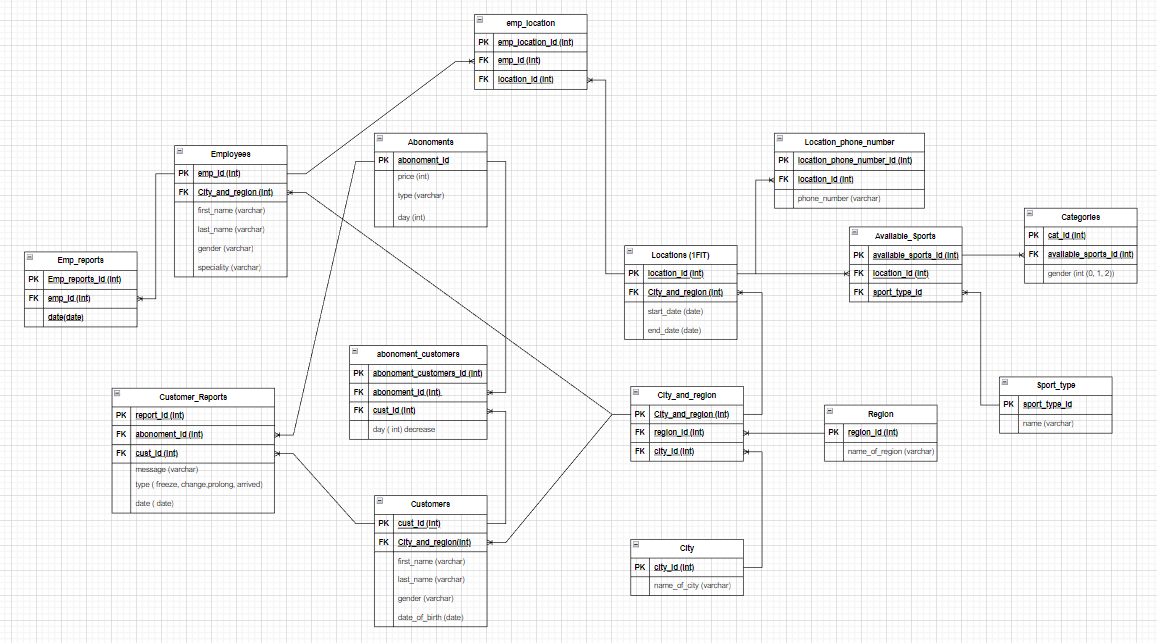
DATABASE 1FIT

Hello everyone.My team and I have chosen the project – 1fit

1fit is a network of gyms

Our ER diagram for database of 1fit is <https://drive.google.com/file/d/1VHRK-fvT0Wo6eBamQG3iucUtgTePvIJz/view?usp=sharing>  
  


Our ER diagram follows to requirments of 1NF, 2NF, 3NF  
1NF - Each table cell should contain a single value. Each record needs to be unique.  
2NF - Be in 1NF. Single Column Primary Key that does not functionally dependant on any subset of candidate key relation  
3NF - Be in 2NF. Has no transitive functional dependencies

**Our creation of tables is following:**

create table City (

city\_id int primary key,

name\_of\_city varchar2(32)

);

create table Region(

region\_id int primary key,

name\_of\_region varchar2(32)

);

create table City\_Region(

city\_region int primary key,

city\_id int references City(city\_id),

region\_id int references Region(region\_id)

);

create table Customers(

cust\_id int primary key,

city\_region int references City\_Region(city\_region),

first\_name varchar2(32),

last\_name varchar2(32),

gender varchar2(32),

date\_of\_birth date

)

create table Locations(

location\_id int primary key,

city\_region references City\_Region(city\_region),

start\_date date,

end\_date date

)

create table Abonoment\_customers(

abonoment\_customers\_id int primary key,

abonoment\_id int references Abonoments(abonoment\_id),

cust\_id int references Customers(cust\_id),

day int

)

create table Abonoments(

abonoment\_id int primary key,

price int,

type varchar2(32),

day int

)

create table Location\_phone\_number(

location\_phone\_number\_id int primary key,

location\_id int references Locations(location\_id),

phone\_number varchar2(32)

)

create table Reports(

report\_id int primary key,

abonoment\_id int references Abonoments(abonoment\_id),

cust\_id int references Customers(cust\_id),

message varchar2(32),

type varchar2(32),

dates date

)

create table Employees(

emp\_id int primary key,

city\_region int references City\_region(city\_region),

first\_name varchar2(32),

last\_name varchar2(32),

gender varchar2(32),

speciality varchar2(32)

)

create table Emp\_reports(

emp\_reports\_id int primary key,

emp\_id int references Employees(emp\_id),

dates date

)

create table Emp\_location(

emp\_location\_id int primary key,

emp\_id int references Employees(emp\_id),

location\_id int references Locations(location\_id)

)

create table Sport\_type(

sport\_type\_id int primary key,

sport\_type\_name varchar2(32)

)

create table Available\_sports(

available\_sports\_id int primary key,

location\_id int references Locations(location\_id),

sport\_type\_id int references Sport\_type(sport\_type\_id)

)

create table Categories(

cat\_id int primary key,

available\_sports\_id int references Available\_sports(available\_sports\_id),

gender varchar2(32)

)

**TRIGGERS**

create or replace trigger custReportArrive

before insert on reports

for each row

begin

if :new.type like 'arrived' then

update Abonoment\_customers

set day = day-1

where cust\_id = :new.cust\_id;

end if;

end;

create or replace trigger custReportProlong

before insert on reports

for each row

declare

temp int;

begin

select day into temp

from abonoments

where abonoment\_id = :new.abonoment\_id;

if :new.type like 'prolong' then

update Abonoment\_customers

set day = temp

where cust\_id = :new.cust\_id;

end if;

end;

create or replace trigger custReportChange

before insert on reports

for each row

declare

temp int;

begin

select day into temp from abonoments where abonoment\_id = :new.abonoment\_id;

if :new.type like 'change' then

update Abonoment\_customers

set day = temp

where cust\_id = :new.cust\_id;

end if;

end;

create or replace trigger CustNum

before insert on customers

for each row

declare

temp int;

begin

select count(\*) into temp from customers;

dbms\_output.put\_line('current number of rows: '||temp);

end;

create or replace trigger reportNum

before insert on reports

for each row

declare

temp int;

begin

select count(\*) into temp from reports;

dbms\_output.put\_line('current number of rows: '||temp);

end;

create or replace trigger employeeNum

before insert on employees

for each row

declare

temp int;

begin

select count(\*) into temp from employees;

dbms\_output.put\_line('current number of rows: '||temp);

end;

**EXCEPTIONS**

declare

c\_name customers.first\_name%type := 'Abay';

c\_lname customers.last\_name%type := 'Baxa';

symbol\_invalid exception;

begin

if c\_name like '%@%' or c\_lname like '%@%' then

raise symbol\_invalid;

else

dbms\_output.put\_line('Registration successful.');

end if;

exception

when symbol\_invalid then

dbms\_output.put\_line('First name or last name has invalid symbol');

when others then

dbms\_output.put\_line('Error!');

end;

declare

c\_lname customers.first\_name%type := 'Abay';

less\_symbol\_invalid exception;

begin

if c\_lname not like '%\_\_\_\_%' then

raise less\_symbol\_invalid;

else

dbms\_output.put\_line('Registration successful.');

end if;

exception

when less\_symbol\_invalid then

dbms\_output.put\_line('Less than 4 characters');

when others then

dbms\_output.put\_line('Error!');

end;

declare

c\_id customers.cust\_id%type;

c\_name customers.first\_name%type;

c\_lname customers.last\_name%type;

begin

select first\_name, last\_name into c\_name, c\_lname

from customers

where cust\_id = c\_id;

dbms\_output.put\_line('Name: '|| c\_name);

dbms\_output.put\_line('Last name: '|| c\_lname);

exception

when no\_data\_found then

dbms\_output.put\_line('No such customer!');

when others then

dbms\_output.put\_line('Error');

end;

declare

city\_name city.name\_of\_city%type := 'A';

city\_invalid exception;

begin

if city\_name is null then

raise city\_invalid;

else

select name\_of\_city into city\_name

from city

where name\_of\_city = city\_name;

end if;

exception

when city\_invalid then

dbms\_output.put\_line('Fill in the fields');

when others then

dbms\_output.put\_line('Successfully');

dbms\_output.put\_line('Name of city: '|| city\_name);

end;