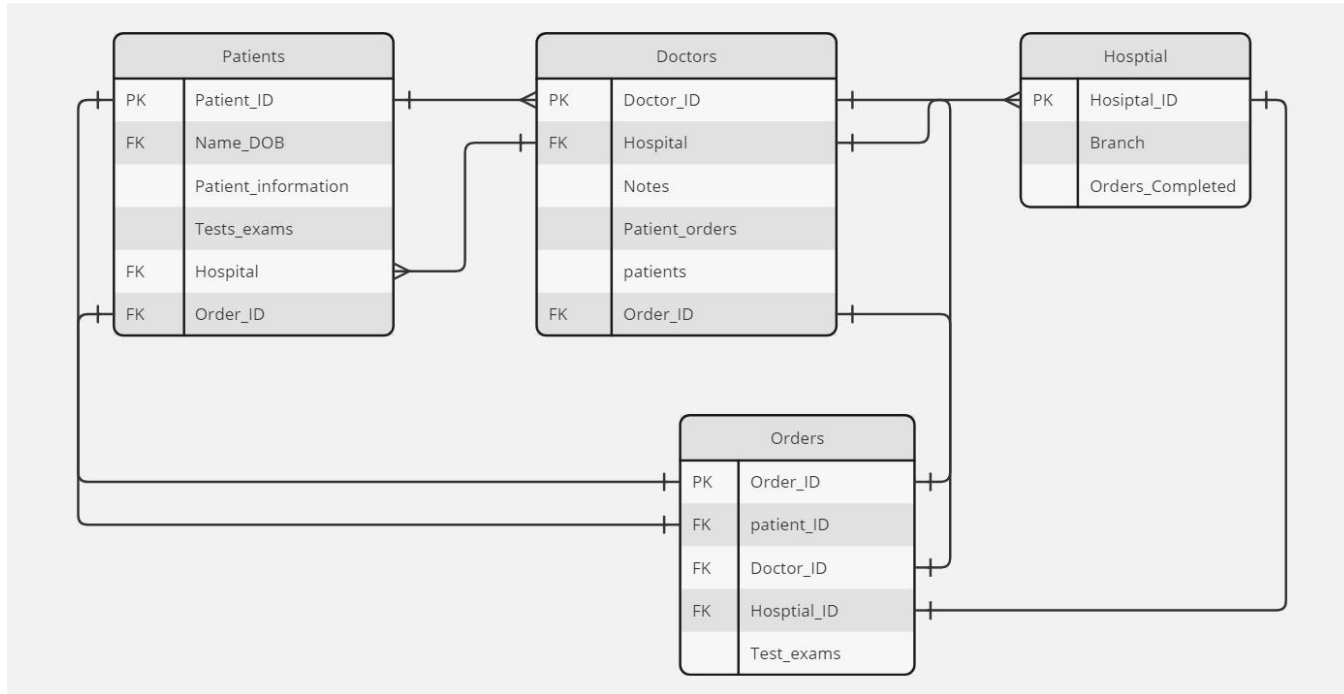


# Assignment 5

Ashleigh Frank

## Question 2



**Question 3:** We can convert any weak entity set to a strong entity set by simply adding appropriate attributes.  
Why, then, do we have weak entity sets?

Data Integrity, Normalization, efficiency,

Reduce redundancy

Helps break down data structures into smaller more manageable components

## Question 4 Part A

- a. Find ID and name of each employee who lives in the same city as the location of the company for which the employee works.

Select employee.ID, employee.person\_name from employee e join works w on e.ID=w.ID join company c on w.company\_name = c.company\_name where c.city = e.city

- b. Find ID and name of each employee who lives in the same city and on the same street as does her or his manager.

Select employee.ID, employee.person\_name from employee e join manages m on e.ID = m.ID where e.city = m.city AND e.street = m.street

- c. Find ID and name of each employee who earns more than the average salary of all employees of her or his company

Select employee.ID, employee.person\_name from employee e join work w on e.ID = w.ID join ( select company\_name, AVG(salary),  
as avg\_salary from w group by company\_name) as avg\_salary on w.company\_name = avg\_salary.comapny\_name where w.salary >  
avg\_salary

## Question 4 Part B

Consider the following SQL query that seeks to find a list of titles of all courses taught in Spring 2017 along with the name of the instructor:

```
select name, title from instructor natural join teaches natural join section natural join course where semester = 'Spring' and year = 2017
```