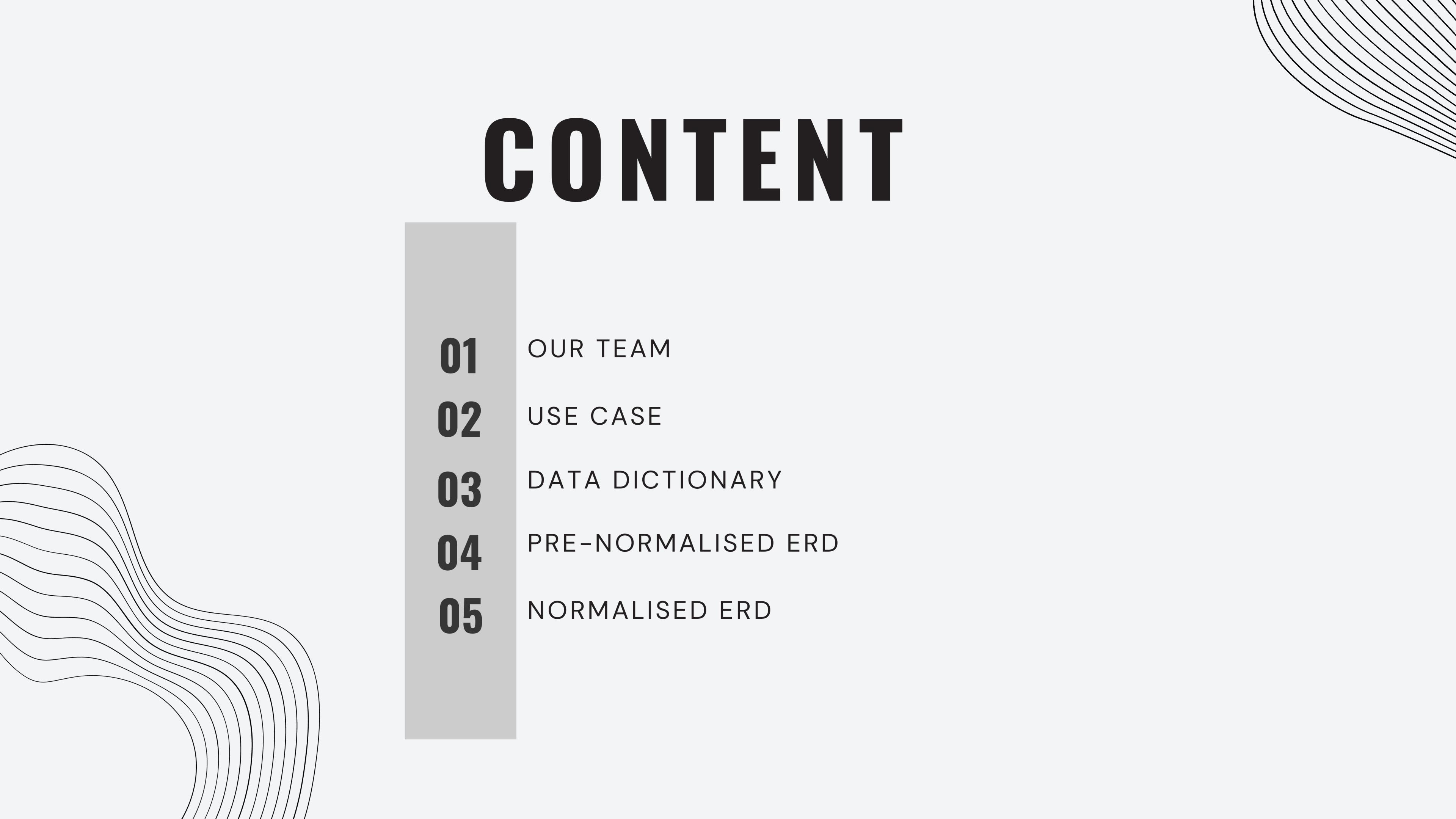




DATABASE SYSTEMS

CN5000

CONTENT

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 - 03** DATA DICTIONARY
 - 04** PRE-NORMALISED ERD
 - 05** NORMALISED ERD

OUR TEAM



Hard Joshi

Group Leader



Shyam Jagani

CTO



Jayrup
Nakawala

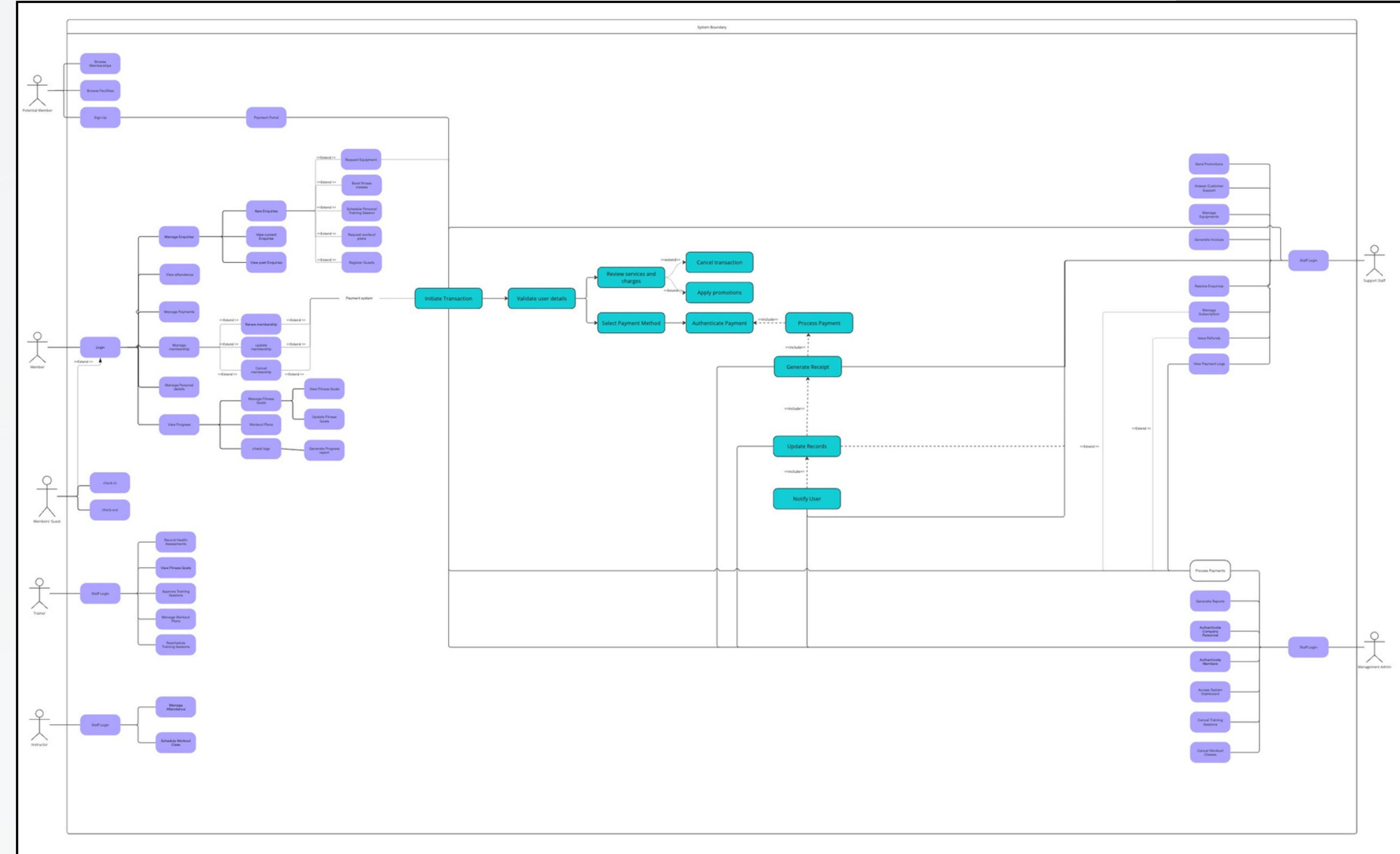
Research Head



Yogi Patel

SALES LEAD

USE CASE DIAGRAM





DATA DICTIONARY

	A	B	C	D	E	F
1	Table Name	Column Name	Data Type	Null	PK/FK	Description
2	Clients	Client_ID	NUMBER(8)	NOT NULL	PK	Unique identifier for each client
3	Clients	First_Name	VARCHAR2(100)	NOT NULL		Client's first name
4	Clients	Last_Name	VARCHAR2(100)	NOT NULL		Client's last name
5	Clients	Client_Category	VARCHAR2(10)	NOT NULL		Client's category (Member or Guest)
6	Clients	Gym_Visits	NUMBER(4)	NULL		Total number of gym visits
7	Clients	Relationship	VARCHAR2(50)	NULL		Relationship to a member (if applicable)
8	Clients	Contact	VARCHAR2(15)	NOT NULL		Primary contact number
9	Clients	Emergency_Contact	VARCHAR2(15)	NULL		Emergency contact number
10	Clients	Email	VARCHAR2(100)	NOT NULL	UNIQUE	Client's email address
11	Clients	Address	CLOB	NULL		Client's address
12	Membership	Membership_ID	NUMBER(8)	NOT NULL	PK	Unique identifier for each membership
13	Membership	Client_ID	NUMBER(8)	NOT NULL	FK	Foreign key referencing the Client table
14	Membership	Plan_Type	VARCHAR2(10)	NOT NULL		Membership plan type (Silver, Gold, Platinum)
15	Membership	Start_Date	DATE	NOT NULL		Membership start date
16	Membership	End_Date	DATE	NOT NULL		Membership end date
17	Membership	Status	VARCHAR2(10)	NOT NULL		Membership status (Active or Inactive)
18	Membership	Price	NUMBER(10,2)	NOT NULL		Membership price
19	Fitness_Classes	Class_ID	NUMBER(8)	NOT NULL	PK	Unique identifier for each fitness class
20	Fitness_Classes	Class_Name	VARCHAR2(100)	NOT NULL		Class name
21	Fitness_Classes	Class_Type	VARCHAR2(30)	NOT NULL		Class type (Core Exercises, Yoga, Pilates, Aerobic Fitness)
22	Fitness_Classes	Schedule	TIMESTAMP	NOT NULL		Class schedule
23	Fitness_Classes	Instructor_ID	NUMBER(8)	NOT NULL	FK	Foreign key referencing the Staff table
24	Fitness_Classes	Available_Slots	NUMBER	NOT NULL		Number of available slots in the class

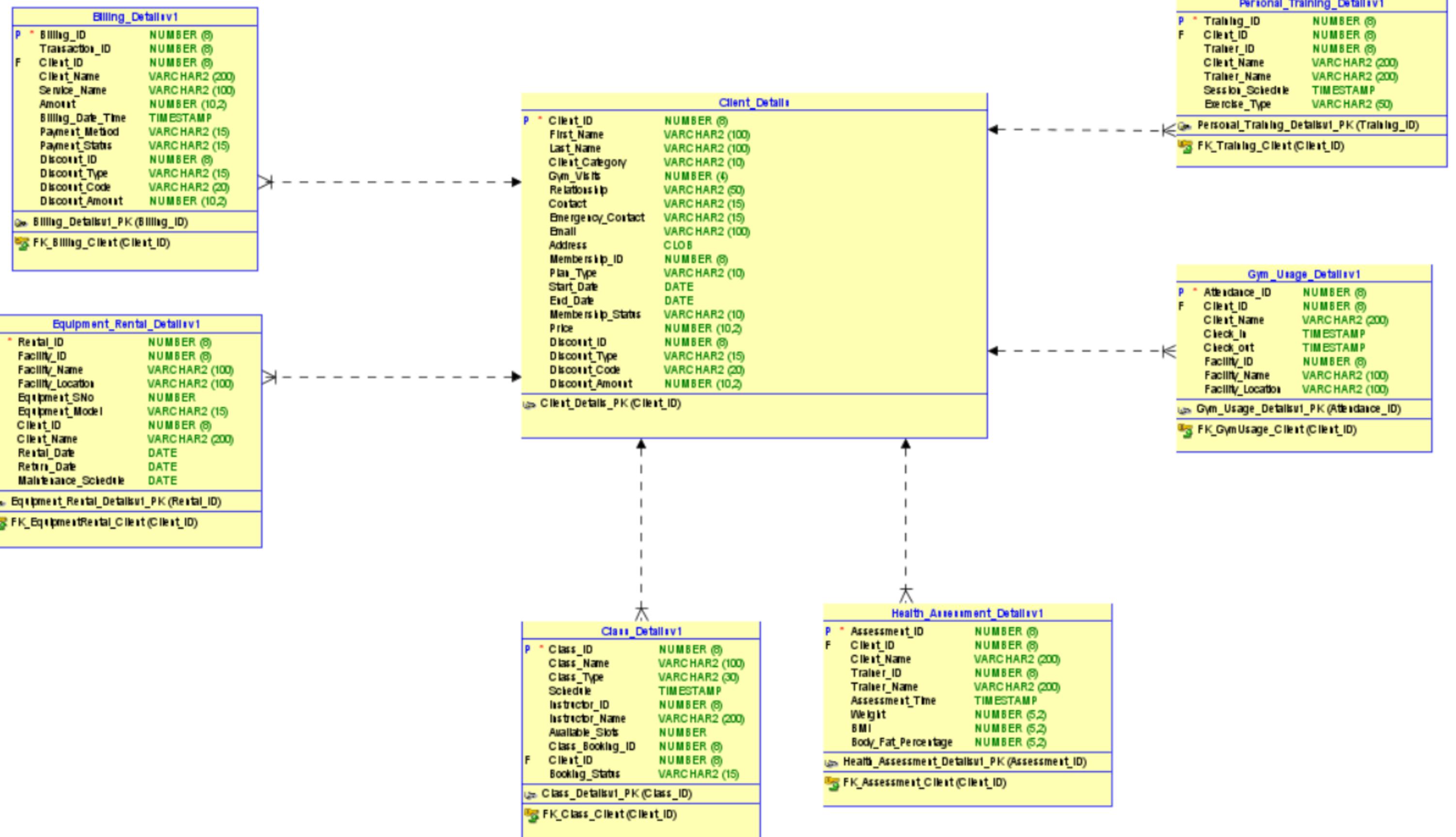
	A	B	C	D	E	F
25	Class_Bookings	Booking_ID	NUMBER(8)	NOT NULL	PK	Unique identifier for each class booking
26	Class_Bookings	Class_ID	NUMBER(8)	NOT NULL	FK	Foreign key referencing the Fitness_Classes table
27	Class_Bookings	Client_ID	NUMBER(8)	NOT NULL	FK	Foreign key referencing the Clients table
28	Class_Bookings	Status	VARCHAR2(15)	NOT NULL		Booking status (Confirmed, Canceled, Waitlisted)
29	Personal_Training_Sessions	Training_ID	NUMBER(8)	NOT NULL	PK	Unique identifier for each personal training session
30	Personal_Training_Sessions	Client_ID	NUMBER(8)	NOT NULL	FK	Foreign key referencing the Clients table
31	Personal_Training_Sessions	Trainer_ID	NUMBER(8)	NOT NULL	FK	Foreign key referencing the Staff table
32	Personal_Training_Sessions	Session_Schedule	TIMESTAMP	NOT NULL		Session schedule
33	Personal_Training_Sessions	Exercise_Type	VARCHAR2(50)	NOT NULL		Type of exercise (Cardio, Strength Training, Calisthenics, Other)
34	Health_Assessments	Assessment_ID	NUMBER(8)	NOT NULL	PK	Unique identifier for each health assessment
35	Health_Assessments	Client_ID	NUMBER(8)	NOT NULL	FK	Foreign key referencing the Clients table
36	Health_Assessments	Trainer_ID	NUMBER(8)	NOT NULL	FK	Foreign key referencing the Staff table
37	Health_Assessments	Assessment_Time	TIMESTAMP	NOT NULL		Assessment time
38	Health_Assessments	Weight	NUMBER(5,2)	NULL		Client's weight
39	Health_Assessments	BMI	NUMBER(5,2)	NULL		Client's BMI
40	Health_Assessments	Body_Fat_Percentage	NUMBER(5,2)	NULL		Client's body fat percentage
41	Gym_Attendance	Attendance_ID	NUMBER(8)	NOT NULL	PK	Unique identifier for each gym attendance record
42	Gym_Attendance	Client_ID	NUMBER(8)	NOT NULL	FK	Foreign key referencing the Clients table
43	Gym_Attendance	Check_in	TIMESTAMP	NOT NULL		Check-in time
44	Gym_Attendance	Check_out	TIMESTAMP	NULL		Check-out time
45	Gym_Attendance	Facility_ID	NUMBER(8)	NOT NULL	FK	Foreign key referencing the Facilities table

	A	B	C	D	E	F
46	Billing	Billing_ID	NUMBER(8)	NOT NULL	PK	Unique identifier for each billing record
47	Billing	Transaction_ID	NUMBER(8)	NULL		Transaction ID (if applicable)
48	Billing	Client_ID	NUMBER(8)	NOT NULL	FK	Foreign key referencing the Clients table
49	Billing	Service_Name	VARCHAR2(100)	NOT NULL		Service name (Membership, Class Booking, Personal Training, Health Assessment, Other)
50	Billing	Amount	NUMBER(10,2)	NOT NULL		Amount charged
51	Billing	Billing_Date_Time	TIMESTAMP	NOT NULL		Billing date and time
52	Billing	Payment_Method	VARCHAR2(15)	NOT NULL		Payment method (Credit Card, Debit Card, Cash, Direct Debit)
53	Billing	Payment_Status	VARCHAR2(15)	NOT NULL		Payment status (CONFIRMED, PENDING)
54	Billing	Discount_Applied	CHAR(1)	NOT NULL		Whether a discount was applied (Y/N)
55	Billing	Discount_Amount	NUMBER(10,2)	NOT NULL		Discount amount
56	Billing	Discount_ID	NUMBER(8)	NULL	FK	Foreign key referencing the Discounts table
57	Discounts	Discount_ID	NUMBER(8)	NOT NULL	PK	Unique identifier for each discount
58	Discounts	Discount_Type	VARCHAR2(15)	NOT NULL		Discount type (Promotion, Referral)
59	Discounts	Discount_Code	VARCHAR2(20)	NOT NULL	UNIQUE	Discount code
60	Discounts	Usage_Count	NUMBER	NOT NULL		Number of times the discount has been used
61	Discounts	Revenue_Loss	NUMBER(10,2)	NOT NULL		Total revenue loss due to the discount
62	Staff	Staff_ID	NUMBER(8)	NOT NULL	PK	Unique identifier for each staff member
63	Staff	First_Name	VARCHAR2(100)	NOT NULL		Staff member's first name
64	Staff	Last_Name	VARCHAR2(100)	NOT NULL		Staff member's last name
65	Staff	Staff_Role	VARCHAR2(15)	NOT NULL		Staff role (Trainer, Instructor, Support Staff, Admin)
66	Staff	Specialization	VARCHAR2(50)	NULL		Staff member's specialization (if applicable)
67	Staff	Contact	VARCHAR2(15)	NOT NULL		Staff member's contact number
68	Staff	Emergency_Contact	VARCHAR2(15)	NULL		Staff member's emergency contact number
69	Staff	Salary	NUMBER(10,2)	NOT NULL		Staff member's salary

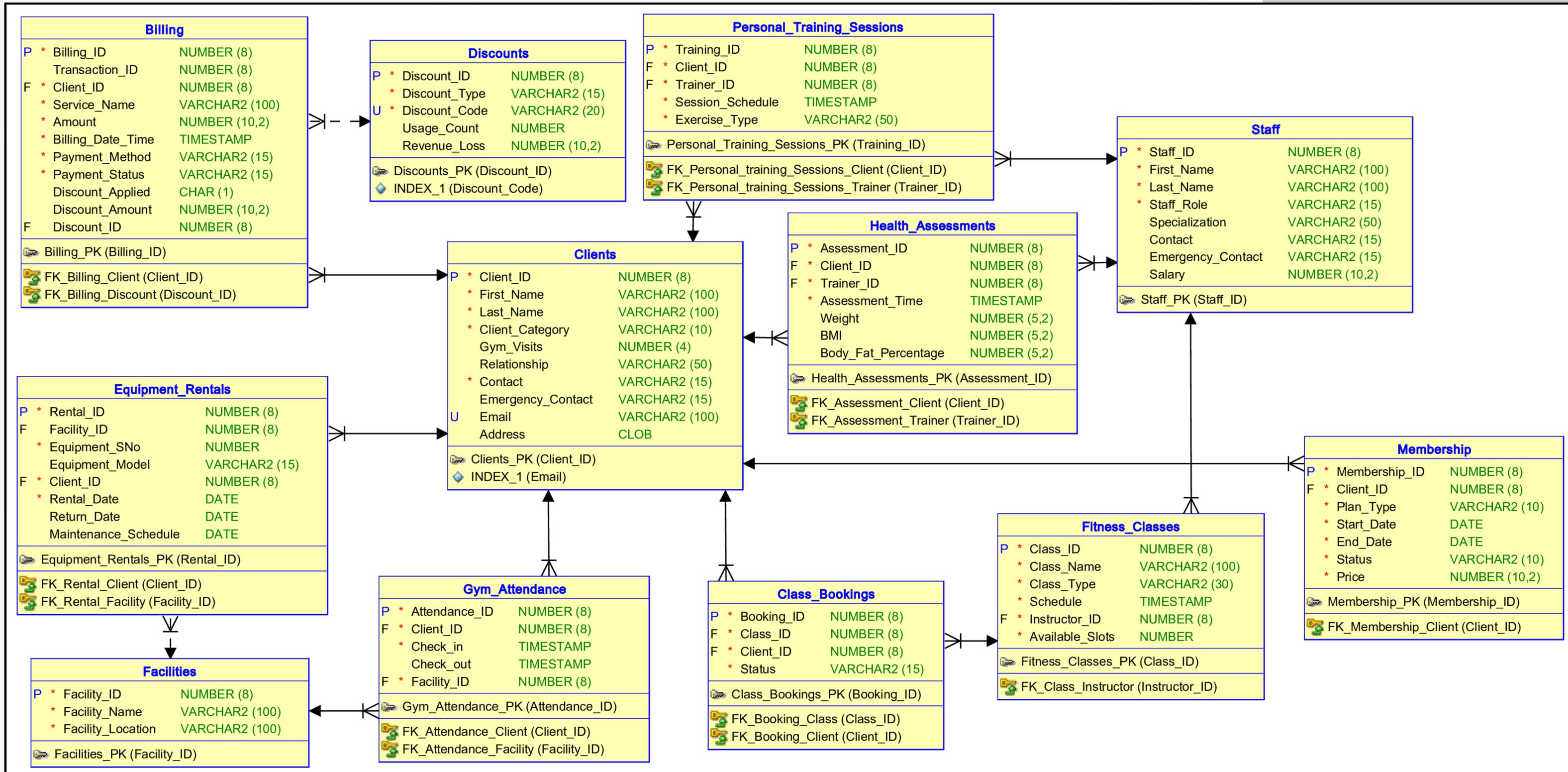
70	Facilities	Facility_ID	NUMBER(8)	NOT NULL	PK	Unique identifier for each facility
71	Facilities	Facility_Name	VARCHAR2(100)	NOT NULL		Facility name
72	Facilities	Facility_Location	VARCHAR2(100)	NOT NULL		Facility location
73	Equipment_Rentals	Rental_ID	NUMBER(8)	NOT NULL	PK	Unique identifier for each equipment rental
74	Equipment_Rentals	Facility_ID	NUMBER(8)	NOT NULL	FK	Foreign key referencing the Facilities table
75	Equipment_Rentals	Equipment_SNo	NUMBER	NOT NULL		Equipment serial number
76	Equipment_Rentals	Equipment_Model	VARCHAR2(15)	NULL		Equipment model
77	Equipment_Rentals	Client_ID	NUMBER(8)	NOT NULL	FK	Foreign key referencing the Clients table
78	Equipment_Rentals	Rental_Date	DATE	NOT NULL		Rental date
79	Equipment_Rentals	Return_Date	DATE	NULL		Return date
80	Equipment_Rentals	Maintenance_Schedule	DATE	NULL		Maintenance schedule



ERD



NORMALISED ERD





THANK YOU