

04/30/2024

FitRITE LIFE DATABASE DESIGN

GROUP #2

[REDACTED]
[REDACTED]
[REDACTED]
MENDOZA JEREMIAH

CONTACT PERSON ON FINAL PROJECT REPORT

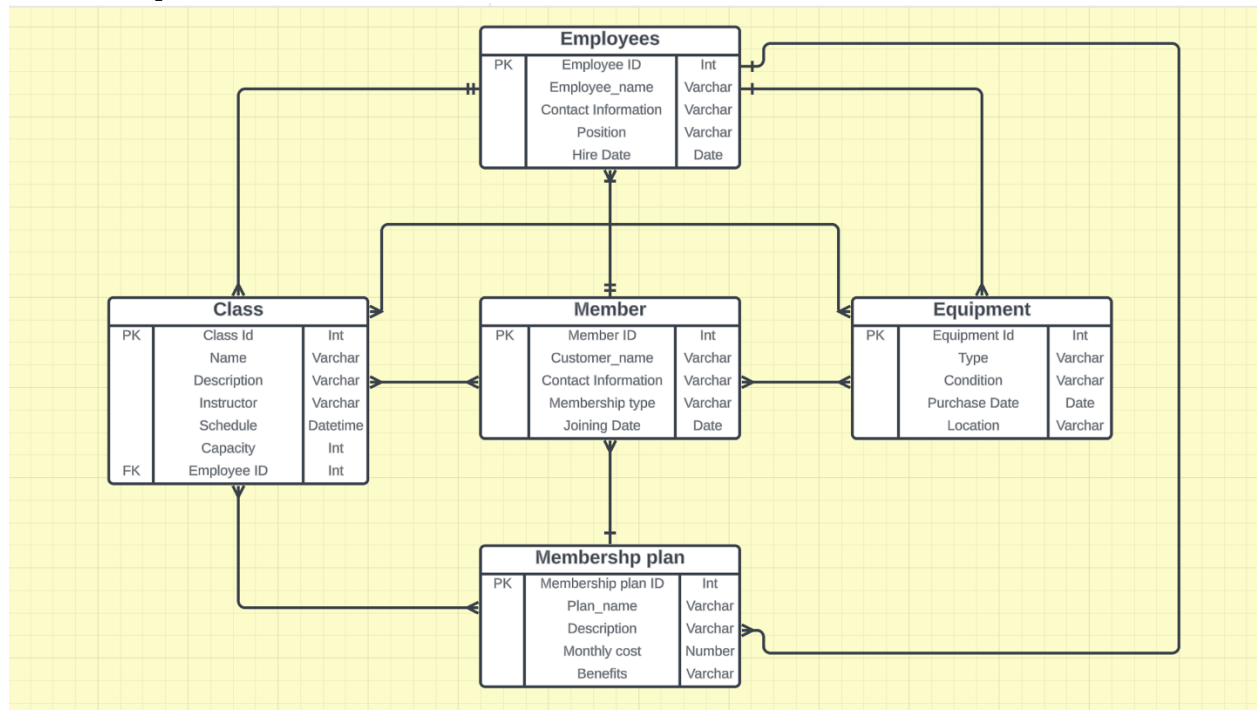
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email: [REDACTED]

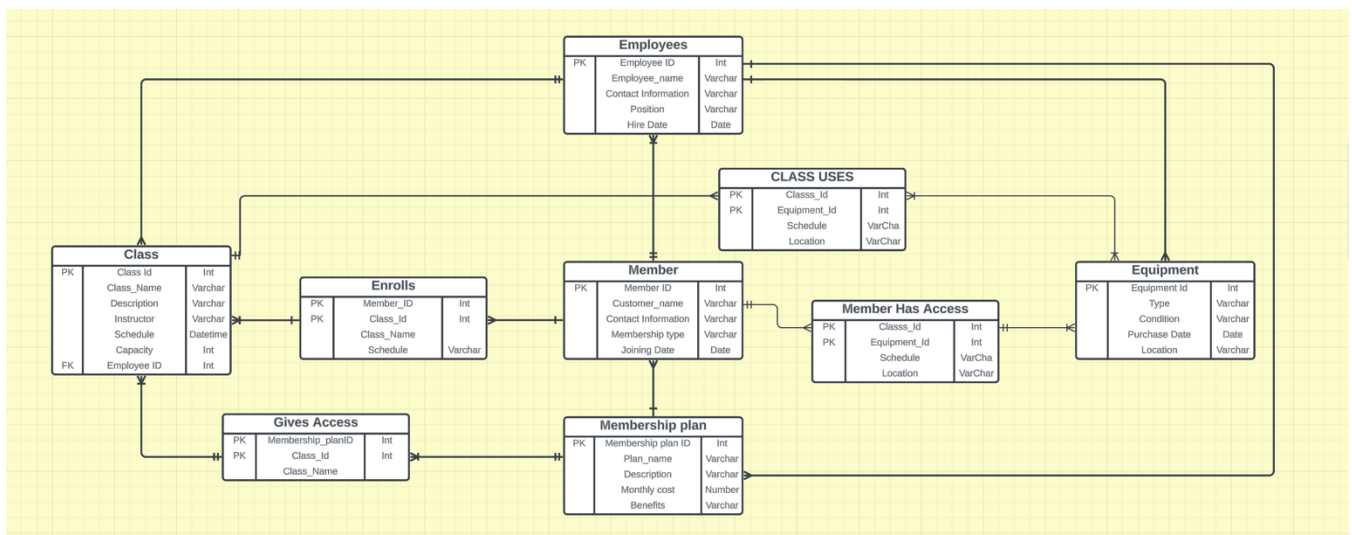
PART A

E-R DIAGRAM (CROW'S NOTATION)

Relationships M:N



Relationships with entities bridges



PART B**RELATIONAL SCHEMA**

1- MEMBERS (MEMBER_ID, CusName, Customer_Phone, Cust_Address , MembType, EnrollDate)

MEMBER_ID	PHONE NUMBER	CUS_ADDRESS
1001	(214) 009-4433	201 MAIN ST DALLAS TX

MEMBER_ID	MEMBTYPE	ENROLLDATE
1001	PREMIUM	01/01/2024

MEMBER_ID	CUSNAME
1001	MIKE SULLIVAN

2- EMPLOYEES (EMPLOYEE_ID, EmployeeName, ContactInfo, Position, HiringDate)

EMPLOYEE_ID	EMPLOYEE_PHONE	EMPLOYEE_ADDRESS
2001	(213) 221-0099	100 E DALLAS ST DALLAS TX

EMPLOYEE_ID	EMPLOYEENAME
2001	TOM JHONSON

EMPLOYEE_ID	POSITION	HIRINGDATE
2001	RECEPCIONIST	10/22/2018

3- CLASSES (CLASS_ID , Class_Name, Description, Instructor, Schedule, Capacity)

CLASS_ID	CLASS_NAME
3001	BOXING

CLASS_ID	CLASS_DESCRIPTION
3001	COMBAT WORKOUT

CLASS_ID	CLASS_INSTRUCTOR	CLASS_SCHEDULE	CLASS_CAPACITY
3001	JHON PEREZ	MON-WED 8:00 – 8:30 PM	10

4- EQUIPMENT (EQUIPMENT_ID , Equipment_type ,
Equipment_Condition, Date_Purchased , Equipment_location.)

EQUIPMENT_ID	EQUITMENT_TYPE	CONDITION	DATE_PURCHASED	LOCATION
4001	TREADMILL	WORKING	04/27/2024	CARDIO_ROOM

EQUIPMENT_ID	CONDITION	DATE_PURCHASED
4001	WORKING	04/27/2024

EQUIPMENT_ID	EQUITMENT_TYPE	LOCATION
4001	TREADMILL	CARDIO_ROOM

5- MEMBERSHIP PLAN (PLAN_ID , Plan_Name, Plan_Description,
Plan_Cost , Plan_Benefits)

MEMBERSHIP_ID	PLAN_NAME	PLAN_DESCRIPTION	PLAN_COST	PLAN_BENEFIT
5001	STANDAR	BASIC MEMBERSHIP	\$20	GENERAL ACCESS /POOL RESTRICTION

MEMBERSHIP_ID	PLAN_NAME	PLAN_COST
5001	STANDAR	\$20

MEMBERSHIP_ID	PLAN_DESCRIPTION	PLAN_BENEFIT
5001	STANDAR MEMBERSHIP	GENERAL ACCESS /POOL RESTRICTION

PART C**DATA DICTIONARY****DATA DICTIONARY FOR DATABASE FitRITE Life**

TABLE NAME	ATTRIBUTE NAME	CONTENTS	TYPE	FORMAT	RANGE	REQUIRED	PK / FK	FK REFERENCE TABLE
MEMBERS	MEMBER_ID	Member ID	INTEGER	###	0-999	Y	PK	CLASSES
	Cus_Name	Customer Name	VARCHAR(35)	Text	NA	Y		
	Customer_Phone	Customer Phone	VARCHAR(20)	Text	NA	Y		
	Customer_Addres	Customer Address	VARCHAR(50)	Text	NA	Y		
	Memb_Type	Plan the Member has	VARCHAR(20)	Text	NA	Y	FK	MEMBERSHIP
	Enroll_Date	Date Member joined	DATE	DD-MON-YYYY	NA	Y		
EMPLOYEES	EMPLOYEE_ID	Employee ID's	INTEGER	####	1000-1099	Y	PK	
	Employee_Name	Employee Name	VARCHAR(35)	Text	NA	Y	FK	CLASSES
	Contact_Info	Contact info fo Employee	VARCHAR(100)	Text	NA	Y		
	Position	Position Title	VARCHAR(30)	Text	NA	Y		
	Hiring_Date	Employee Hired Date	DATE	DD-MON-YYYY	NA	Y		
MEMBERSHIP	PLAN_ID	Plan ID	INTEGER	####	NA	Y	PK	
	Plan_Name	Plan Name	VARCHAR(35)	Text		Y	FK	MEMBERS
	Plan_Description	Plan Description	VARCHAR(35)	Text	NA	Y		
	Plan_Cost	Monthly Cost	Currency	\$0,000.00	NA	Y		
	Plan_Benefit	Classes Access	VARCHAR(30)	Text	NA			
CLASSES	CLASS_ID	Classes ID	INTEGER	####	NA	Y	PK	
	Class_Name	Class Name	VARCHAR(35)	Text		Y		
	Class_Description	Description of the class	VARCHAR(35)	Text	NA	Y		
	Class_Instructor	Instrutor name	VARCHAR(100)	Text	NA	Y	FK	EMPLOYEES
	Class_Schedule	Class Schedule	VARCHAR(30)	DD-MON-YYYY	NA	Y		
	Class_Capacity	Max Class Ocupancy	INTEGER	####	NA	Y		
	Member_Info	Member enrolled in class	INTEGER	###	0-999	Y	FK	MEMBERS
EQUIPMENT	EQUIPMENT_ID	Equitment_ID	INTEGER	####	NA	Y	PK	
	Equipment_Type	Type Of Equitment	VARCHAR(35)	Text		Y		
	Equipment_Condition	Codition of Equitmernt	VARCHAR(5)	Text	NA	Y		
	Date_Purchased	Date Purchased	DATE	DD-MON-YYYY	NA	Y		
	Equipment_Location	Location of the equitment	VARCHAR(35)	Text	NA			

PART D.

SQL QUERIES SCREENSHOTS

1- Member

```
SQL> DESCRIBE MEMBER;
Name
-----
MEMBER_ID          NOT NULL NUMBER (38)
CUSTOMER_NAME      NOT NULL VARCHAR2 (35)
CUSTOMER_PHONE     NOT NULL VARCHAR2 (20)
CUSTOMER_ADDRESS   NOT NULL VARCHAR2 (50)
CUSTOMER_STATE     NOT NULL VARCHAR2 (15)
MEMBERSHIP_TYPE    NOT NULL VARCHAR2 (20)
ENROLL_DATE        NOT NULL DATE
POINTS            NOT NULL NUMBER (38)

SQL> SELECT * FROM MEMBER;

MEMBER_ID\CUSTOMER NAME      \CUSTOMER_PHONE    \CUSTOMER ADDRESS      \CUSTOMER STATE \MEMBERSHIP_TYPE    \ENROLL_DA\    POINTS
-----
1001\CALEB ROE              \4698980114        \201 MAIN ST DALLAS TX 76039    \TEXAS        \PREMIUM          \01-FEB-20\    100
1002\ERIK HUNTLEY          \4697571898        \8851 MOON CT FT WORTH TX 75025  \TEXAS        \SILVER           \15-JAN-23\    60
1003\EMMA JOHNSON          \2145137759        \202 ALDERWOOD LANE OKLAHOMA CITY OK 73151  \OAKHLOHOMA   \GOLD             \05-JUN-21\    80
1004\KELLY KLIEN           \3149894459        \587 SE RIVER STREET BROOKLYN NY 11228    \NEW YORK     \SILVER           \03-JAN-23\    60
1005\JAMES SMITH           \4157898899        \11 DEVON STREET LOCKPORT NY 14094    \NEW YORK     \GOLD             \15-APR-22\    80
1006\JANE DOE              \2145456547        \7475 FULTON STREET BRANDON FL 33511    \FLORIDA      \PREMIUM          \01-APR-20\    100
1007\ROB SMITH             \3130049030        \427 S BRANCH AVENUE MIAMI BEACH FL 33139  \FLORIDA      \GOLD             \08-JUL-22\    80
1008\ANTHONY FLORES        \5159097789        \8851 FOREST LN DALLAS TX 74039    \TEXAS        \PREMIUM          \09-SEP-21\    100

8 rows selected.
```

2- Employees

```
SQL> DESCRIBE EMPLOYEE;
Name
-----
EMPLOYEE_ID        NOT NULL NUMBER (38)
EMPLOYEE_NAME      NOT NULL VARCHAR2 (35)
CONTACT_INFORMATION NOT NULL VARCHAR2 (100)
POSITION           NOT NULL VARCHAR2 (30)
HIRING_DATE        NOT NULL DATE

SQL> SELECT * FROM EMPLOYEE;

EMPLOYEE_ID\EMPLOYEE_NAME      \CONTACT_INFORMATION      \POSITION      \HIRING_DA
-----
2001\JOSH MENDOZA             \3321 DALLAS DR DALLAS,TX,74059    \MANAGER       \01-JAN-20
2002\ANTHONY YEUNG            \7721 FLORENCE DR IRVING,TX,73221    \TRAINER       \06-JUN-20
2003\DHUNDUP TASHI            \416 W NORTHGATE DR PLANO, TX,78309  \TRAINER       \07-JUL-20
2004\MARVIN AMAYA             \3225 FOREST HILL DR ADDISON,TX,75109 \FITNESS INSTRUCTOR \01-JAN-21
2005\HARRIS FORD              \213 PIPE RD DALLAS,TX,76029        \FITNESS INSTRUCTOR \01-FEB-21

SQL>
```

3-Class

```
SQL> DESCRIBE CLASS;
```

Name	Null?	Type
CLASS_ID	NOT NULL	NUMBER(38)
CLASS_NAME	NOT NULL	VARCHAR2(50)
CLASS_DESCRIPTION	NOT NULL	VARCHAR2(100)
CLASS_INSTRUCTOR	NOT NULL	VARCHAR2(35)
CLASS_SCHEDULE	NOT NULL	VARCHAR2(100)
CLASS_CAPACITY	NOT NULL	NUMBER(38)
EMPLOYEE_ID	NOT NULL	NUMBER(38)

```
SQL> SELECT * FROM CLASS;
```

CLASS_ID\CLASS_NAME	\CLASS_DESCRIPTION	\CLASS_CAPACITY	EMPLOYEE_ID	\CLASS_INSTRUCTOR
3001\BOXING MON-WED 8:00AM - 9:00AM	\COMBAT AND WORKOUT	\10\	2002	\ANTHONY YEUNG
3002\DANCING FRI 5:00PM - 6:30PM	\HIP-HOP AND SALSA	\30\	2003	\DHUNDUP TASHI
3003\AEROBICS TUE-THUR 1:00PM - 3:00PM	\INTENSE WORKOUT	\20\	2004	\MARVIN AMAYA
3004\SWIMMING TUE-THUR 10:00AM - 11:00AM	\SWIMMING LESSONS	\20\	2005	\HARRIS FORD
3005\YOGA MON-WED 5:00PM - 6:00PM	\IMPROVING FLEXIBILITY AND MOBILITY	\15\	2005	\HARRIS FORD

4- Membership

```
SQL> DESCRIBE MEMBERSHIP;
```

Name	Null?	Type
PLAN_ID	NOT NULL	NUMBER(38)
PLAN_NAME	NOT NULL	VARCHAR2(40)
PLAN_DESCRIPTION	NOT NULL	VARCHAR2(50)
PLAN_COST	NOT NULL	NUMBER(6,2)
PLAN_BENEFIT	NOT NULL	VARCHAR2(100)

```
SQL> SELECT * FROM MEMBERSHIP;
```

PLAN_ID\PLAN_NAME	\PLAN_DESCRIPTION	\PLAN_COST	PLAN_BENEFIT
4001\SILVER	\BASIC ACCESS	\19.99	\ACCESS ONLY DURING STAFFED HOURS
4002\GOLD	\MID-TIER BENEFITS	\50.99	\24-HOURS ACCESS TO THE GYM + POOL ACCESS
4003\PREMIUM	\TOP-TIER PERKS	\75.99	\GOLD BENEFIT + 10 MONTHLY FREE SESSION

```
SQL>
```

5- Equipment

```
SQL> DESCRIBE EQUIPMENT ;
```

Name	Null?	Type
EQUIPMENT_ID	NOT NULL	NUMBER(38)
EQUIPMENT_TYPE	NOT NULL	VARCHAR2(50)
EQUIPMENT_CONDITION	NOT NULL	VARCHAR2(50)
PURCHASE_DATE	NOT NULL	DATE
LOCATION	NOT NULL	VARCHAR2(50)

```
SQL> SELECT * FROM EQUIPMENT;
```

EQUIPMENT_ID\EQUIPMENT_TYPE	\EQUIPMENT_CONDITION	\PURCHASE_DATE	LOCATION
5001\ELLIPTICAL STATIONARY	\WORKING	\02-AUG-21	\CARDIO ROOM
5002\TREADMILL	\OUT OF SERVICE	\02-JUL-22	\CARDIO ROOM
5003\SQUAT MACHINE	\WORKING	\02-NOV-24	\WEIGHT ROOM
5004\AB BENCH	\WORKING	\12-OCT-22	\WEIGHT ROOM
5005\LEG CURL MACHINE	\WORKING	\11-NOV-23	\CARDIO ROOM
5006\BICEP MACHINE	\WORKING	\01-JAN-24	\WEIGHT ROOM
5007\TRICEP MACHINE	\OUT OF SERVICE	\01-JAN-24	\WEIGHT ROOM

7 rows selected.

```
SQL>
```


Part E

1)

```
SQL> SELECT CUSTOMER_NAME,CUSTOMER_ADDRESS,CUSTOMER_PHONE FROM MEMBER;
```

CUSTOMER_NAME	\CUSTOMER_ADDRESS	\CUSTOMER_PHONE
CALEB ROE	\201 MAIN ST DALLAS TX 76039	\4698980114
ERIK HUNTLEY	\8851 MOON CT FT WORTH TX 75025	\4697571898
EMMA JOHNSON	\202 ALDERWOOD LANE OKLAHOMA CITY OK 73151	\2145137759
KELLY KLIEN	\587 SE RIVER STREET BROOKLYN NY 11228	\3149894459
JAMES SMITH	\11 DEVON STREET LOCKPORT NY 14094	\4157898899
JANE DOE	\7475 FULTON STREET BRANDON FL 33511	\2145456547
ROB SMITH	\427 S BRANCH AVENUE MIAMI BEACH FL 33139	\3130049030
ANTHONY FLORES	\8851 FOREST LN DALLAS TX 74039	\5159097789

8 rows selected.

2)

```
SQL> SELECT POINTS,CUSTOMER_PHONE FROM MEMBER ORDER BY POINTS DESC FETCH FIRST 5 ROWS ONLY;
```

POINTS	CUSTOMER_PHONE
100	4698980114
100	5159097789
100	2145456547
80	2145137759
80	4157898899

3)

```
SQL> SELECT CUSTOMER_STATE, MEMBERSHIP_TYPE, COUNT(*) AS NUM_CUSTOMERS
2 FROM MEMBER
3 GROUP BY CUSTOMER_STATE, MEMBERSHIP_TYPE
4 ORDER BY CUSTOMER_STATE, MEMBERSHIP_TYPE;
```

CUSTOMER_STATE	MEMBERSHIP_TYPE	NUM_CUSTOMERS
FLORIDA	GOLD	1
FLORIDA	PREMIUM	1
NEW YORK	GOLD	1
NEW YORK	SILVER	1
OAKHLOHOMA	GOLD	1
TEXAS	PREMIUM	2
TEXAS	SILVER	1

7 rows selected.

4)

```
SQL> SELECT CUSTOMER_NAME, MEMBERSHIP_TYPE, POINTS, PREFERENCE FROM MEMBER;
```

CUSTOMER_NAME	MEMBERSHIP_TYPE	POINTS	PREFERENCE
CALEB ROE	PREMIUM	100	2
ERIK HUNTLEY	SILVER	60	7
EMMA JOHNSON	GOLD	80	8
KELLY KLIEN	SILVER	60	4
JAMES SMITH	GOLD	80	3
JANE DOE	PREMIUM	100	9
ROB SMITH	GOLD	80	2
ANTHONY FLORES	PREMIUM	100	5

8 rows selected.

5)

When selecting a gold tier customer" **rob smith**" he had 2 preferences on the equipment and the points he earned is 80.

Now the recommendation would be to gain preference on the equipment and raise it up to 8 in order to gain "platinum" membership which would **unlock** all the platinum membership benefits.