DBMS - Mini Project
GYM MANAGEMENT SYSTEM

Submitted By:
H M Mythreya
PES2UG20CS130
V Semester Section C

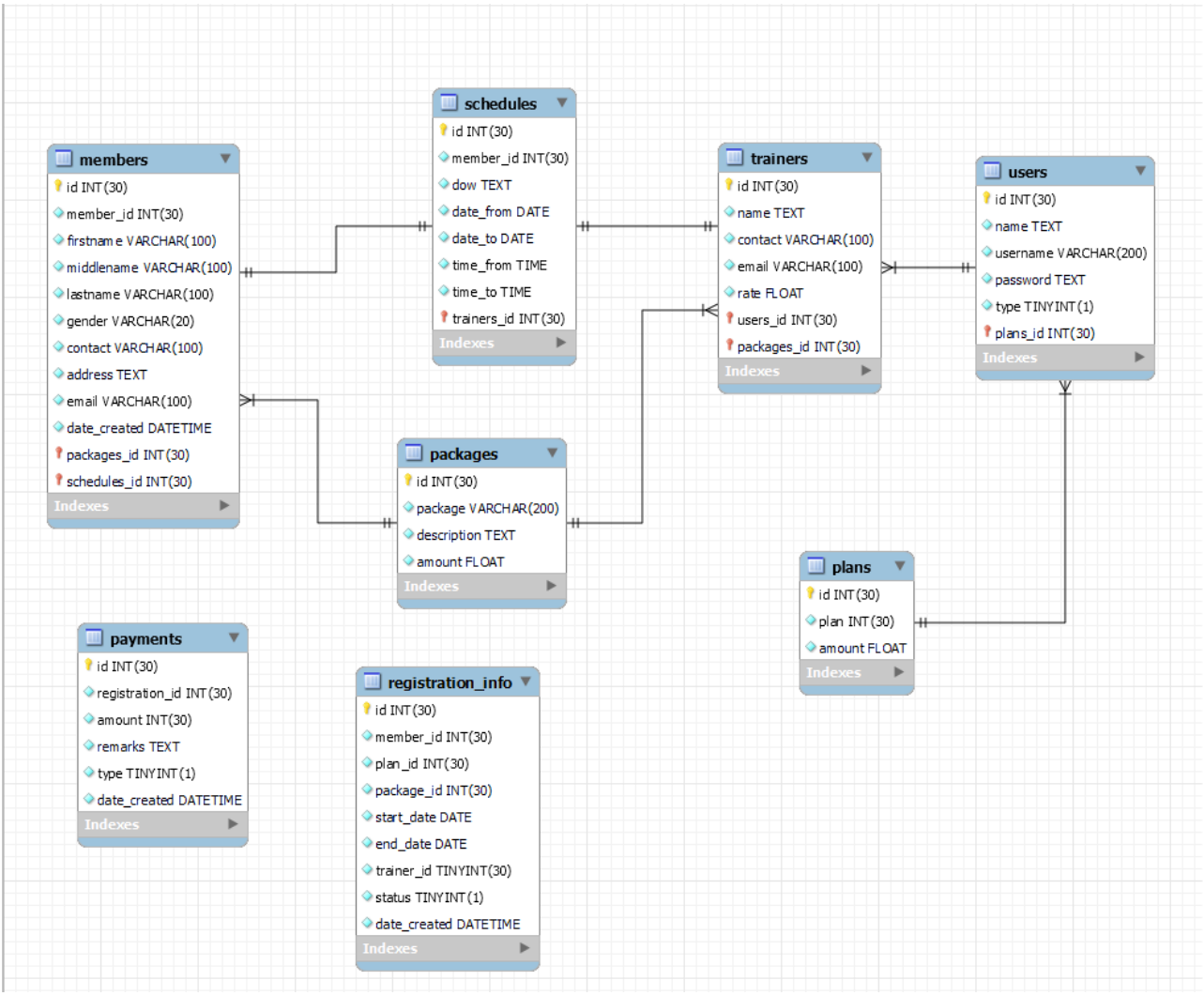
Short Description and Scope of the Project

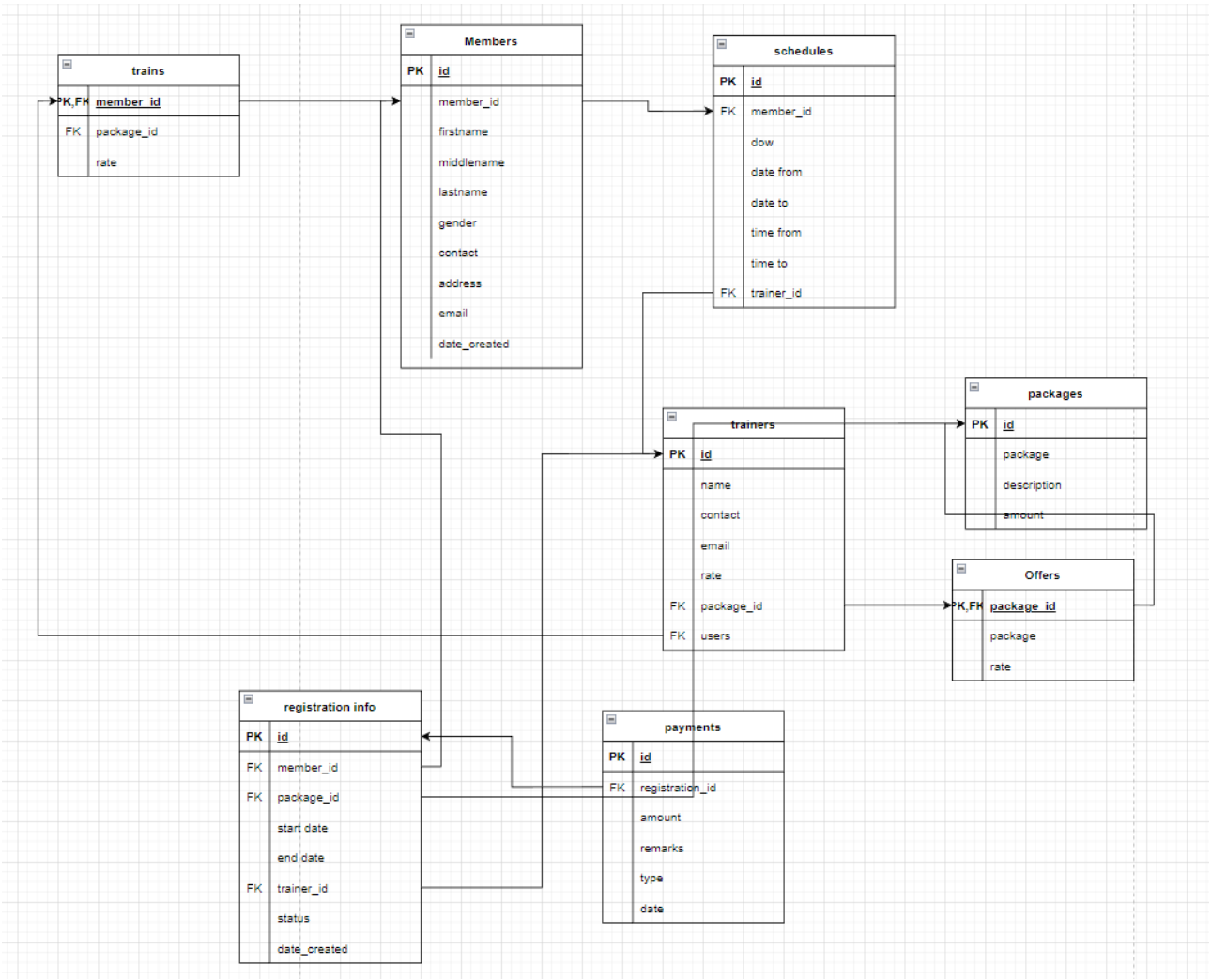
Gym Management system. A simple website and database to handle gym subscriptions. The website has register and login features allowing members to create accounts and buy a package. The website can also be used to book sessions and see trainer schedules. On the admin side, the website can be used to edit packages, users, control the schedule, add new packages, etc.

Scope:

Can help gym businesses keep track of schedules, members, trainers, packages, etc. Editing packages and plans can be done easily in the frontend itself if logged in as admin, this can enable trainers to directly change schedules or plans without having to know any sql programming

ER Diagram and Relational Schema




trains
PK,FK member_id
FK package_id
rate
Members
PK id
member_id
firstname
middlename
lastname
gender
contact
address
email
date_created
schedules
PK id
FK member_id
dow
date from
date to
time from
time to
FK trainer_id
packages
PK id
package
description
amount
trainers
PK id
name
contact
email
rate
FK package_id
FK users
Offers
PK,FK package_id
package
rate
registration info
PK id
FK member_id
FK package_id
start date
end date
FK trainer_id
status
date_created
payments
PK id
FK registration_id
amount
remarks
type
date

DDL statements - Building the database

```
CREATE DATABASE gym_db
USE gym_db

CREATE TABLE members(id int, member_id int, firstname varchar(100), middlename varchar(100), lastname varchar(100), gender varchar(20), contact int, address varchar(100), email varchar(100), date_created datetime, PRIMARY KEY (ID))

CREATE TABLE packages(id int, package varchar(100), description text, amount float, PRIMARY KEY (id))

CREATE TABLE registration_info(id int, member_id int, package_id int, start_date date, end_date date, trainer_id tinyint, status tinyint, date_created datetime, PRIMARY KEY (id))

CREATE TABLE trainers(id int, name varchar(100), contact varchar(100), email varchar(100), rate float, PRIMARY KEY (id))


CREATE TABLE users(id int, name varchar(200), username varchar(200), password text, type tinyint, PRIMARY KEY (id))
```

Populating the Database

members table:

	id	member_id	firstname	middlename	lastname	gender	contact	address	email	date_created
Edit Copy Delete	1	103197	Mythreya	H	M	Male	8310712803	ABC	hm.mythreya@gmail.com	2022-03-11 00:00:00
Edit Copy Delete	2	199087	Bhavya	N		Female	1234567890	XYZ	bhavya@gmail.com	2022-03-10 11:41:06
Edit Copy Delete	3	199233	Random	Name	hi	Male	1231231231	Secret	rand@yahoo.com	2016-03-10 11:41:06
Edit Copy Delete	4	129653	Hello	World		Other	9998887771	who knows	hello@world.com	2019-11-07 19:36:42
Edit Copy Delete	5	111246	DBMS	Mini	Project	Other	2468246824	PES University	dbms@project.com	2022-11-19 19:39:10

packages table:

	id	package	description	amount
Edit Copy Delete	1	Basic Trial Package	1 Week Trial For those who want to trial the facil...	0
Edit Copy Delete	2	Basic GYM Package	6 Months of GYM Package. Does not include trainers...	5000
Edit Copy Delete	3	Pro Gym Package	6 Months of Pro GYM Package. Members will recieve ...	7000
Edit Copy Delete	4	Premium GYM Package	12 Months of ultimate premium GYM Package. 20 Trai...	24000

registration_info table:

	id	member_id	package_id	start_date	end_date	trainer_id	status (0=Inactive, 1= Active)	date_created
Edit Copy Delete	1	1	4	2022-03-11	2023-03-11	0	1	2022-03-11 00:00:00
Edit Copy Delete	2	2	2	2022-09-10	2023-02-10	0	1	2022-03-10 11:41:06
Edit Copy Delete	3	3	2	2016-03-10	2016-09-10	0	0	2016-03-10 00:00:00
Edit Copy Delete	4	4	3	2019-11-07	2020-05-07	0	0	2019-11-07 19:36:42
Edit Copy Delete	5	5	1	2022-11-19	2022-11-26	0	1	2022-11-19 19:39:10

Join Queries

```
SELECT firstname, end_date FROM registration_info
JOIN members ON members.id = registration_info.member_id
```

firstname	end_date
Mythreya	2023-03-11
Bhavya	2023-02-10
Random	2016-09-10
Hello	2020-05-07
DBMS	2022-11-26

```
SELECT firstname, contact, end_date FROM members
JOIN registration_info ON members.id = registration_info.member_id
WHERE registration_info.status = 0
```

firstname	contact	end_date
Random	1231231231	2016-09-10
Hello	9998887771	2020-05-07

```
SELECT firstname, start_date FROM registration_info
JOIN members ON members.id = registration_info.member_id
```

firstname	start_date
Mythreya	2022-03-11
Bhavya	2022-09-10
Random	2016-03-10
Hello	2019-11-07
DBMS	2022-11-19

Aggregate Functions

```
SELECT COUNT(firstname) FROM members
```

COUNT(firstname)
5

```
SELECT COUNT(name) FROM trainers
```

COUNT(name)
1

```
SELECT COUNT(firstname) FROM members
JOIN registration_info ON registration_info.member_id = members.id
WHERE registration_info.status = 1
```

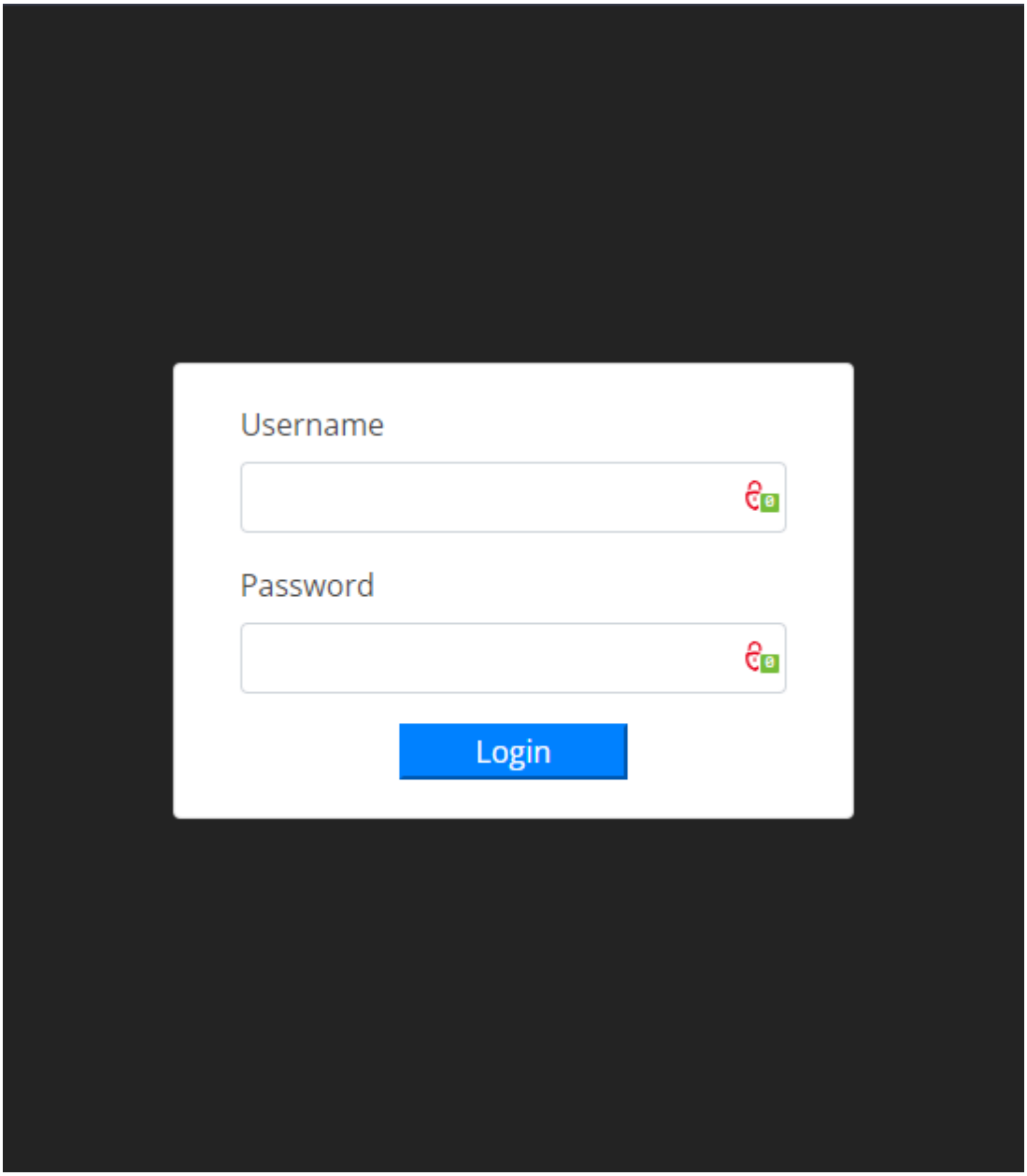
COUNT(firstname)
3

```
SELECT COUNT(firstname) FROM members
JOIN registration_info ON registration_info.member_id = members.id
WHERE registration_info.status = 0
```

COUNT(firstname)
2

Developing a Frontend

Login Page



Admin can edit, delete or add new entries to members and packages directly from frontend

Member List + New

Show 10 entries Search:

#	Member ID	Name	Email	Contact	Action
1	199087	, Bhavya N	bhavya@gmail.com	1234567890	View Edit Delete
2	129653	, Hello World	hello@world.com	9998887771	View Edit Delete
3	199233	Hi, Random Name	rand@yahoo.com	1231231231	View Edit Delete
4	103197	M, Mythreya H	hm.mythreya@gmail.com	8310712803	View Edit Delete
5	111246	Project, DBMS Mini	dbms@project.com	2468246824	View Edit Delete

Showing 1 to 5 of 5 entries Previous 1 Next

Package Form

Package Name

Description

Amount

Save Cancel

Package List

Show 10 entries Search:

#	package	Amount	Action
1	package: **Basic Trial Package** Description: **1 Week Trial For those who want to trial the facilities**	0.00	Edit Delete
2	package: **Basic GYM Package** Description: **6 Months of GYM Package. Does not include trainers or any additional facilities**	5,000.00	Edit Delete
3	package: **Pro Gym Package** Description: **6 Months of Pro GYM Package. Members will recieve 10 trainer sessions, 2 professional diets according to your needs, and unlimited workout plans. Other facilities not included**	7,000.00	Edit Delete

Admin can also create schedules