

Project Description

Having both come from healthcare related fields, we understand having an adequate amount of medications available is a top priority. Running out of medications or not having enough in stock can be a huge problem for patients who rely on medications on a routine basis. At the same time, we understand it can be difficult for healthcare workers such as pharmacists to keep track of an overwhelmingly large inventory of medications. Therefore, the goal of this project is to create a medication monitoring system that alerts the user when a medication falls below a threshold stock quantity in addition to having basic functionalities such as querying medication, refilling medication and restocking medication.

User Personas

- Yao, the medication monitor system designer/creator
- Aaron, the medication monitor system designer/creator
- Ben, the pharmacist

User Stories

- As one of the designers/creators, Yao would like to allow users to query for specific medications in the database and obtain information regarding the queried medication such as name, id (associated with the medication) and stock. Additionally, if a stock falls below a threshold, Yao would like to highlight the returned stock information in red. Otherwise, the stock information will be highlighted in green.
- As one of the designers/creators, Yao understands that pharmacists are very busy. As such, he would like to make it easier for pharmacists to keep track of medications that are low in stock. More specifically, Yao would like to create a dashboard displaying all medications that are considered low in stock (i.e stock is below the threshold). If a medication that is originally low in stock is restocked such that the stock is no longer below the threshold, the medication will be removed from the dashboard.
- As one of the designers/creators, Aaron would like to let the user refill medication for patients by filling out a refill form. This refill form will require the users to fill out necessary information such as name, id, and amount of medication to order. Additionally, Aaron would like to notify the user whether the order is successfully processed or not. If the order is successful, Aaron wants the database to reflect the new stock.
- As one of the designers/creators, Aaron would like to let the user restock medication for all medications but more importantly for medications that appear on the dashboard. Similarly, the user is required to fill out a restock form with necessary information such as name, id, manufacturer and amount of medication to order. Additionally, Aaron would like to notify the

user whether the order is successfully processed or not. If the order is successful, Aaron wants the database to reflect the new stock. Lastly, if the medication does not exist in the database, Aaron would like to automatically insert the new medication into the database.

- As one of the designers/creators, Aaron understands the importance of security; not just anyone should be able to order medication. Aaron would like only the pharmacist to be able to place medication order (refill or restock). To do so, Aaron would like the pharmacist to sign in before being able to order.
- As a pharmacist, Ben would like be able to query for a specific medication in the database. He would also like to be able to order medications for customers and be able to fill out a form for restocking medications that are low in stock. Ben is incredibly busy so he would also like to be notified whenever any medications fall below a threshold stock to restock without having to constantly check the inventory.

Design mockups

List of Design mockups:

- Login Page
- Query Page
- Refill Page
- Restock Page
- Monitor Dashboard Page

See design mockups on next page.

Have light color body
background

Login

Username:

Password:

Login

Want a navbar on each page for easier navigation

Name of monitor system

Refill

Navigation bar
Restock

Monitor

Have light color body background

Query a Medication

Medication:

☒ Query by Name ☐ Query by Id

Look up Medicine
(button)

Start Query
Area to display results

Want a navbar on each page for easier navigation

Name of monitor system

| | | |
|----------------|---------|---------|
| Navigation bar | | |
| Refill | Restock | Monitor |

Have light color body background

Refill Form

Type:

Medication Name:

Medication Id:

Quantity:

Reset

Place Order

Area to display feedback message to users (ex. is order successful)

Want a navbar on each page for easier navigation

Name of monitor system

Refill

Navigation bar
Restock

Monitor

Have light color body background

Restock Form

Medication Name:

Medication Id:

Manufacturer:

Quantity:

Reset

Place Order

Area to display feedback message
to users (ex. is order successful)

Name of monitor system

Want a navbar on each page for easier navigation

Refill

Navigation bar
Restock

Monitor

Have light color body background

Medication name
current stock:
Manufacturer:
Medication Id:

Display medications low in stock

Medication name
current stock:
Manufacturer:
Medication Id: