The pharmacist will be able to …

1. Search for customers that are currently taking a certain drug
    a. Ex: find the names and usernames of all customers that are taking 'Humira':

```
WITH
    r1 as (
            SELECT *
            FROM customer,prescribed
            WHERE customer.username = prescribed.customer_username)
SELECT r1.name, customer_username
FROM r1 JOIN drug USING(ndc)
WHERE drug.name = 'Humira';
```

2. Search for customers that see a certain doctor
    a. Ex: find the names and usernames of all customers that have seen Dr. Micah Blevins:

```
WITH
    r1 as (
            SELECT *
            FROM customer,diagnosis
            WHERE customer.username = diagnosis.customer_username)
SELECT r1.name
FROM r1,doctor
WHERE r1.doctor_username = doctor.username AND doctor.name = 'Micah Blevins'
GROUP BY r1.name;
```

3. Find all of the drugs that a certain customer has taken
    a. Ex: find all drugs that Rhia Dillon has taken:

```
WITH
    r1 as (
            SELECT *
            FROM customer,prescribed
            WHERE customer.username = prescribed.customer_username)
SELECT drug.name, drug.ndc
FROM r1 JOIN drug USING(ndc)
WHERE r1.name = 'Rhia Dillon';
```

4. Find all of the locations belonging to the chain where the pharmacist works
    a. Ex: list the addresses of all the locations of the chain where Teresa Crawford works:

```
SELECT address, city, state, zipcode
FROM pharmacist,location
WHERE pharmacist.name = 'Teresa Crawford' AND pharmacist.location_stock_id = location.stock_id;
```

5. Take inventory of the pharmacy where they work
    a. Ex: find all the drugs and their amounts that are in stock at the location where Leopold Cortez works:

```
WITH
```

```
        r1 as (
                SELECT *
                FROM stock,drug
                WHERE stock.drug_ndc = drug.ndc)
SELECT r1.name, r1.ndc, r1.amount
FROM r1,pharmacist
WHERE pharmacist.name = 'Leopold Cortez' AND pharmacist.location_address = r1.address;
```

The customers will be able to …

1. View their own medical history
   a. Search for all diseases that Jordi Holloway has had or currently has
      select disease_name from diagnosis join customer on
      customer_username=username where name = 'Jordi Holloway';
   b. Search for all diseases that Jordi Holloway with username 'Holloway85' had
      i. select disease_name from diagnosis join customer on
         customer_username=username where username= 'Holloway85';

2. Search for details of certain drugs
   a. Search for the side effects of Amoxil:
      select side_effects from drug where name = 'Amoxil';
   b. Search for dosage of Amoxil:
      select dosage from drug where name = 'Amoxil';
   c. Show all drugs that can treat HIV:
      select name, disease_name from drug join treats on ndc = drug_ndc
      whedisease_name = 'HIV';

3. Search to see if a certain drug is available at a certain store
   a. Show a list of stores that carry drug Amoxil
      select stock_id, address from stock join drug on drug_ndc = ndc where
      amount >0 and name = 'Amoxil';
4. Search for doctors that work at a certain hospital
   a. Show a list of doctors that work at Canton-Potsdam Hospital
      select name from doctor where hospital_name = 'Canton-Potsdam Hospital';
5. Search for doctors with certain specializations
   a. Show a list of doctors that specialize in Diagnostic radiology
      select name from doctor where specialization = 'Diagnostic radiology';

6. Show all of the customer's own prescriptions
   a. Show a list of prescriptions that user Sharpe17 has
      select * from prescription where customer_username = 'Sharpe17';
   b. Show a list of drugs that user Sharpe17 need to take as well as their dosage
      select name, dosage from prescribed natural join drug where
      customer_username = 'Sharpe17';

7. Find closest stores…
   a. Search for all pharmacies that are in Clinton, NY

```
                  select stock_id from location where city = 'Clinton' and state = 'NY';
```

The doctors will be able to:
1. View the medical history of their patients
    a. Show the past diseases or conditions of Jane Doe

```
select name
from drug natural join prescribed
where customer_username = 'Dillon79' and doctor_username = 'Murray68' and
diagnosis_date = '2019-02-05';
```

2. Find where a patient can buy a certain drug.
    WITH

```
r1 as(
        select *
        from treats
        where drug_ndc='50090-0308'
        ), -- disease_name, ndc

r2 as(
        select *
        from r1 natural join stock
        where r1.drug_ndc = stock.drug_ndc)
select *
from r2;
```