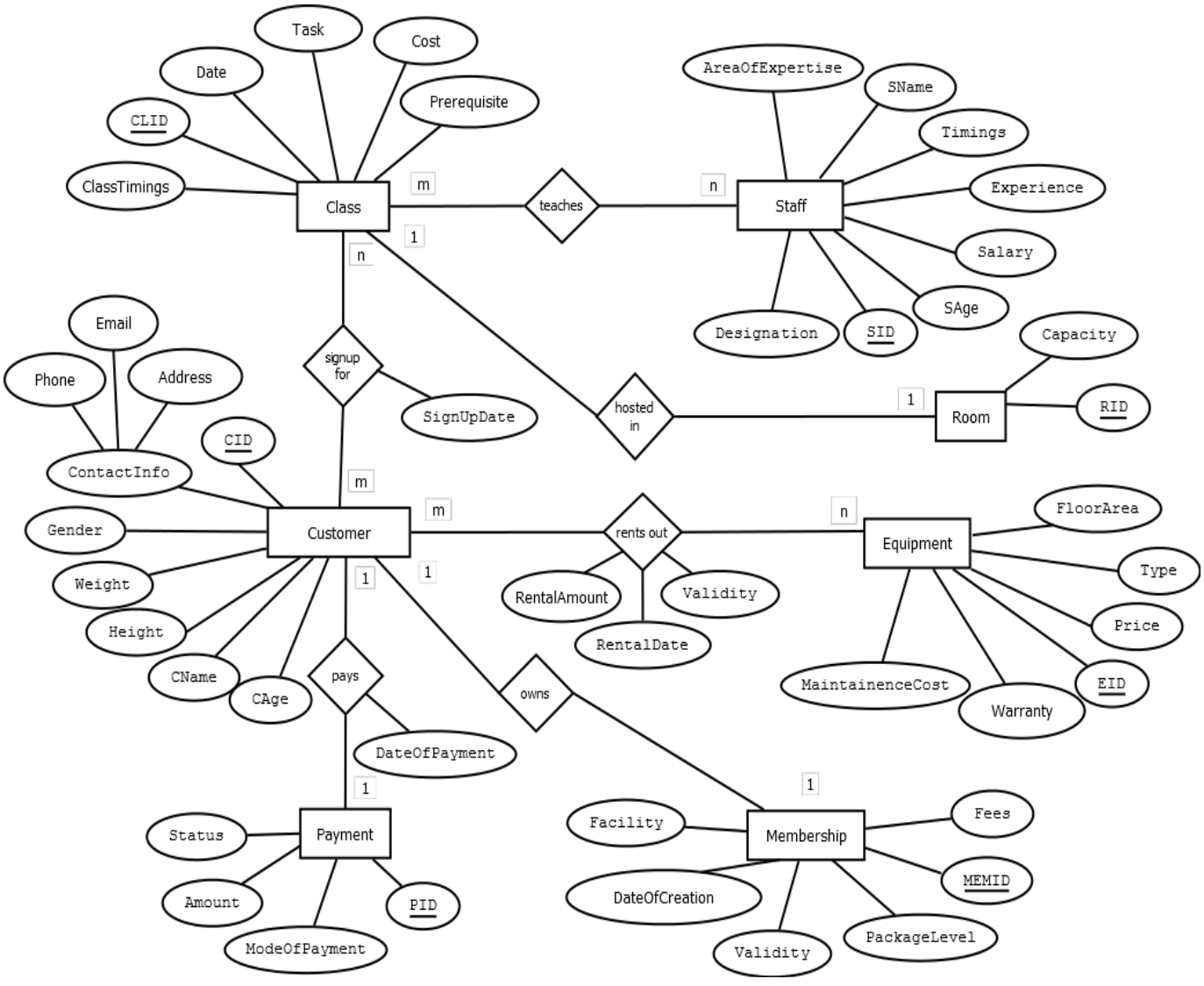
1. This system is applicable to only one branch of the gym.
2. There is only one manager who handles the administration of the entire gym

Future scope:

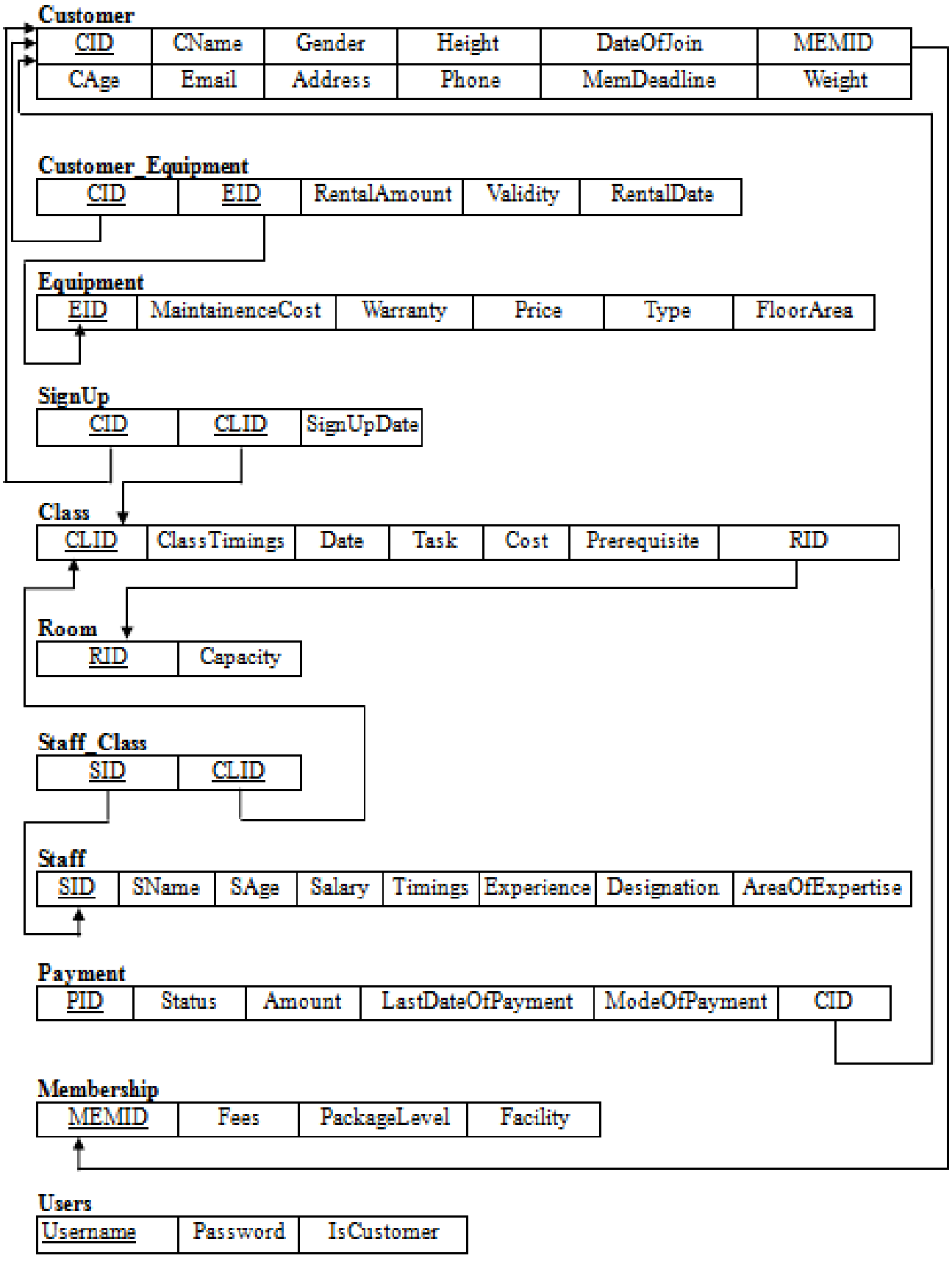
- This system can be extended to a gym with several branches by improving the database and allocating a central database for all branches
- This system is controlled by certain assumptions and needs to be improvised for a more real life application

Results :

•ER Model :



•Relational Model :



•SQL : Table desciprtion, Table data, Queries (few), Triggers/ Stored Procedures, if any.

1. Database and list of tables

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| gym                |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
5 rows in set (0.00 sec)

mysql> use gym;
Database changed
mysql> show tables;
+--------------------+
| Tables_in_gym      |
+--------------------+
| class              |
| customer           |
| customer_equipment |
| equipment          |
| membership         |
| payment            |
| room               |
| signup             |
| staff              |
| staff_class        |
| users              |
+--------------------+
11 rows in set (0.00 sec)
```

2. Table class: description and data

```
mysql> desc class;
+-------------+-------------+------+-----+---------+----------------+
| Field       | Type        | Null | Key | Default | Extra          |
+-------------+-------------+------+-----+---------+----------------+
| CLID        | int(5)      | NO   | PRI | NULL    | auto_increment |
| ClassTimings | varchar(10) | YES  |     | NULL    |                |
| Date        | date        | YES  |     | NULL    |                |
| Title       | varchar(20) | YES  |     | NULL    |                |
| Cost        | int(10)     | YES  |     | NULL    |                |
| Prerequisite | varchar(50) | YES  |     | NULL    |                |
| RID         | int(5)      | YES  |     | NULL    |                |
+-------------+-------------+------+-----+---------+----------------+
7 rows in set (0.09 sec)

mysql> select * from class;
+------+-------------+------------+--------------------+------+--------------------+------+
| CLID | ClassTimings | Date       | Title              | Cost | Prerequisite       | RID  |
+------+-------------+------------+--------------------+------+--------------------+------+
|    1 | 9-11        | 2017-09-15 | Special Yoga class |  200 | None               |    2 |
|    2 | 2-4         | 2017-09-20 | Zumba class        |  500 | Weight less than 70 |    1 |
|    3 | 3-5         | 2017-09-25 | Diet Counselling   |  100 | None               |    3 |
+------+-------------+------------+--------------------+------+--------------------+------+
3 rows in set (0.00 sec)

mysql>
```

3. Table customer: description and data

```
mysql> desc customer;
+------------+-------------+------+-----+---------+----------------+
| Field      | Type        | Null | Key | Default | Extra          |
+------------+-------------+------+-----+---------+----------------+
| CID        | int(5)      | NO   | PRI | NULL    | auto_increment |
| CName      | varchar(20) | YES  |     | NULL    |                |
| CAge       | int(3)      | YES  |     | NULL    |                |
| Phone      | varchar(10) | YES  |     | NULL    |                |
| Email      | varchar(50) | YES  |     | NULL    |                |
| Address    | varchar(80) | YES  |     | NULL    |                |
| Gender     | varchar(5)  | YES  |     | NULL    |                |
| Height     | int(5)      | YES  |     | NULL    |                |
| Weight     | int(5)      | YES  |     | NULL    |                |
| MEMID      | int(5)      | YES  |     | NULL    |                |
| DateOfMem  | date        | YES  |     | NULL    |                |
| MemDeadline | int(5)     | YES  |     | NULL    |                |
+------------+-------------+------+-----+---------+----------------+
12 rows in set (0.00 sec)

mysql> select * from customer;
+-----+---------+------+------------+-------------------------+-----------------------------------+--------+--------+
------+-------+------------+-------------+
| CID | CName   | CAge | Phone      | Email                   | Address                           | Gender | Height |
Weight | MEMID | DateOfMem  | MemDeadline |
+-----+---------+------+------------+-------------------------+-----------------------------------+--------+--------+
------+-------+------------+-------------+
|   1 | Ramesh  |   26 | 9898979745 | ramesh26@hotmail.com    | B/26,khira nagar,santacruz(w)     | M      |    165 |
   70 |     1 | 2017-09-01 |           3 |
|   2 | Sahana  |   22 | 9191656565 | sahana22@hotmail.com    | A/6,Kunj vihar,mulund(w)          | F      |    158 |
   49 |     1 | 2017-08-01 |           6 |
|   3 | Krushika |   27 | 9796959894 | krushika27@gmail.com    | 12,kushal nagar,khar(w)           | F      |    162 |
   57 |     2 | 2017-09-10 |           3 |
|   4 | Vishal  |   35 | 9879879870 | vishal35@gmail.com      | 204,Sea sunshine,juhu,santacruz(w) | M      |    163 |
   62 |     1 | 2017-09-05 |           1 |
|   5 | Akshay  |   28 | 9197512365 | akshay28@rediffmail.com | A/16,Aparna apartment,kurla(w)    | M      |    162 |
   71 |     1 | 2017-09-01 |           6 |
+-----+---------+------+------------+-------------------------+-----------------------------------+--------+--------+
------+-------+------------+-------------+
5 rows in set (0.00 sec)

mysql>
```

4. Table cutomer_equipment: description and data

```
mysql> desc customer_equipment;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| CID        | int(5)      | NO   | PRI | NULL    |       |
| EID        | int(5)      | NO   | PRI | NULL    |       |
| Validity   | varchar(10) | YES  |     | NULL    |       |
| RentalDate | date        | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
4 rows in set (0.00 sec)

mysql> select * from customer_equipment;
+-----+-----+----------+------------+
| CID | EID | Validity | RentalDate |
+-----+-----+----------+------------+
|   2 |   4 | 3        | 2017-09-01 |
|   3 |   2 | 3        | 2017-09-01 |
|   5 |   7 | 3        | 2017-09-01 |
+-----+-----+----------+------------+
3 rows in set (0.00 sec)

mysql>
```

5. Table equipment: description and data

```
mysql> desc equipment;
+------------------+-------------+------+-----+---------+----------------+
| Field            | Type        | Null | Key | Default | Extra          |
+------------------+-------------+------+-----+---------+----------------+
| EID              | int(5)      | NO   | PRI | NULL    | auto_increment |
| MaintainenceCost | int(10)     | YES  |     | NULL    |                |
| Warranty         | int(5)      | YES  |     | NULL    |                |
| Price            | int(10)     | YES  |     | NULL    |                |
| Type             | varchar(30) | YES  |     | NULL    |                |
| RentalAmount     | int(10)     | YES  |     | NULL    |                |
| FloorArea        | int(5)      | YES  |     | NULL    |                |
+------------------+-------------+------+-----+---------+----------------+
7 rows in set (0.00 sec)

mysql> select * from equipment;
+-----+------------------+----------+-------+-----------------------------+--------------+-----------+
| EID | MaintainenceCost | Warranty | Price | Type                        | RentalAmount | FloorArea |
+-----+------------------+----------+-------+-----------------------------+--------------+-----------+
|   1 |             1000 |        5 | 15000 | Bench Press                 |          300 |         4 |
|   2 |             1000 |        5 | 25000 | Hammer Strength machine     |          300 |         5 |
|   3 |              700 |        2 | 20000 | Reverse hyper               |          200 |         5 |
|   4 |              800 |        2 | 15000 | Hammer Strength machine     |          200 |         2 |
|   5 |             1200 |        3 | 25000 | Leg Curl machine            |          350 |         5 |
|   6 |              700 |        3 | 20000 | Leg press machine           |          150 |         6 |
|   7 |             2500 |        3 | 60000 | Squat Rack                  |          450 |        10 |
|   8 |              500 |        1 | 10000 | Air resistance exercise bike|          100 |         2 |
|   9 |             1000 |        2 | 20000 | Treadmill                   |          300 |         5 |
|  10 |             2000 |        3 | 40000 | Spin Bike                   |          350 |         4 |
+-----+------------------+----------+-------+-----------------------------+--------------+-----------+
10 rows in set (0.00 sec)

mysql>
```

6. Table membership: description and data

```
mysql> desc membership;
+--------------+-------------+------+-----+---------+----------------+
| Field        | Type        | Null | Key | Default | Extra          |
+--------------+-------------+------+-----+---------+----------------+
| MEMID        | int(5)      | NO   | PRI | NULL    | auto_increment |
| Fees         | int(10)     | YES  |     | NULL    |                |
| PackageLevel | varchar(20) | YES  |     | NULL    |                |
| Facility     | varchar(50) | YES  |     | NULL    |                |
+--------------+-------------+------+-----+---------+----------------+
4 rows in set (0.00 sec)

mysql> select * from membership;
+-------+-------+--------------+-----------------------------------------------------+
| MEMID | Fees  | PackageLevel | Facility                                            |
+-------+-------+--------------+-----------------------------------------------------+
|     1 | 15000 | Golden       | Unlimited workout,Personal trainer,Shower,Locker    |
|     2 | 12000 | Silver       | 4 hrs workout per day,Personal trainer              |
|     3 |  8000 | Bronze       | 2 hrs workout per day                               |
+-------+-------+--------------+-----------------------------------------------------+
3 rows in set (0.00 sec)

mysql>
```

7. Table payment : description and data

```
mysql> desc payment;
+-------------------+-------------+------+-----+---------+----------------+
| Field             | Type        | Null | Key | Default | Extra          |
+-------------------+-------------+------+-----+---------+----------------+
| PID               | int(5)      | NO   | PRI | NULL    | auto_increment |
| Status            | varchar(20) | YES  |     | NULL    |                |
| Amount            | int(10)     | YES  |     | NULL    |                |
| LastDateOfPayment | date        | YES  |     | NULL    |                |
| ModeOfPayment     | varchar(20) | YES  |     | NULL    |                |
| CID               | int(5)      | YES  |     | NULL    |                |
+-------------------+-------------+------+-----+---------+----------------+
6 rows in set (0.00 sec)

mysql> select * from payment;
+-----+---------+--------+-------------------+---------------+------+
| PID | Status  | Amount | LastDateOfPayment | ModeOfPayment | CID  |
+-----+---------+--------+-------------------+---------------+------+
|   1 | Pending |   8000 | 2017-10-29        | Cash          |    1 |
|   2 | Pending |   8000 | 2017-09-10        | Debit card    |    2 |
|   3 | Clear   |      0 | 2017-09-10        | Debit card    |    3 |
|   4 | Pending |   1000 | 2017-09-10        | Cash          |    4 |
|   5 | Pending |  10000 | 2017-09-10        | Cash          |    5 |
+-----+---------+--------+-------------------+---------------+------+
5 rows in set (0.00 sec)

mysql>
```

8. Table room: description and data

```
mysql> desc room;
+----------+--------+------+-----+---------+-------+
| Field    | Type   | Null | Key | Default | Extra |
+----------+--------+------+-----+---------+-------+
| RID      | int(5) | NO   | PRI | NULL    |       |
| Capacity | int(5) | YES  |     | NULL    |       |
+----------+--------+------+-----+---------+-------+
2 rows in set (0.00 sec)

mysql> select * from room;
+-----+----------+
| RID | Capacity |
+-----+----------+
|   1 |      100 |
|   2 |       40 |
|   3 |      200 |
|   4 |      150 |
+-----+----------+
4 rows in set (0.00 sec)

mysql>
```

9. Table signup: description and data

```
mysql> desc signup;
+------------+--------+------+-----+---------+-------+
| Field      | Type   | Null | Key | Default | Extra |
+------------+--------+------+-----+---------+-------+
| CID        | int(5) | NO   | PRI | NULL    |       |
| CLID       | int(5) | NO   | PRI | NULL    |       |
| SignUpDate | date   | YES  |     | NULL    |       |
+------------+--------+------+-----+---------+-------+
3 rows in set (0.00 sec)

mysql> select * from signup;
+-----+------+------------+
| CID | CLID | SignUpDate |
+-----+------+------------+
|   1 |    1 | 2017-09-13 |
|   4 |    3 | 2017-09-23 |
+-----+------+------------+
2 rows in set (0.00 sec)

mysql>
```

10. Table staff: description and data

```
mysql> desc staff;
+----------------+-------------+------+-----+---------+----------------+
| Field          | Type        | Null | Key | Default | Extra          |
+----------------+-------------+------+-----+---------+----------------+
| SID            | int(5)      | NO   | PRI | NULL    | auto_increment |
| SName          | varchar(20) | YES  |     | NULL    |                |
| SAge           | int(2)      | YES  |     | NULL    |                |
| Salary         | int(10)     | YES  |     | NULL    |                |
| Timings        | varchar(10) | YES  |     | NULL    |                |
| Experience     | varchar(20) | YES  |     | NULL    |                |
| Designation    | varchar(20) | YES  |     | NULL    |                |
| AreaOfExpertise| varchar(50) | YES  |     | NULL    |                |
+----------------+-------------+------+-----+---------+----------------+
8 rows in set (0.00 sec)

mysql> select * from staff;
+-----+---------+------+--------+---------+------------+-------------+----------------------+
| SID | SName   | SAge | Salary | Timings | Experience | Designation | AreaOfExpertise      |
+-----+---------+------+--------+---------+------------+-------------+----------------------+
|   1 | Satish  |   35 |  25000 | 9-5     | 8          | Manager     | -                    |
|   2 | Tukaram |   45 |  20000 | 9-6     | 12         | Clerk       | -                    |
|   3 | Rajnesh |   32 |  10000 | 12-2    | 5          | Trainer     | Muscle building      |
|   4 | Yash    |   27 |  10000 | 12-2    | 3          | Trainer     | Yoga training        |
|   5 | Sarita  |   27 |  10000 | 12-2    | 3          | Trainer     | Nutrition consulting |
+-----+---------+------+--------+---------+------------+-------------+----------------------+
5 rows in set (0.00 sec)

mysql>
```

11. Table staff_class: description and data

```
mysql> desc staff_class;
+-------+--------+------+-----+---------+-------+
| Field | Type   | Null | Key | Default | Extra |
+-------+--------+------+-----+---------+-------+
| SID   | int(5) | NO   | PRI | NULL    |       |
| CLID  | int(5) | NO   | PRI | NULL    |       |
+-------+--------+------+-----+---------+-------+
2 rows in set (0.00 sec)

mysql> select * from staff_class;
+-----+------+
| SID | CLID |
+-----+------+
|   3 |    2 |
|   4 |    1 |
|   5 |    3 |
+-----+------+
3 rows in set (0.06 sec)

mysql>
```

12. Table users: description and data

```
mysql> desc users;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| Username   | varchar(10) | NO   | PRI | NULL    |       |
| Password   | varchar(10) | YES  |     | NULL    |       |
| IsCustomer | int(1)      | YES  |     | 1       |       |
+------------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)

mysql> select * from users;
+----------+----------+------------+
| Username | Password | IsCustomer |
+----------+----------+------------+
| Akshay   | a@123    |          1 |
| Krushika | qwerty   |          1 |
| Ramesh   | star     |          1 |
| Sahana   | asdfg    |          1 |
| Satish   | 12345    |          0 |
| Vishal   | hello    |          1 |
+----------+----------+------------+
6 rows in set (0.00 sec)

mysql>
```

Nested Query

1. Update payment

```
mysql> update payment set amount= amount-1000 where CID=(Select CID from customer where
    -> CName='Akshay');
Query OK, 1 row affected (0.04 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select * from payment;
+-----+---------+--------+-------------------+---------------+------+
| PID | Status  | Amount | LastDateOfPayment | ModeOfPayment | CID  |
+-----+---------+--------+-------------------+---------------+------+
|   1 | Pending |   5000 | 2017-09-10        | Cash          |    1 |
|   2 | Pending |   8000 | 2017-09-10        | Debit card    |    2 |
|   3 | Clear   |      0 | 2017-09-10        | Debit card    |    3 |
|   4 | Pending |   1000 | 2017-09-10        | Cash          |    4 |
|   5 | Pending |   9000 | 2017-09-10        | Cash          |    5 |
+-----+---------+--------+-------------------+---------------+------+
5 rows in set (0.00 sec)
```

2. Update membership

```
mysql> update customer set MEMID=(select MEMID from membership where PackageLevel='Golden') where
    -> CName='Ramesh';
Query OK, 1 row affected (0.08 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select * from customer;
+-----+----------+------+------------+-------------------------+-----------------------------------
+--------+--------+--------+-------+------------+-------------+
| CID | CName    | CAge | Phone      | Email                   | Address
| Gender | Height | Weight | MEMID | DateOfJoin | MemDeadline |
+-----+----------+------+------------+-------------------------+-----------------------------------
+--------+--------+--------+-------+------------+-------------+
|   1 | Ramesh   |   26 | 9898979745 | ramesh26@hotmail.com    | B/26,khira nagar,santacruz(w)
| M      |    165 |     70 |     1 | 2017-09-01 |           3 |
|   2 | Sahana   |   22 | 9191656565 | sahana22@hotmail.com    | A/6,Kunj vihar,mulund(w)
| F      |    158 |     49 |     1 | 2017-08-01 |           6 |
|   3 | Krushika |   27 | 9796959894 | krushika27@gmail.com    | 12,kushal nagar,khar(w)
| F      |    162 |     57 |     2 | 2017-09-10 |           3 |
|   4 | Vishal   |   35 | 9879879870 | vishal35@gmail.com      | 204,Sea sunshine,juhu,santacruz(w)
| M      |    163 |     62 |     3 | 2017-09-05 |           1 |
|   5 | Akshay   |   28 | 9197512365 | akshay28@rediffmail.com | A/16,Aparna apartment,kurla(w)
| M      |    162 |     71 |     1 | 2017-09-01 |           6 |
+-----+----------+------+------------+-------------------------+-----------------------------------
+--------+--------+--------+-------+------------+-------------+
5 rows in set (0.00 sec)
```

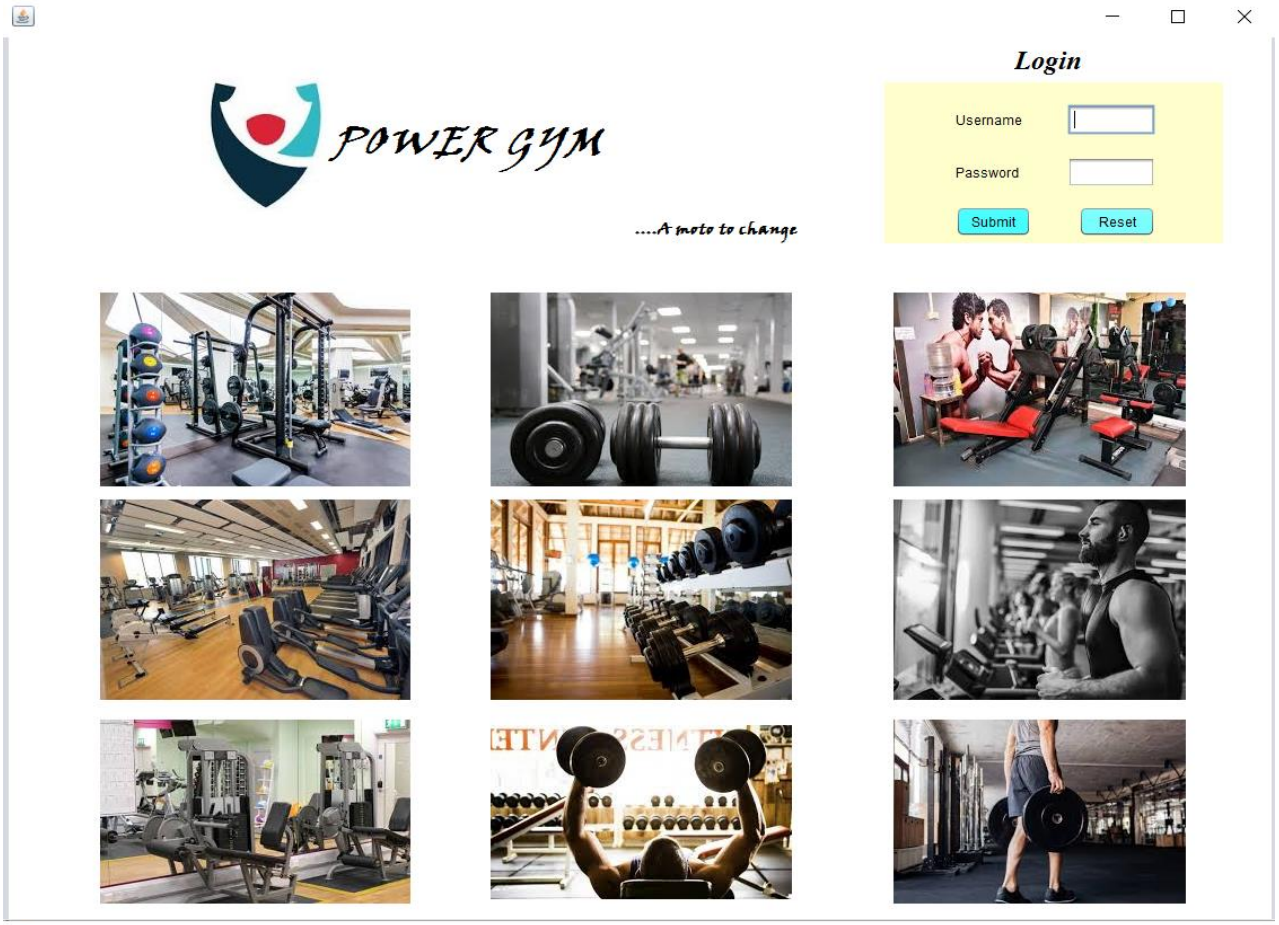
Trigger

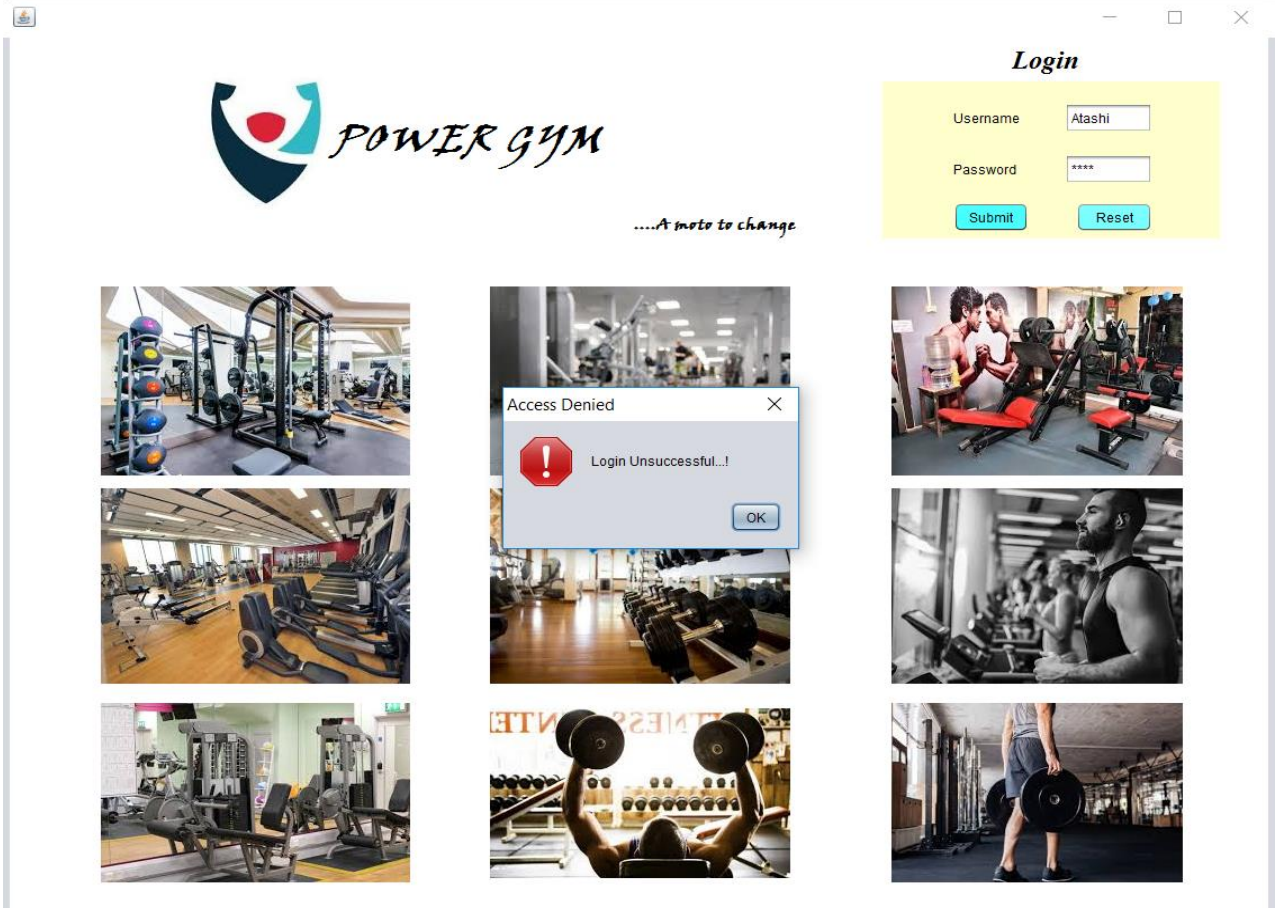
1. To manage payment on updating membership

```
mysql> create trigger updatepayment before update on customer for each row update payment set
 Amount=Amount+(Select Fees from membership where MEMID=new.MEMID)-(Select Fees from membersh
ip where MEMID=old.MEMID) where CID=new.CID;
Query OK, 0 rows affected (0.06 sec)

mysql> show triggers;
+---------------+--------+----------+-----------------------------------------------------------
-----------------------------------------------------------------------------------------------
-------+--------+---------+----------+----------------+----------------------+---------------
-------+--------------------+
| Trigger       | Event  | Table    | Statement

       | Timing | Created | sql_mode | Definer        | character_set_client | collation_conn
ection | Database Collation |
+---------------+--------+----------+-----------------------------------------------------------
-----------------------------------------------------------------------------------------------
-------+--------+---------+----------+----------------+----------------------+---------------
-------+--------------------+
| updatepayment | UPDATE | customer | update payment set Amount=Amount+(Select Fees from memb
ership where MEMID=new.MEMID)-(Select Fees from membership where MEMID=old.MEMID) where CID=n
ew.CID | BEFORE | NULL    |          | root@localhost | utf8                 | utf8_general_c
i      | latin1_swedish_ci  |
+---------------+--------+----------+-----------------------------------------------------------
-----------------------------------------------------------------------------------------------
-------+--------+---------+----------+----------------+----------------------+---------------
-------+--------------------+
1 row in set (0.00 sec)
```

```
mysql> update customer set MEMID=(select MEMID from membership where PackageLevel='Golden') w
here CName='Vishal';
Query OK, 1 row affected (0.09 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from payment;
+-----+---------+--------+-------------------+---------------+------+
| PID | Status  | Amount | LastDateOfPayment | ModeOfPayment | CID  |
+-----+---------+--------+-------------------+---------------+------+
|   1 | Pending |   5000 | 2017-09-10        | Cash          |    1 |
|   2 | Pending |   8000 | 2017-09-10        | Debit card    |    2 |
|   3 | Clear   |      0 | 2017-09-10        | Debit card    |    3 |
|   4 | Pending |   8000 | 2017-09-10        | Cash          |    4 |
|   5 | Pending |  10000 | 2017-09-10        | Cash          |    5 |
+-----+---------+--------+-------------------+---------------+------+
5 rows in set (0.00 sec)
```

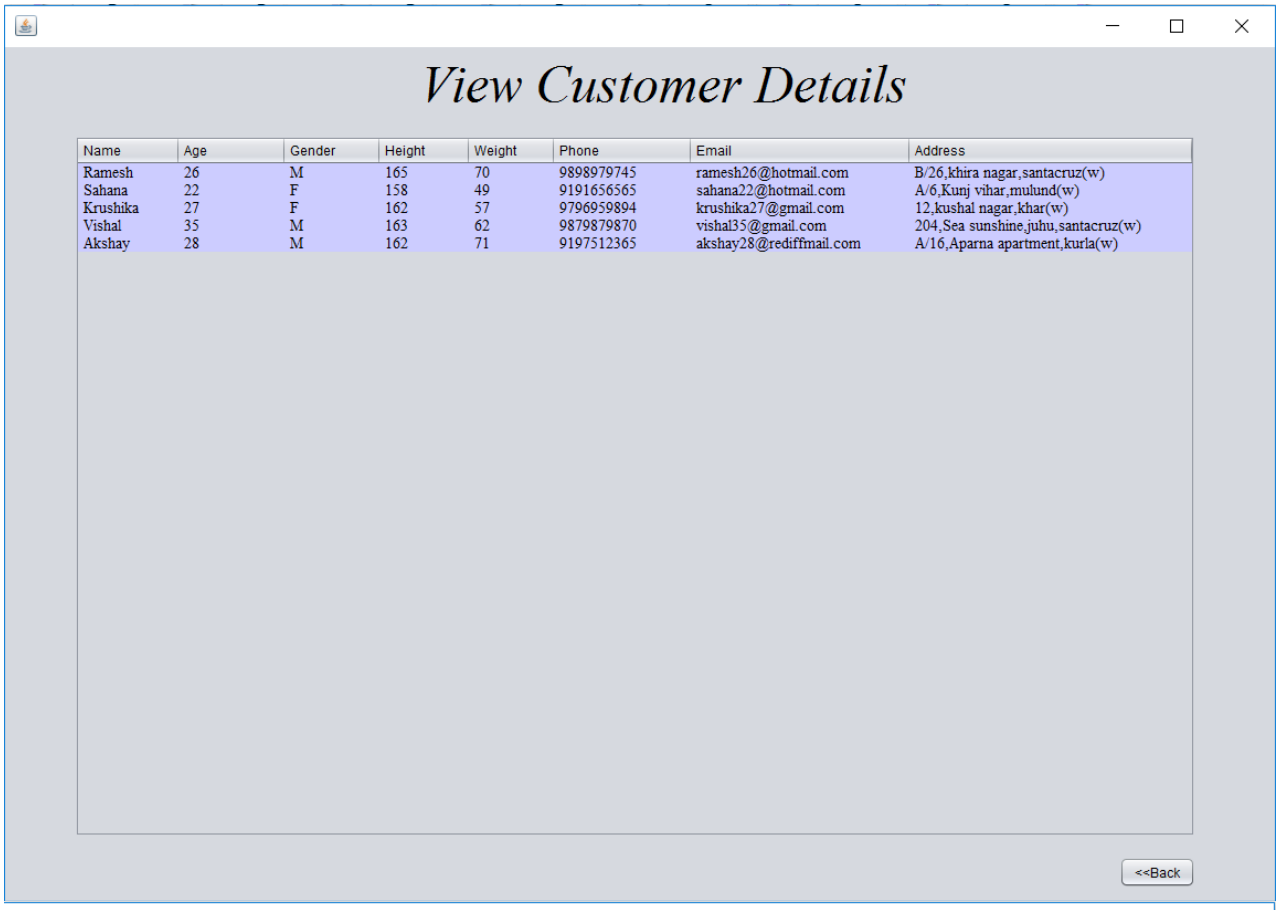
- Snapshots of screens

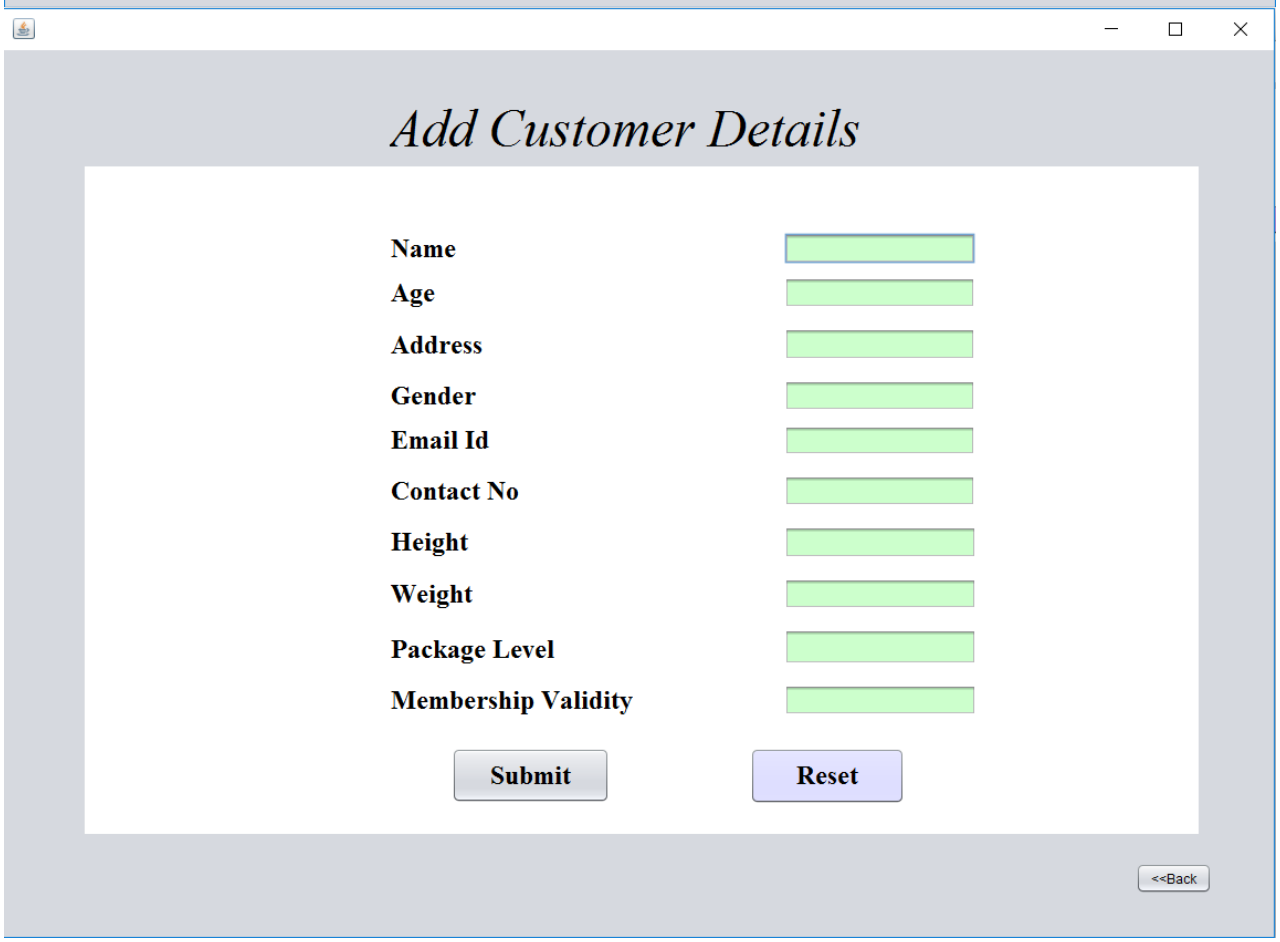


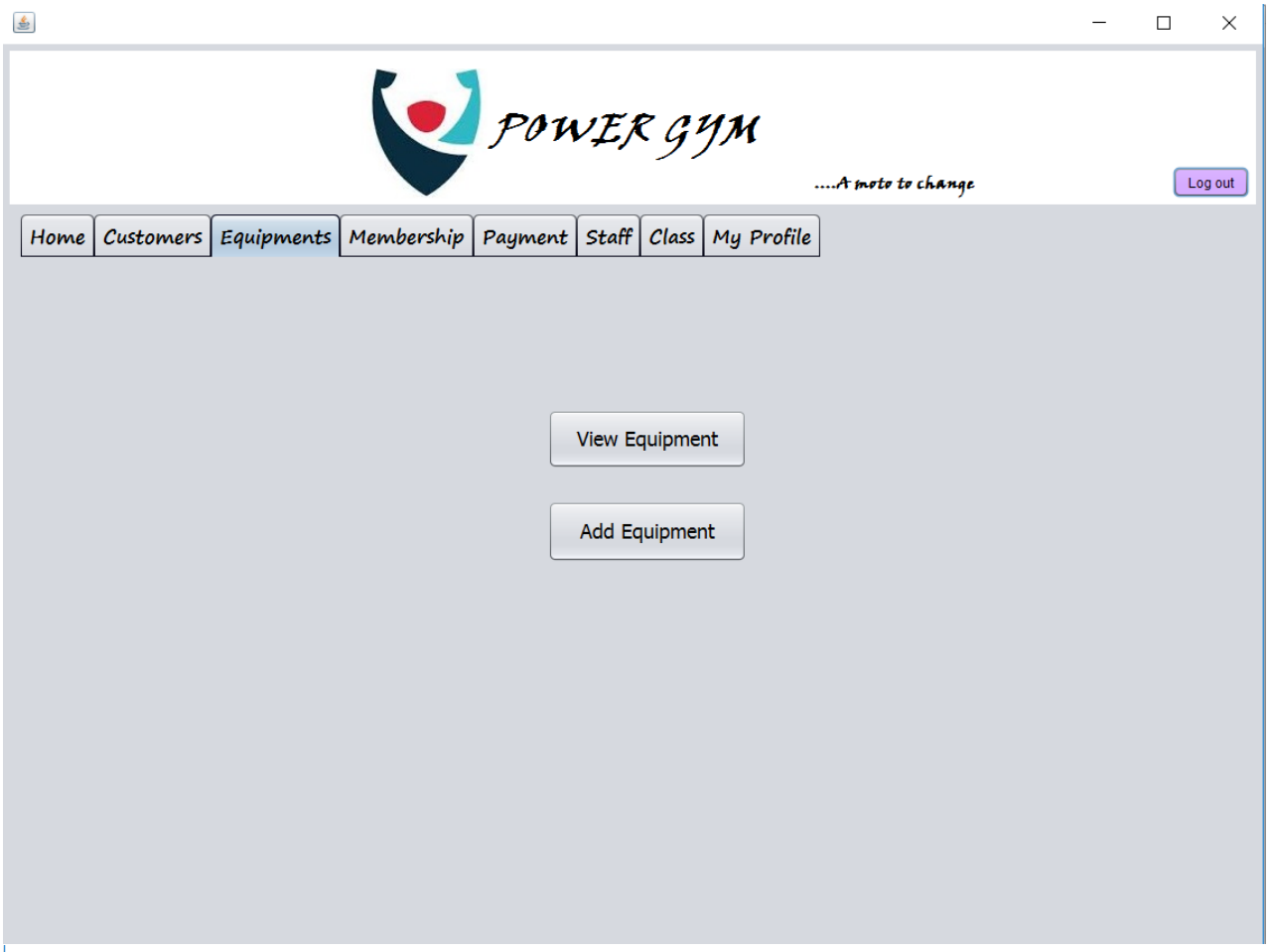


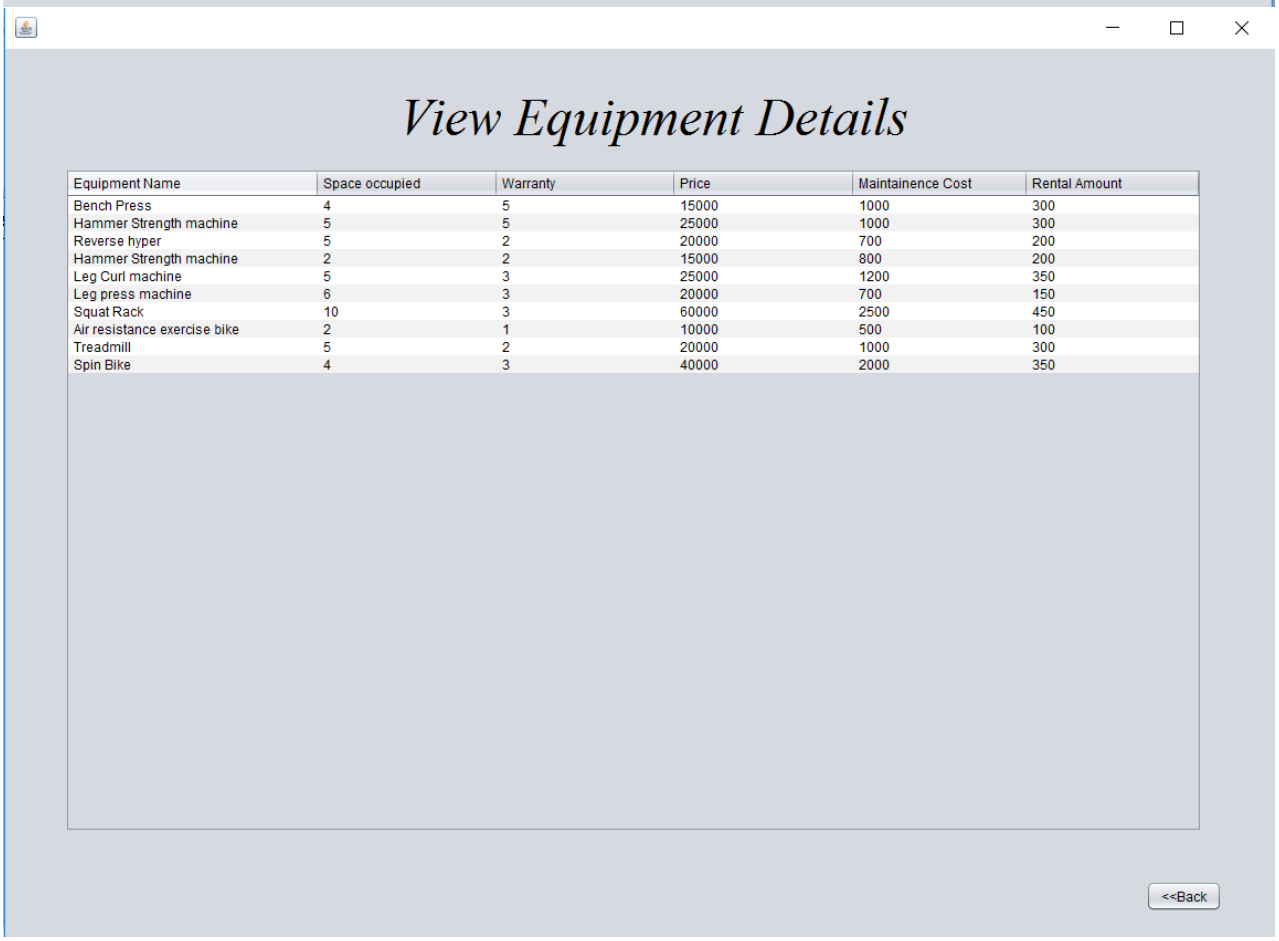

POWER GYM
....A moto to change
Log out
Home
Customers
Equipments
Membership
Payment
Staff
Class
My Profile
Welcome to POWER GYM Portal


POWER GYM
....A moto to change
Log out
Home
Customers
Equipments
Membership
Payment
Staff
Class
My Profile
View Customers
Add Customer

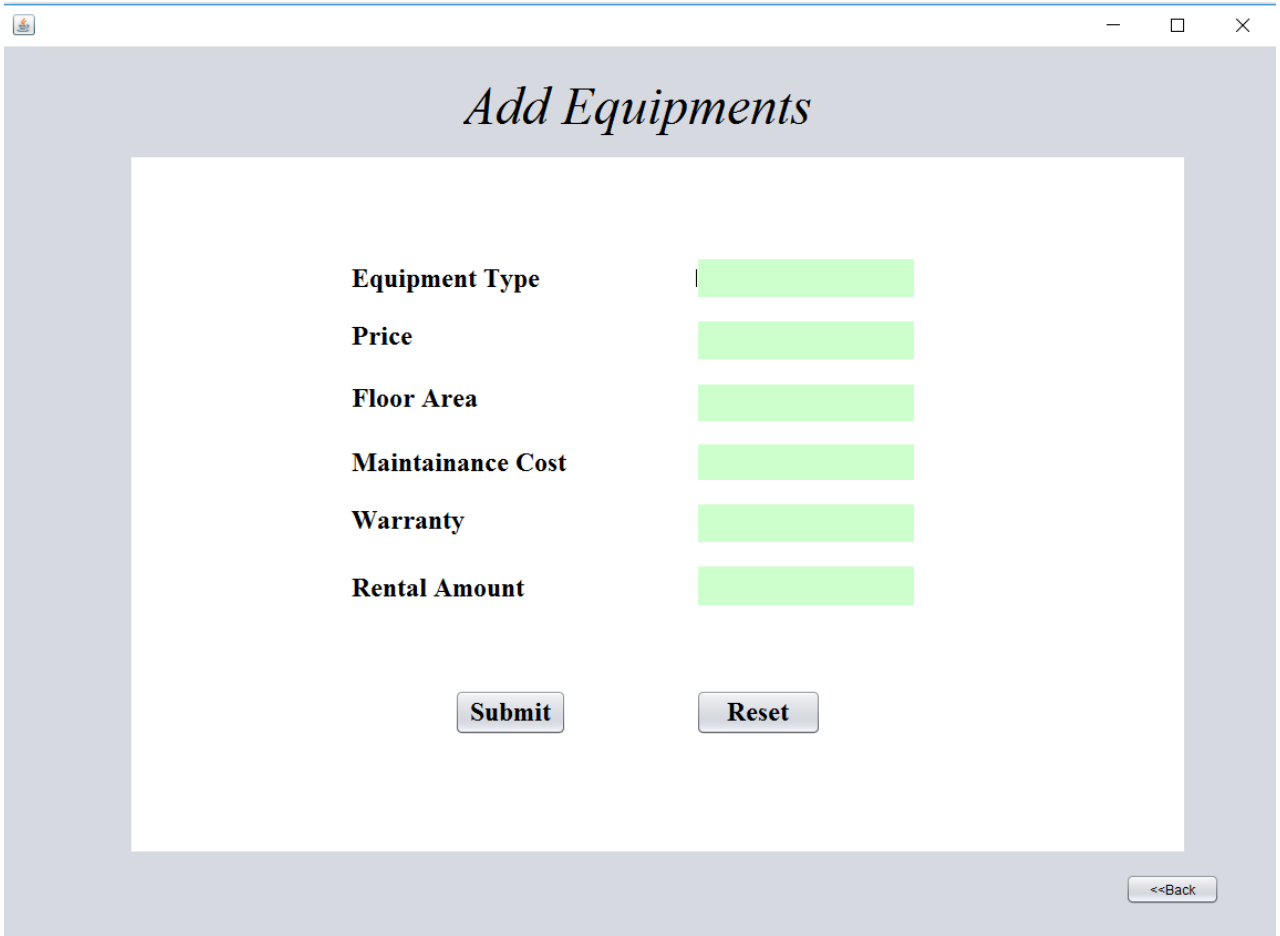

View Customer Details
Name Age Gender Height Weight Phone Email Address
Ramesh 26 M 165 70 9898979745 ramesh26@hotmail.com B/26,khira nagar,santacruz(w)
Sahana 22 F 158 49 9191656565 sahana22@hotmail.com A/6,Kunj vihar,mulund(w)
Krushika 27 F 162 57 9796959894 krushika27@gmail.com 12,kushal nagar,khar(w)
Vishal 35 M 163 62 9879879870 vishal35@gmail.com 204,Sea sunshine,juhu,santacruz(w)
Akshay 28 M 162 71 9197512365 akshay28@rediffmail.com A/16,Aparna apartment,kurla(w)
<<Back

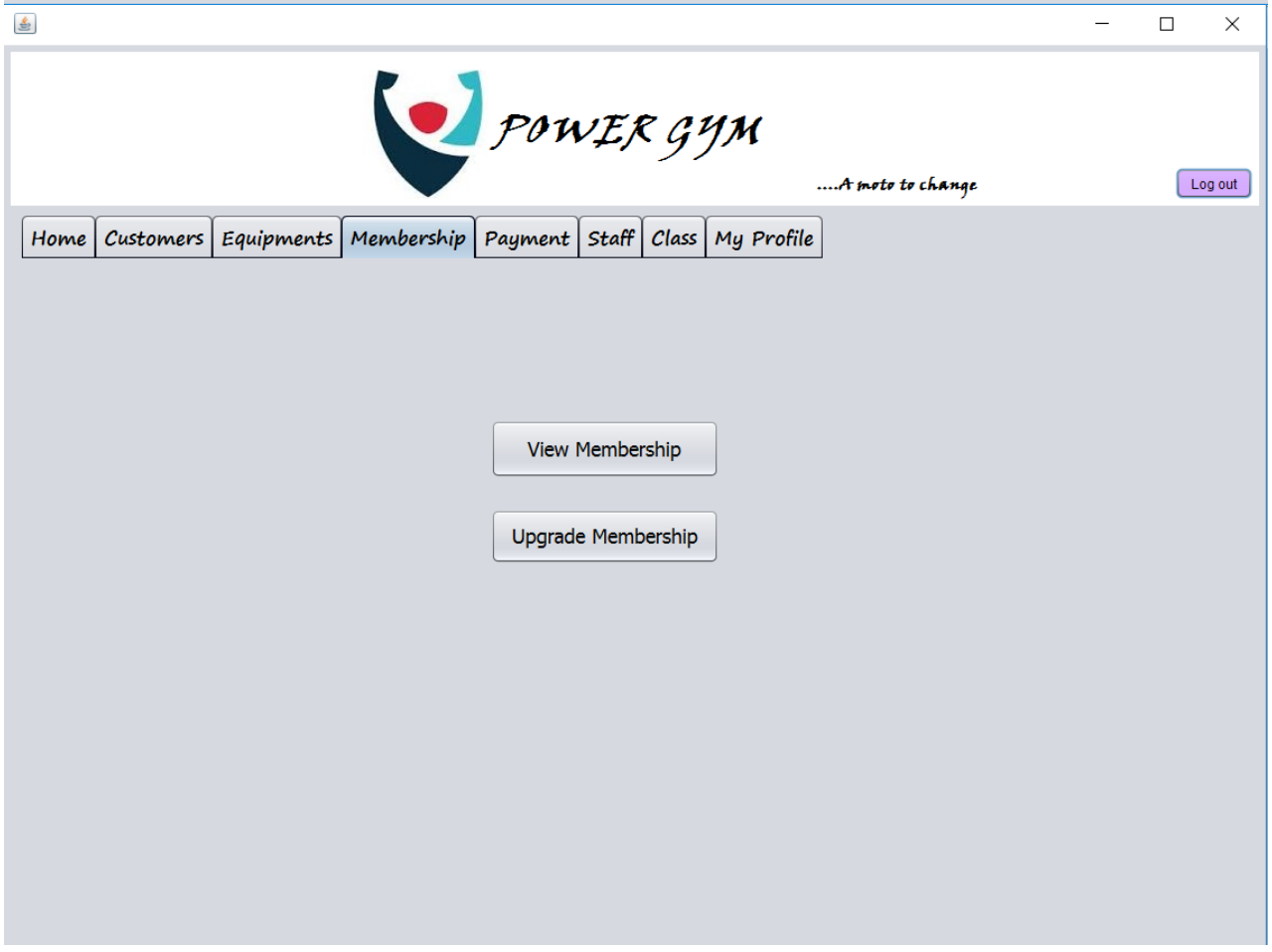

Add Customer Details
Name
Age
Address
Gender
Email Id
Contact No
Height
Weight
Package Level
Membership Validity
Submit
Reset
<<Back

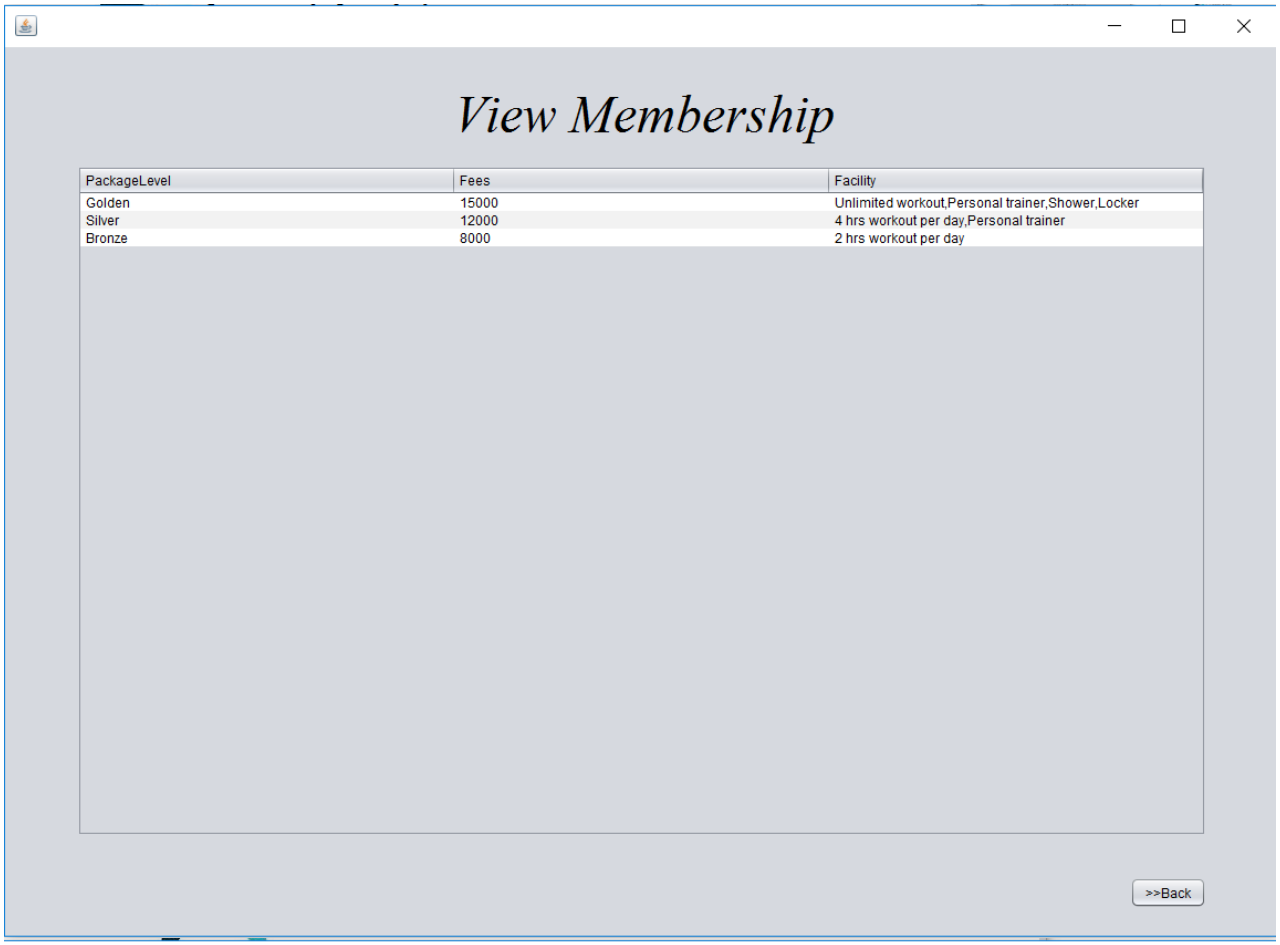


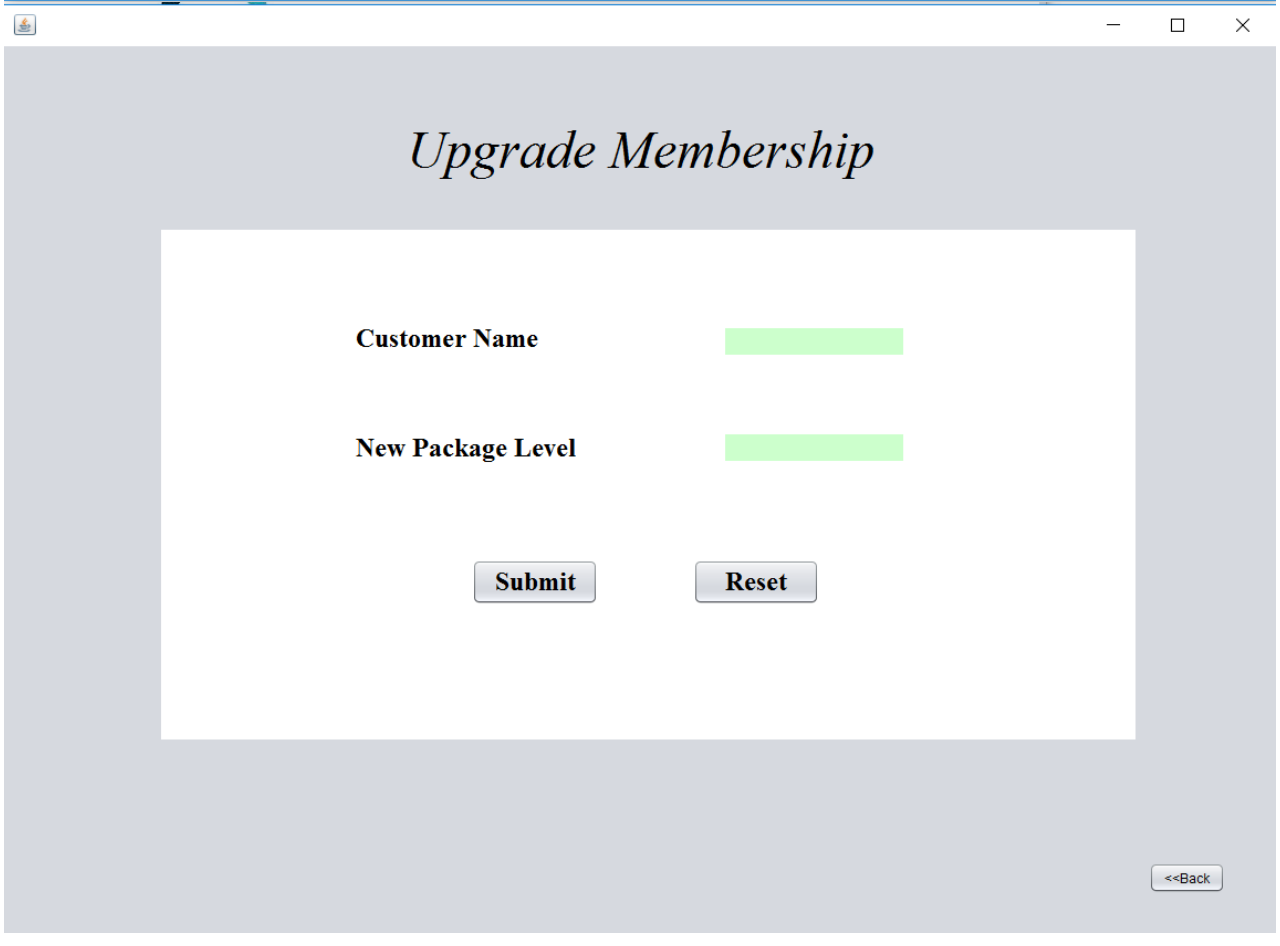


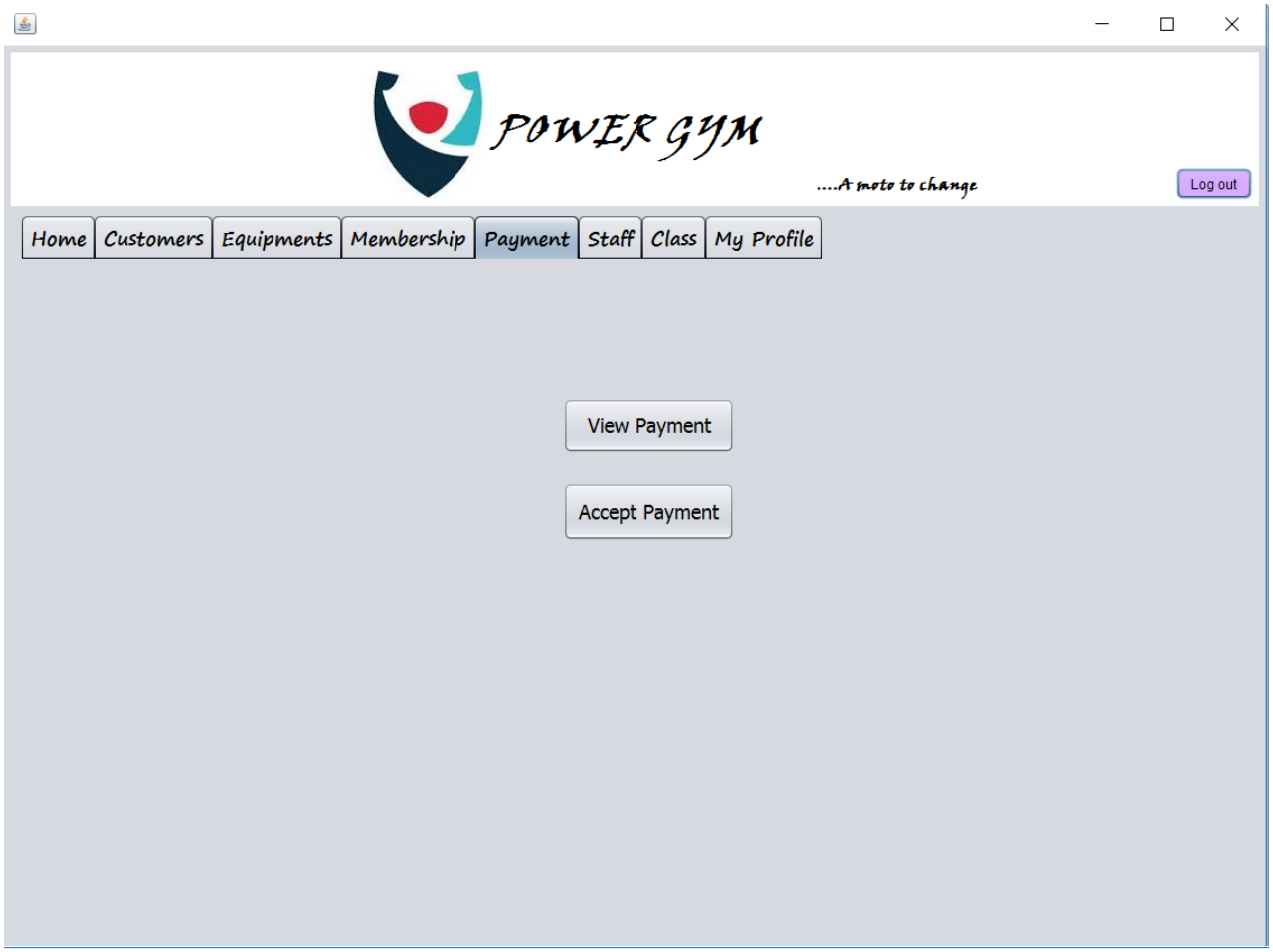
Equipment Name	Space occupied	Warranty	Price	Maintainence Cost	Rental Amount
Bench Press	4	5	15000	1000	300
Hammer Strength machine	5	5	25000	1000	300
Reverse hyper	5	2	20000	700	200
Hammer Strength machine	2	2	15000	800	200
Leg Curl machine	5	3	25000	1200	350
Leg press machine	6	3	20000	700	150
Squat Rack	10	3	60000	2500	450
Air resistance exercise bike	2	1	10000	500	100
Treadmill	5	2	20000	1000	300
Spin Bike	4	3	40000	2000	350

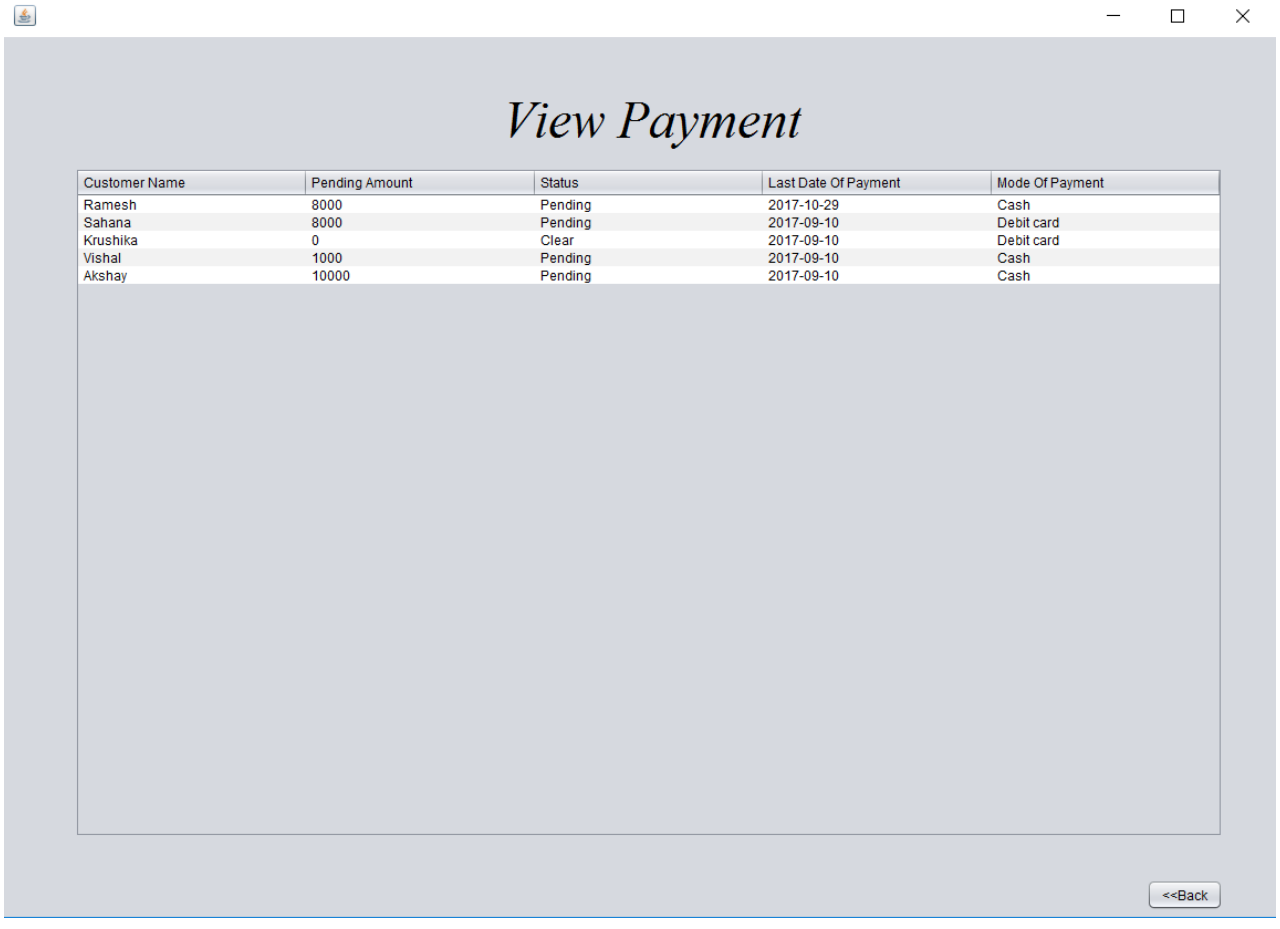

Add Equipments
Equipment Type
Price
Floor Area
Maintainance Cost
Warranty
Rental Amount
Submit
Reset
<<Back

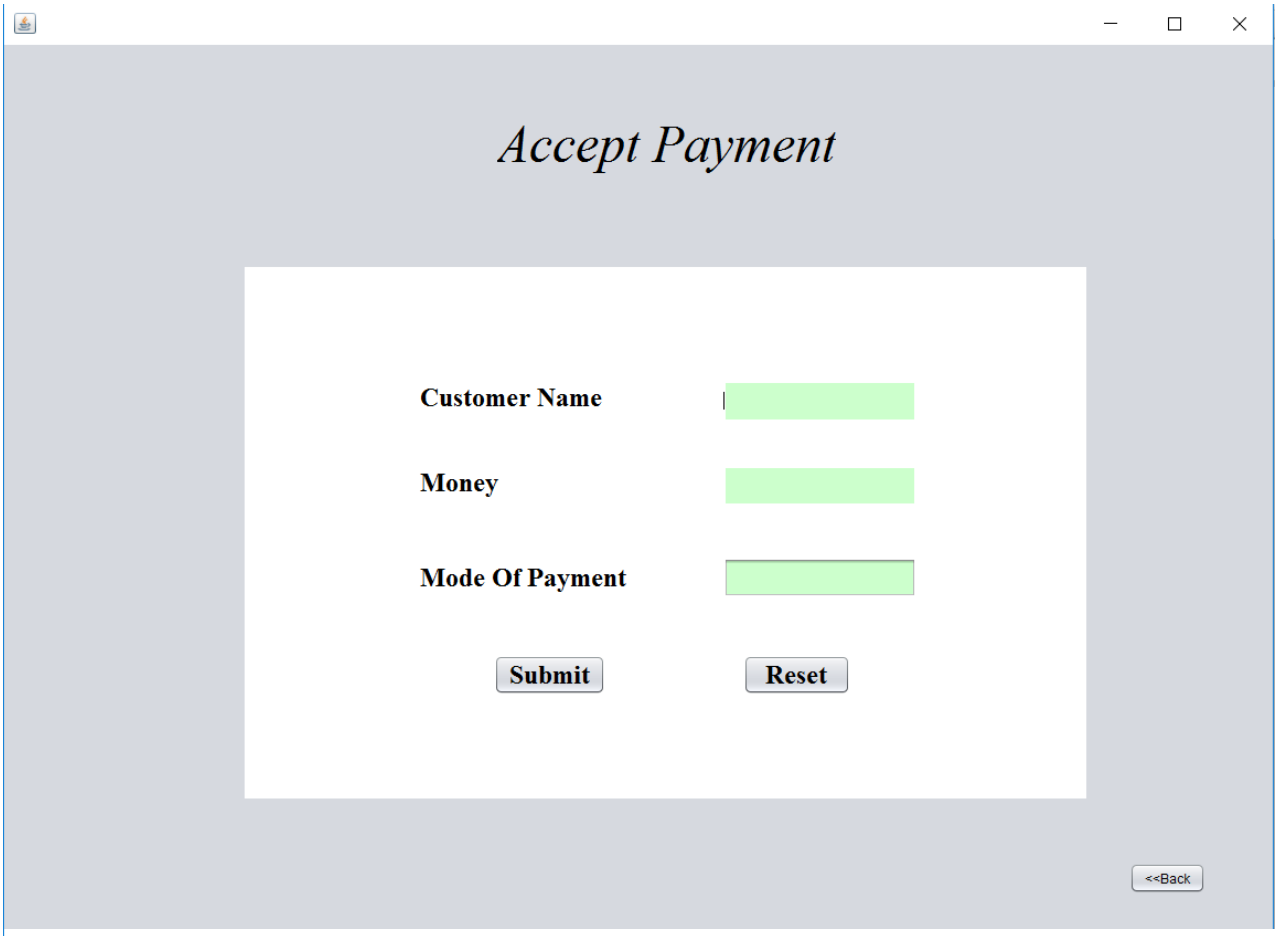

POWER GYM
....A moto to change
Log out
Home
Customers
Equipments
Membership
Payment
Staff
Class
My Profile
View Membership
Upgrade Membership

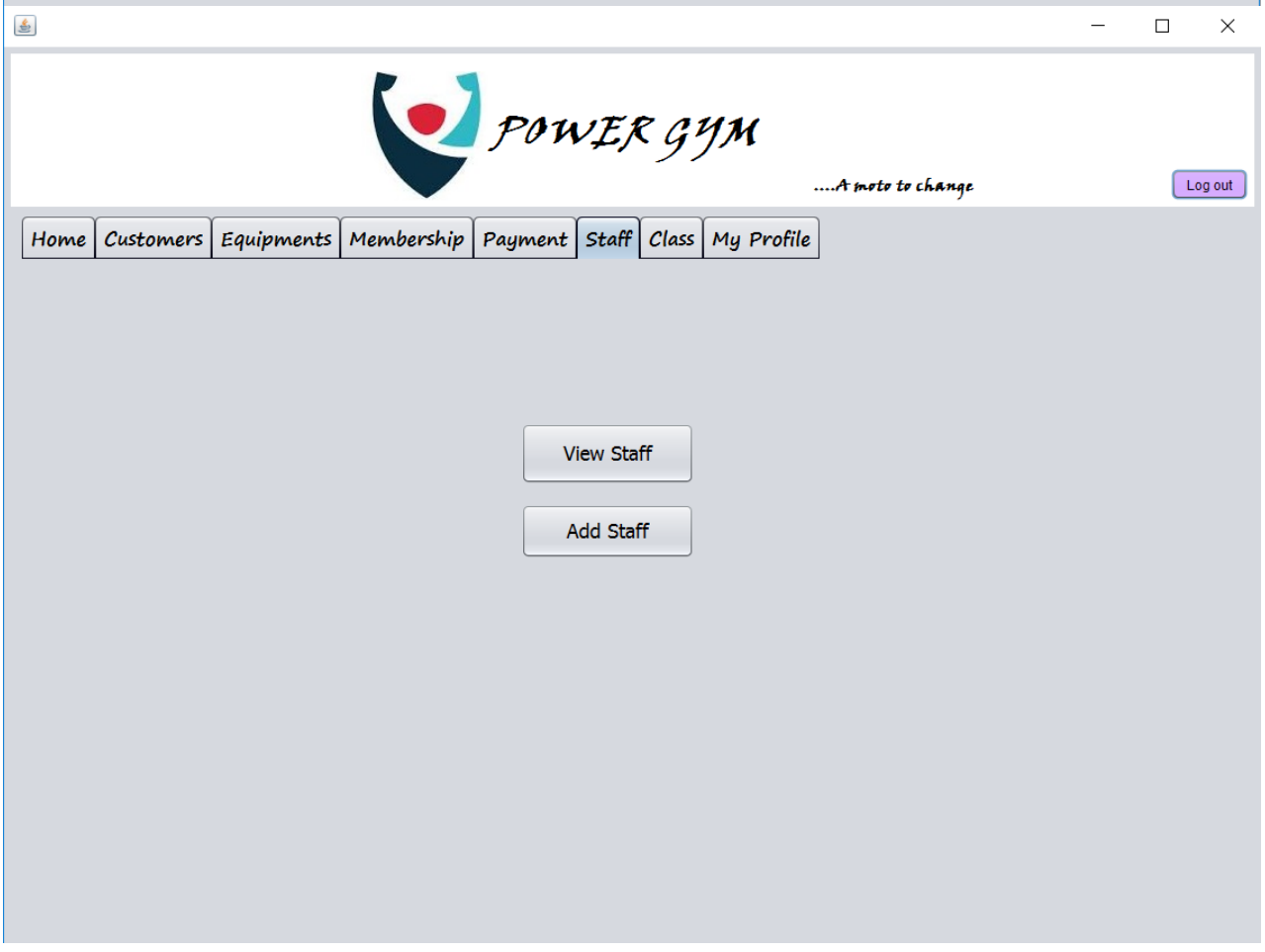

View Membership
PackageLevel
Fees
Facility
Golden
15000
Unlimited workout,Personal trainer,Shower,Locker
Silver
12000
4 hrs workout per day,Personal trainer
Bronze
8000
2 hrs workout per day
>>Back

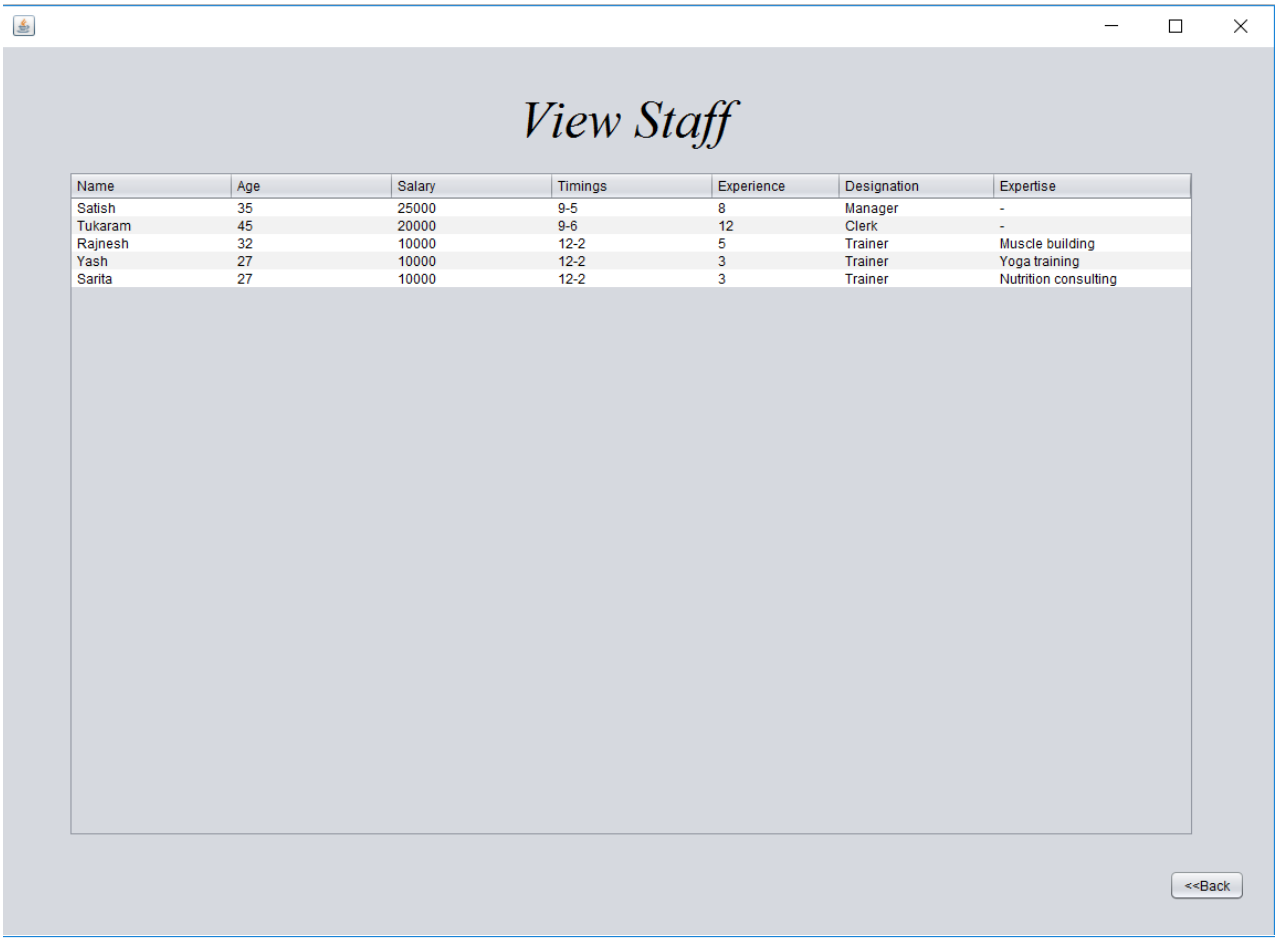

Upgrade Membership
Customer Name
New Package Level
Submit
Reset
<<Back

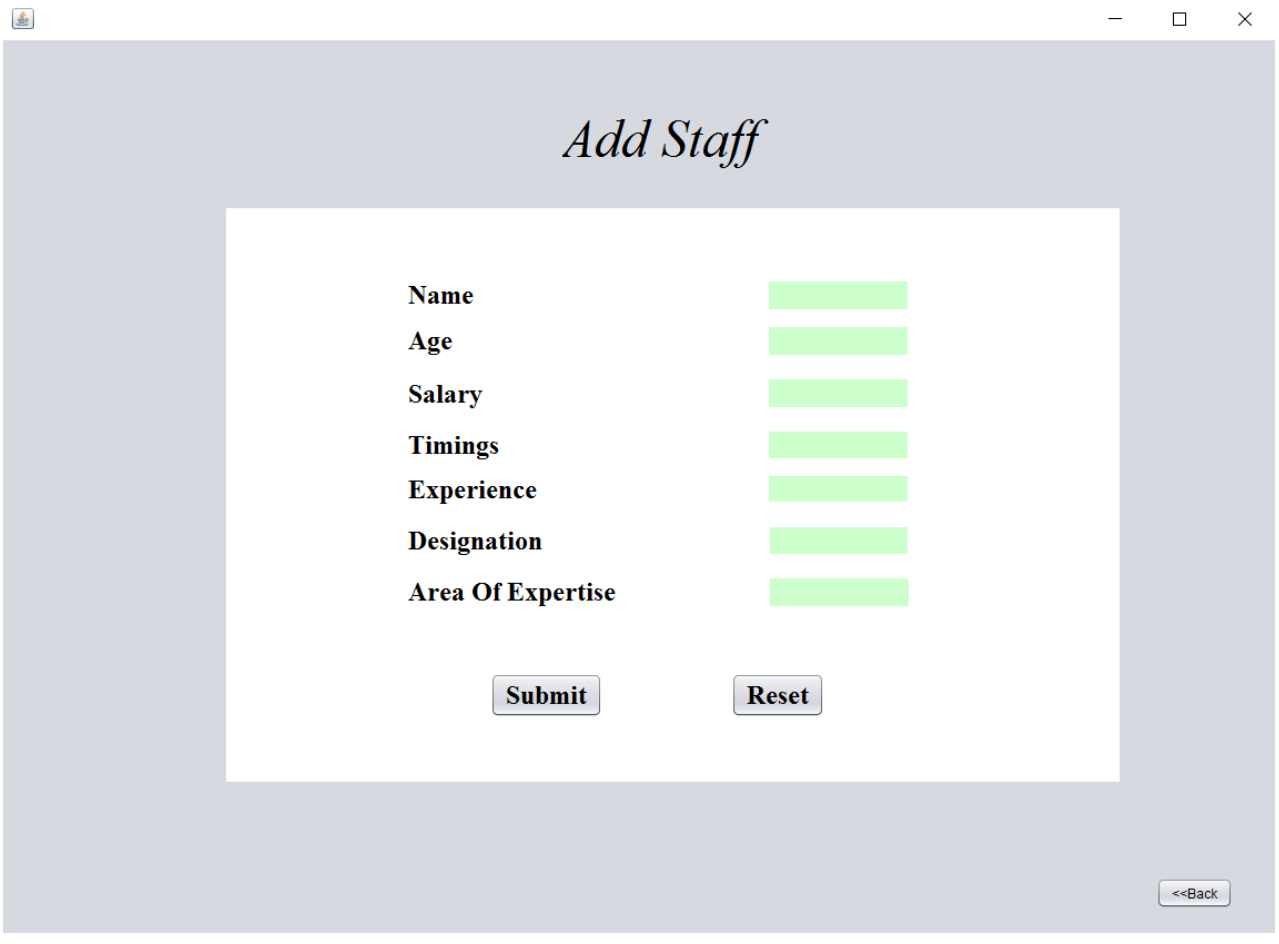

POWER GYM
....A moto to change
Log out
Home
Customers
Equipments
Membership
Payment
Staff
Class
My Profile
View Payment
Accept Payment

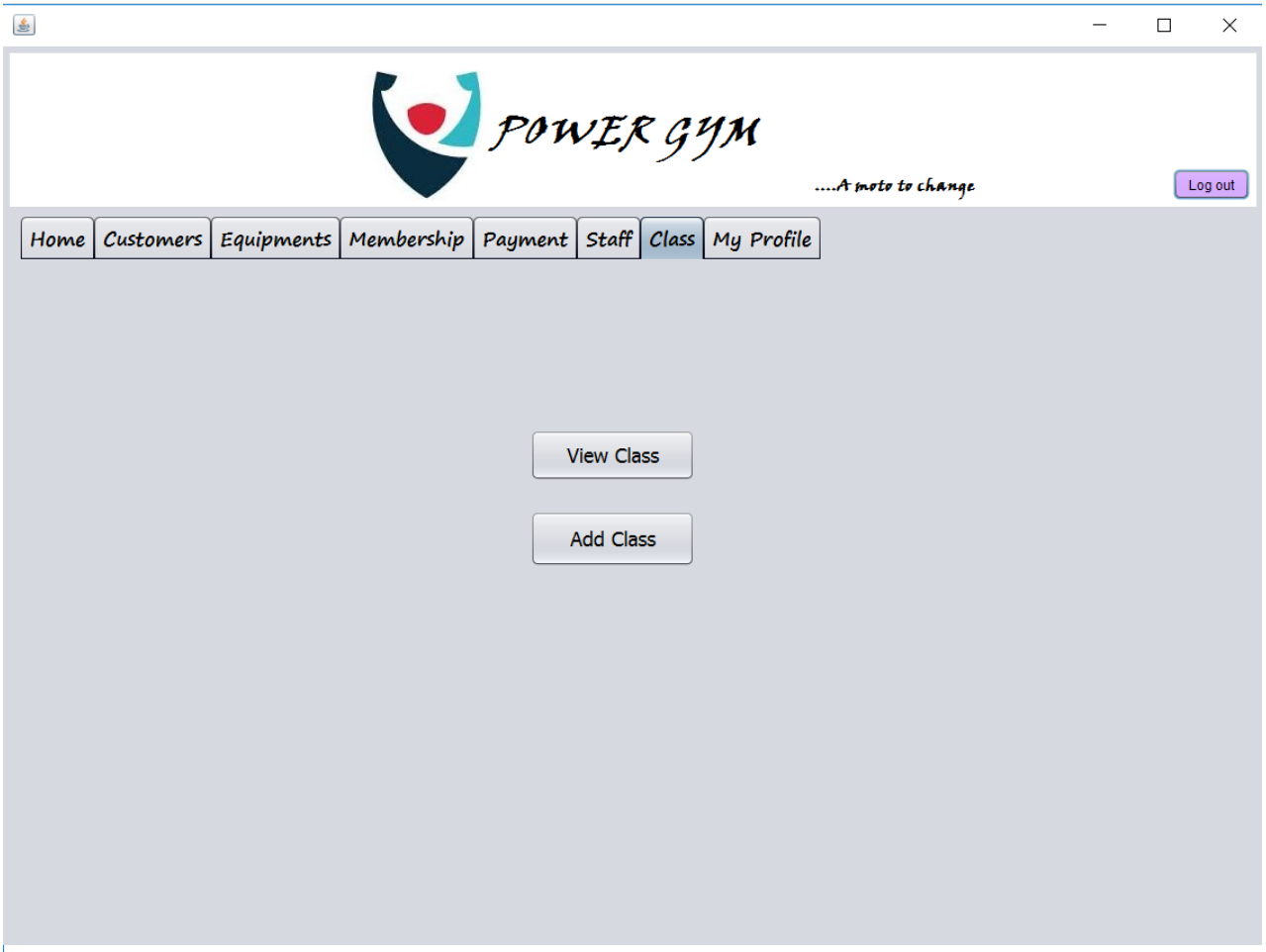

View Payment
Customer Name | Pending Amount | Status | Last Date Of Payment | Mode Of Payment
Ramesh | 8000 | Pending | 2017-10-29 | Cash
Sahana | 8000 | Pending | 2017-09-10 | Debit card
Krushika | 0 | Clear | 2017-09-10 | Debit card
Vishal | 1000 | Pending | 2017-09-10 | Cash
Akshay | 10000 | Pending | 2017-09-10 | Cash
<<Back

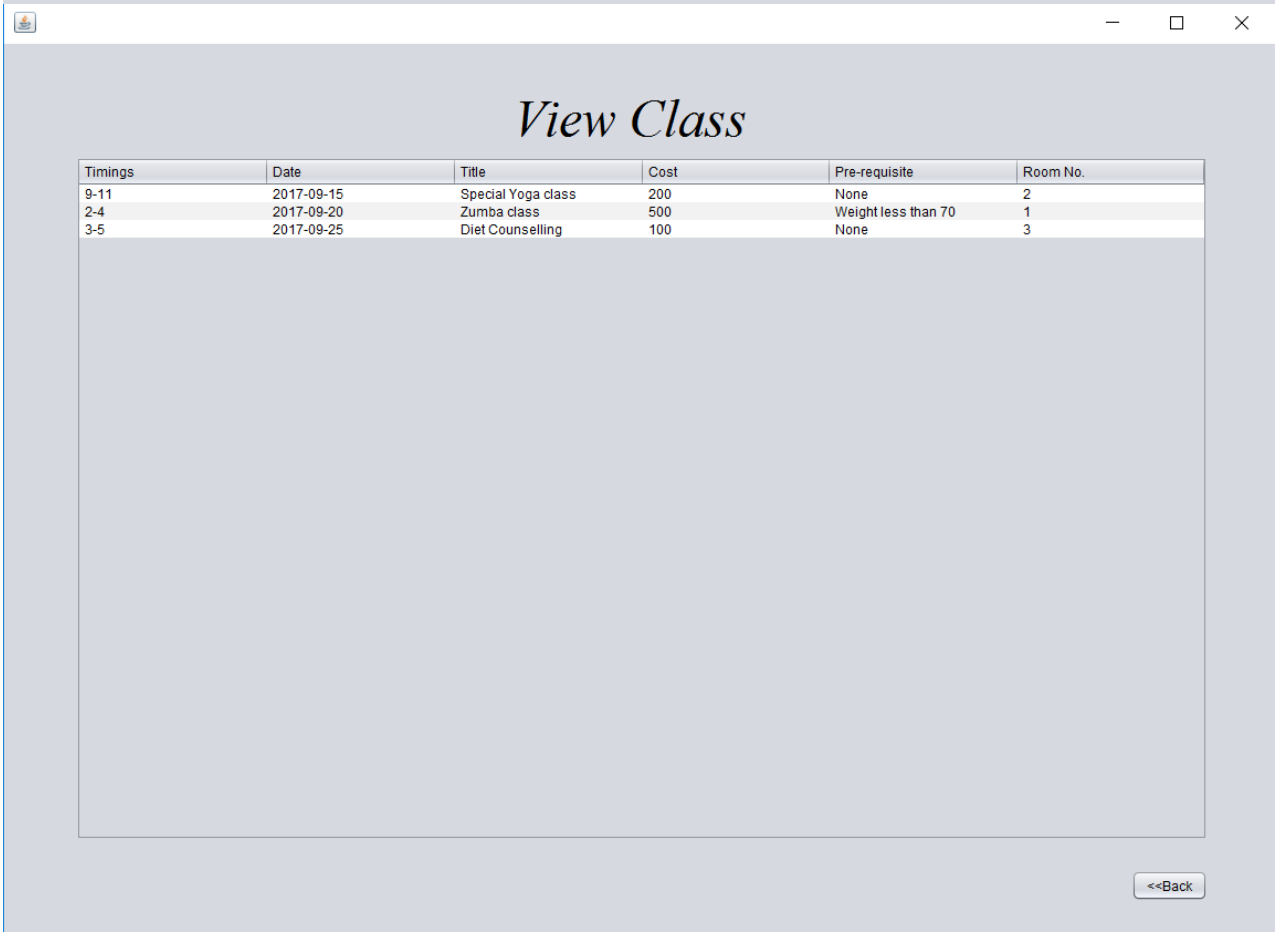

Accept Payment
Customer Name
Money
Mode Of Payment
Submit
Reset
<<Back

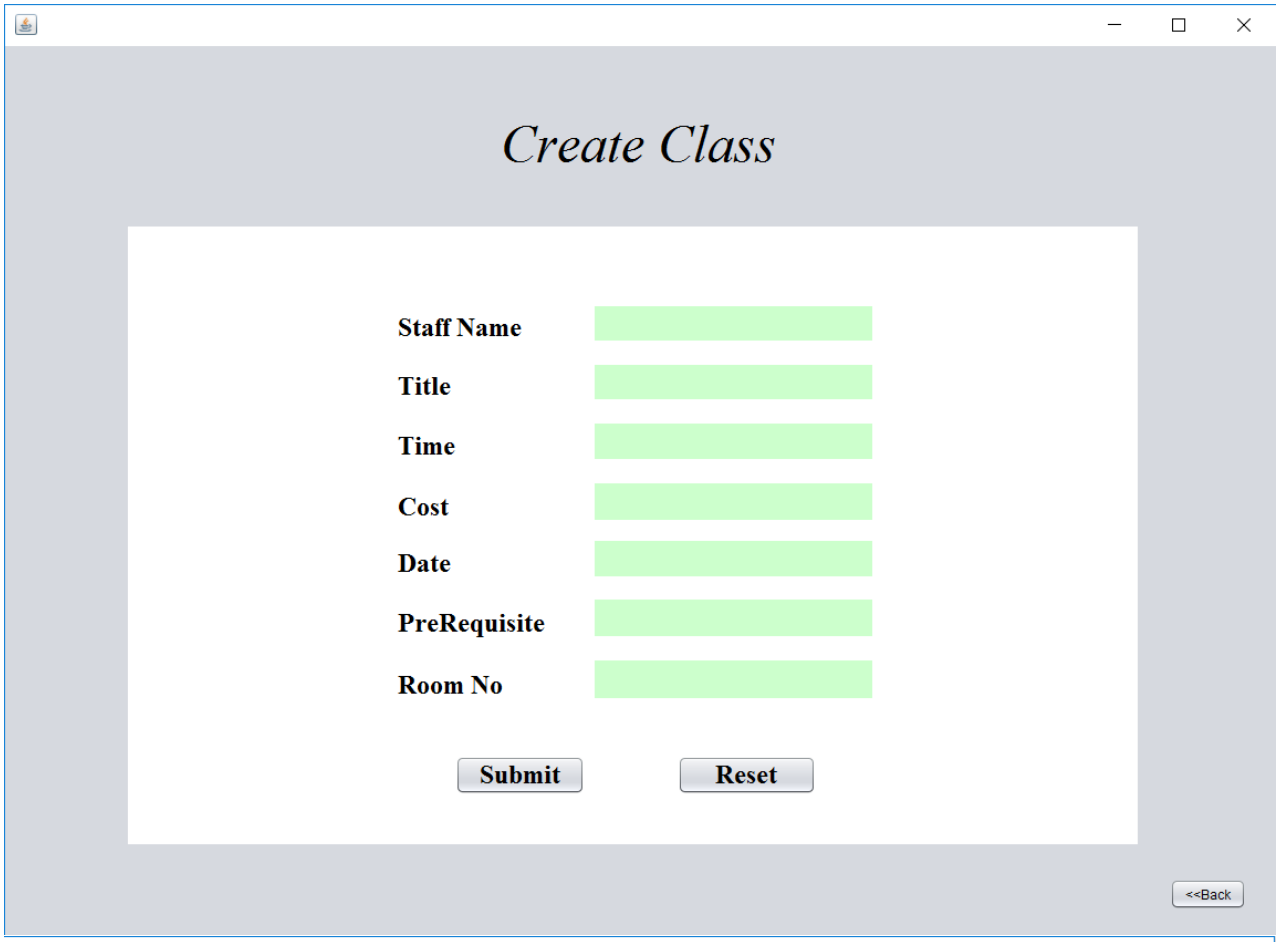

POWER GYM
....A moto to change
Log out
Home
Customers
Equipments
Membership
Payment
Staff
Class
My Profile
View Staff
Add Staff

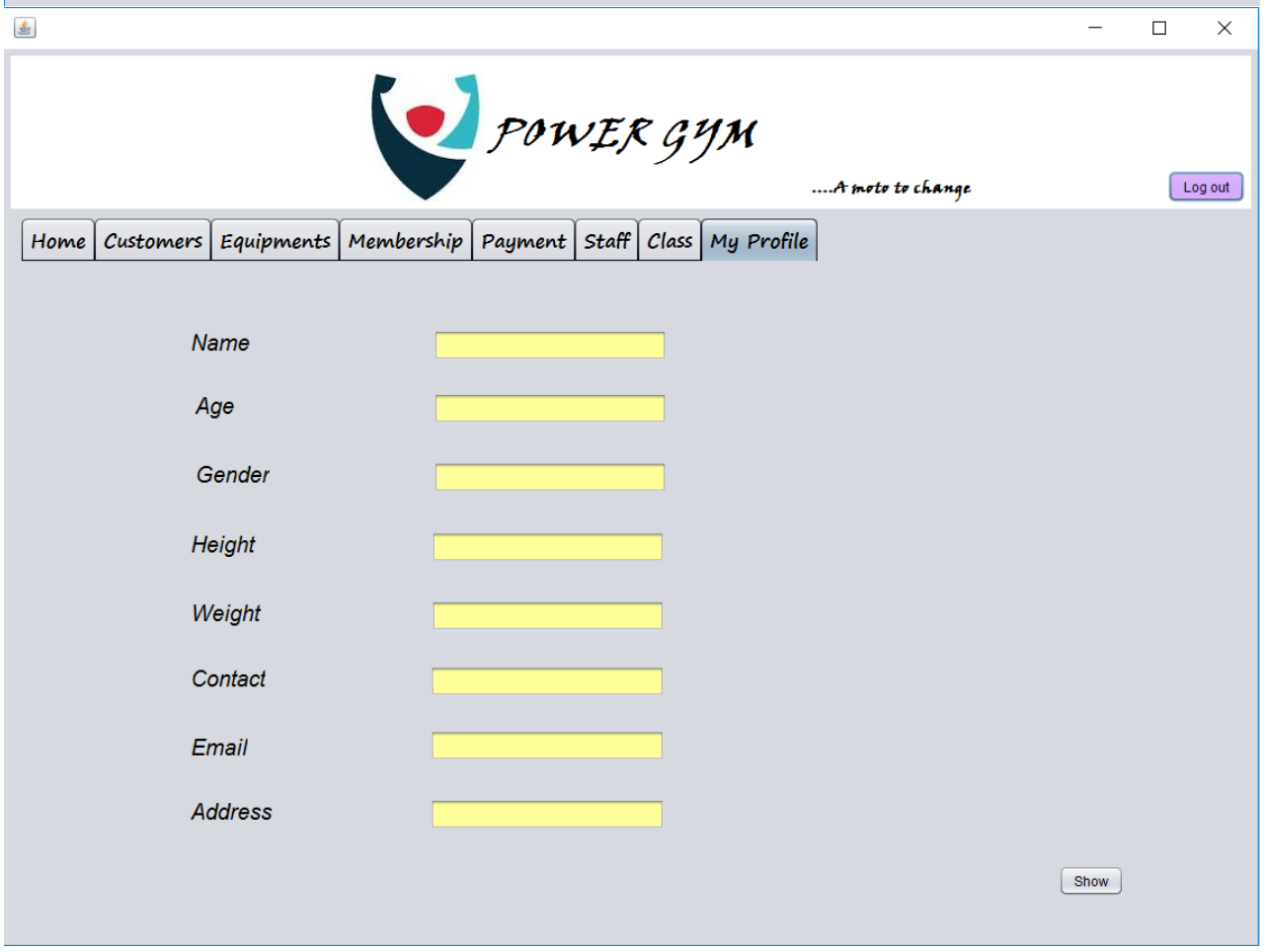

View Staff
Name Age Salary Timings Experience Designation Expertise
Satish 35 25000 9-5 8 Manager -
Tukaram 45 20000 9-6 12 Clerk -
Rajnesh 32 10000 12-2 5 Trainer Muscle building
Yash 27 10000 12-2 3 Trainer Yoga training
Sarita 27 10000 12-2 3 Trainer Nutrition consulting
<<Back


Add Staff
Name
Age
Salary
Timings
Experience
Designation
Area Of Expertise
Submit
Reset
<<Back

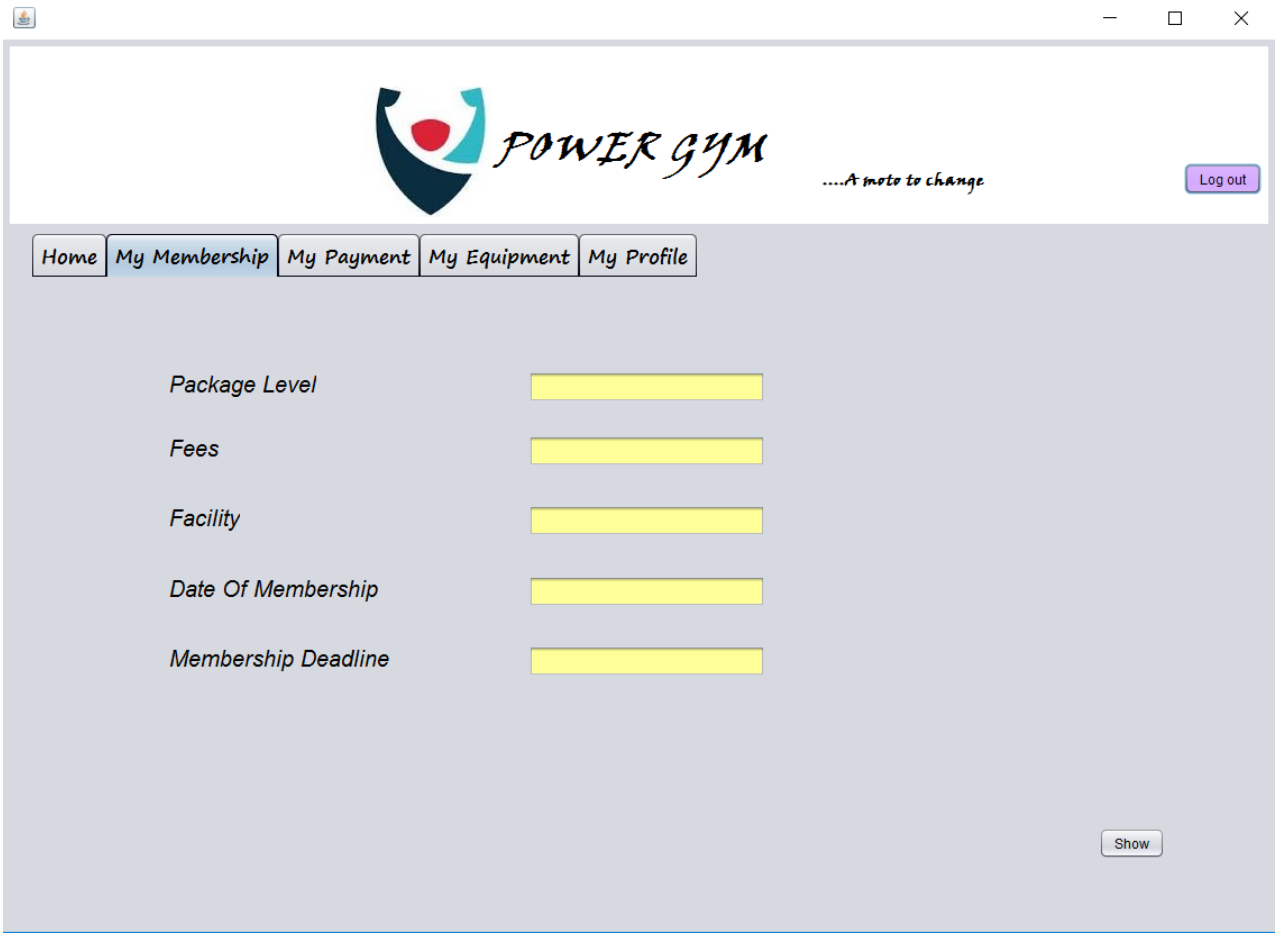

POWER GYM
....A moto to change
Log out
Home
Customers
Equipments
Membership
Payment
Staff
Class
My Profile
View Class
Add Class

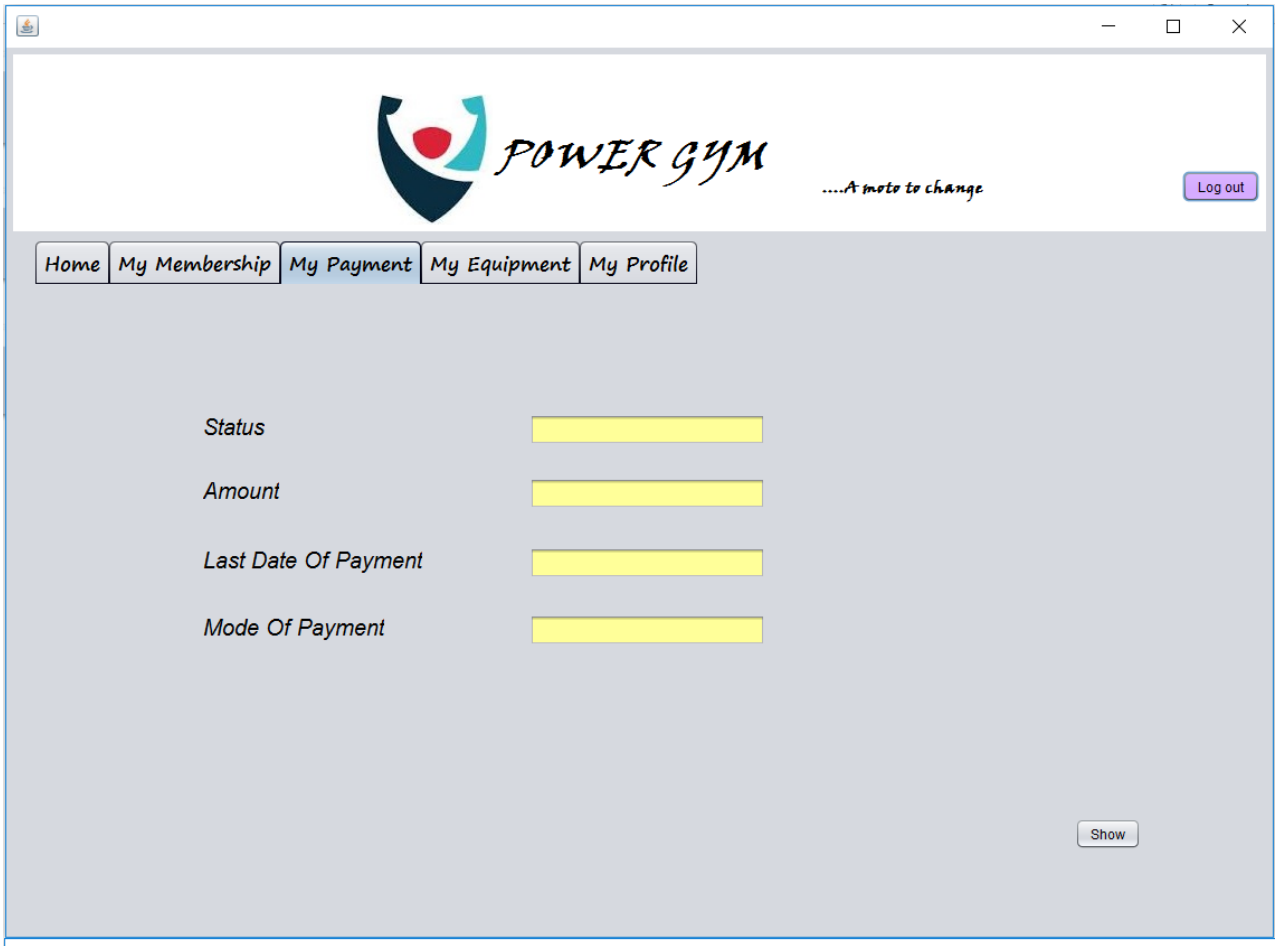

View Class
Timings
Date
Title
Cost
Pre-requisite
Room No.
9-11
2017-09-15
Special Yoga class
200
None
2
2-4
2017-09-20
Zumba class
500
Weight less than 70
1
3-5
2017-09-25
Diet Counselling
100
None
3
<<Back

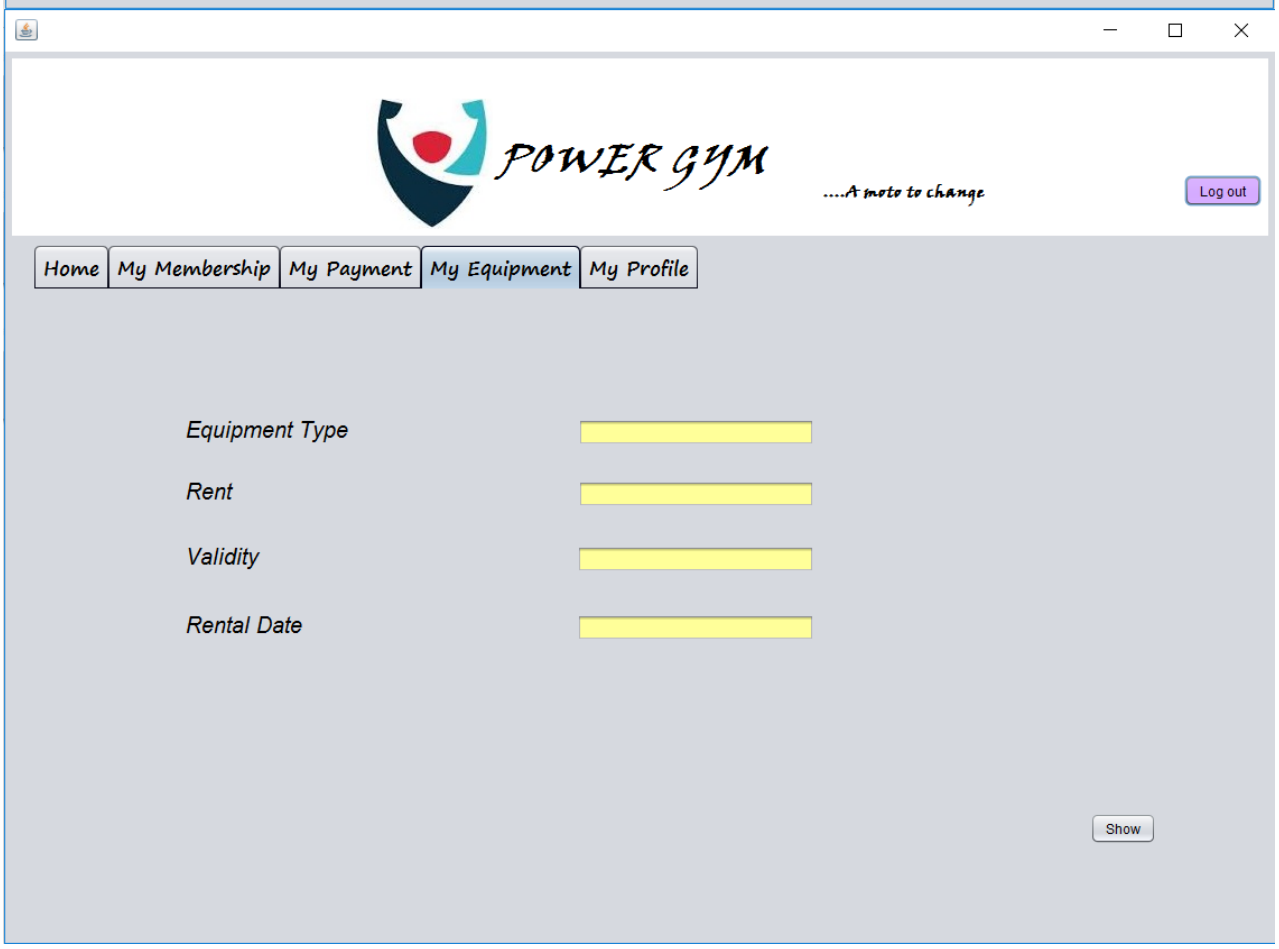

Create Class
Staff Name
Title
Time
Cost
Date
PreRequisite
Room No
Submit
Reset
<<Back

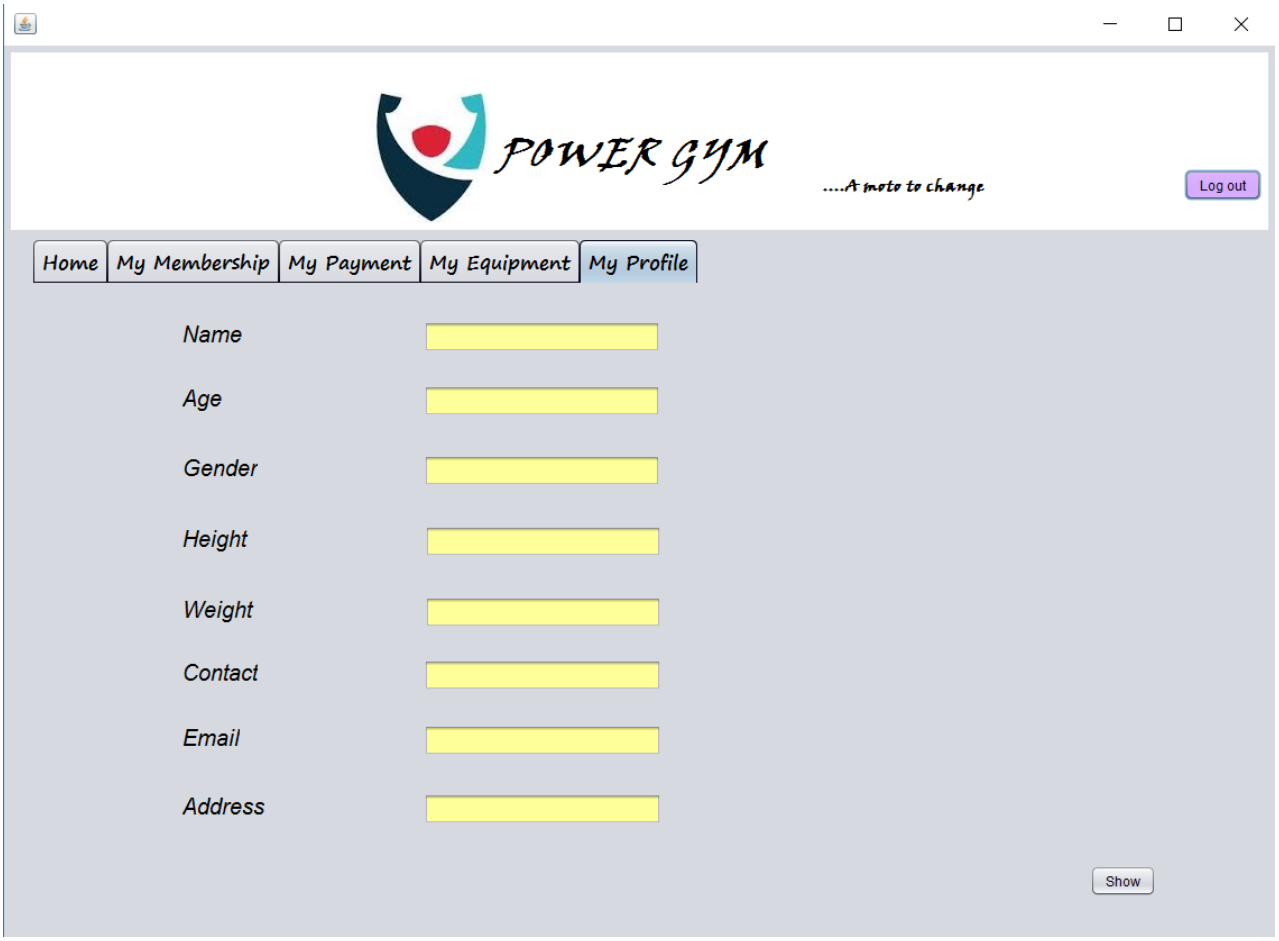

POWER GYM
....A moto to change
Log out
Home
Customers
Equipments
Membership
Payment
Staff
Class
My Profile
Name
Age
Gender
Height
Weight
Contact
Email
Address
Show


POWER GYM
....A moto to change
Log out
Home
My Membership
My Payment
My Equipment
My Profile
Welcome to POWER GYM Portal


POWER GYM
....A moto to change
Log out
Home
My Membership
My Payment
My Equipment
My Profile
Package Level
Fees
Facility
Date Of Membership
Membership Deadline
Show


POWER GYM
....A moto to change
Log out
Home
My Membership
My Payment
My Equipment
My Profile
Status
Amount
Last Date Of Payment
Mode Of Payment
Show


POWER GYM
....A moto to change
Log out
Home
My Membership
My Payment
My Equipment
My Profile
Equipment Type
Rent
Validity
Rental Date
Show



Conclusion:

Thus a gym management system application was developed by using java swings in NetBeans to meet the requirements and database connectivity was done using JDBC successfully.

References :

1. https://netbeans.org/kb/docs/java/quickstart-gui.html
2. https://netbeans.org/features/java-on-client/swing.html
3. https://www.youtube.com/watch?v=6IJr5JIY9Yo
4. https://www.youtube.com/watch?v=IHgH2k8N6fM
5. https://www.theurbanpenguin.com/java-creating-a-gui-swing-application-using-netneans-ide-7-4/
6. http://zetcode.com/tutorials/javaswingtutorial/