CS 6440 Project Manual

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Team Name

- Health Hacker

Team Members

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Project Name

App for Consolidating and Comparing Prices on Different Discount Drug Programs

GitHub link

https://github.gatech.edu/gt-hit-spring2018/APP

Introduction

A desktop web application where a user can compare drug prices among the major three pharmacies (Walmart, CVS, Walgreen) along GoodRx discount program. User can use this app either by signing in or not signing in.Once signing up with FHIR ID , users can also get access to their medical history stored in the FHIR server to get the information of their prescribed drugs. Besides, user can view their personal information and search history.

This document guides a user through the necessary steps to find the drug prices and get access to the account once signing up.

App running environment

For developers, see "Special Instructions - Health Hacker.md" for more information on how to run this app via Docker and Flask.

For users, the app is compatible with most desktop web browsers (Google Chrome, FireFox, Safari, Internet Explorer).

Some limitations of this app, see "Limitations" in the file "Special Instructions - Health Hacker.md".

How to use this web app

Search (no login)

User can search the drug without login required.

- Steps
  - Under the input box, type drug's name, then click the "Search" button (Figure 1)
  - Three drop down lists will be shown and user can select drug form, dosage, and quantity, once confirmed, click the "Add" button (Figure 2). If the drug is not in our current database, a pop-up window shows the alert information: "sorry, we don't have information for this drug" (Figure 3).
  - The webpage will return a search list showing the drugs that the user is looking for. User can search more than one drug by repeating step 1-2. User can also delete drug from the list (Figure 4).
  - Click "Find the Lowest Price" and the search results would be shown.
- Example

Figure 1:

FireRx

Find the lowest price for your prescriptions

simvastatin   Search

Figure 2:

FireRx

Find the lowest price for your prescriptions

simvastatin   Search

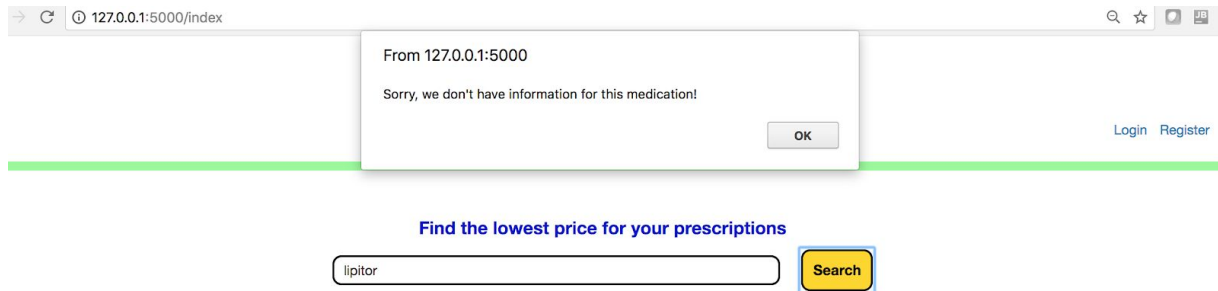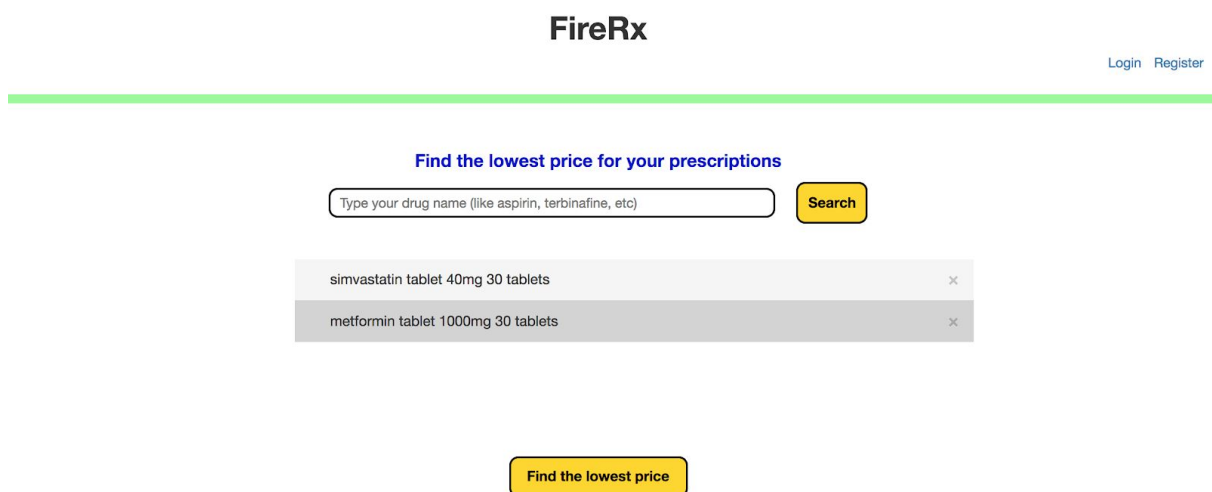Select Form | tablet ⬍   Select Dosage | 40mg ⬍   Select Quantity | 30 tablets ⬍   Add

Figure 3:

Figure 4:

Search Results (no login)

If user searches for multiple drug prices, the search results will show separate drug prices from different stores and discounted drug prices. In addition, it also shows the combined price of drugs. The tab "Individual drug price" shows separate drug prices and the tab "Combined drug price" shows the summed price of drug from each store.

Individual drug price

- Steps
  - Individual drug price is the default page once user click "Find the Lowest Price" button in the search page (Figure 5).
  - User can click the either "Pharmacy", "Original Price", "with Coupon" to sort them ascending or descending (Figure 6).
- Example

Figure 5:

FireRx

Login   Register

Individual Drug Price   Combined Drug Price   Start a new search

simvastatin tablet 40mg 30 tablets

Name	Original Price	With Coupon
Walmart	28	13.01
CVS	29	18.99
Walgreen	19.88	15

metformin tablet 1000mg 30 tablets

Name	Original Price	With Coupon
Walmart	4	4
CVS	14	11.06
Walgreen	8	5

Figure 6:

FireRx

Login   Register

Individual Drug Price   Combined Drug Price   Start a new search

simvastatin tablet 40mg 30 tablets

Name	Original Price	With Coupon ▲
Walmart	28	13.01
Walgreen	19.88	15
CVS	29	18.99

metformin tablet 1000mg 30 tablets

Name	Original Price	With Coupon ▲
Walmart	4	4
Walgreen	8	5
CVS	14	11.06

Combined drug price

- Steps
  - On the "Individual drug price" page, click the tab "Combined drug price", a new window will show the summed prices of multiple drugs searched by user (Figure 7).
  - User can click the either "Pharmacy", "Original Price", "with Coupon" to sort them ascending or descending (Figure 8).
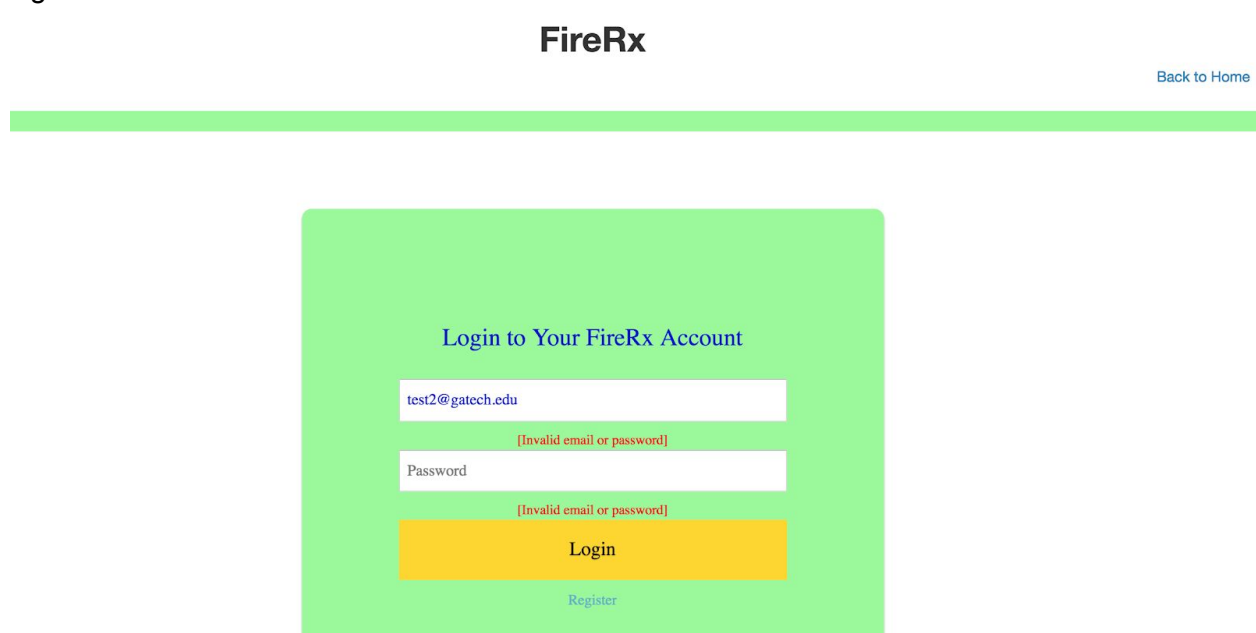
- Example

Figure 7:

Figure 8:

Register

User can sign up to enjoy more services from this app. Once user signs up and logs in, he/she will be able to see his/her own basic information, searched meds history, and medication history.

- Steps
  - On the main page, click the link "Register"
  - Input email address (required, if input wrong format, alert shows up)
  - Input Birthday (if input wrong format, alert shows up)
  - Input FHIR Patient ID (required)
  - Create a password (required)
  - Retype the password (required, if input different password, alert shows up)
  - Click "Sign Up" button (Figure 9)
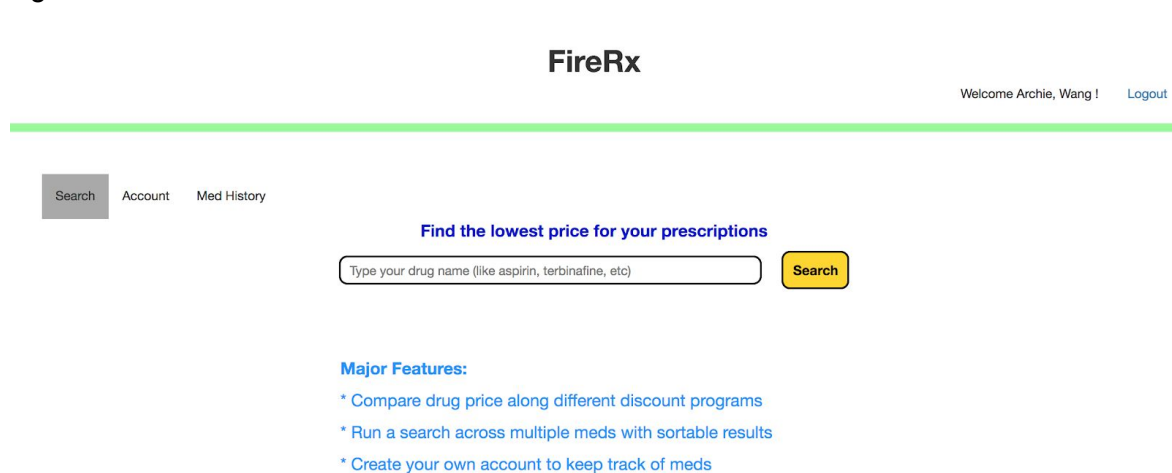 - The webpage directs to the search page (logged in).
- Example

Figure 9:

Sign Up for My Rx   Already a member? Sign in

Major Features

✔ Compare drug price along different discount programs

✔ Run a search across multiple meds with sortable results

✔ Create your own account to keep track of meds

test@gatech.edu

Jane

Middle Name

Young

1975-02-02

29390283

Password

Retype Password

Sign Up

Log in

- Steps
    - On the main page, click the link "Log in"
    - Enter email address
    - Enter password
    - Click the button "Login" (Figure 10)
    - The webpage directs to the search page (logged in). If user inputs invalid email/password, or wrong password, or there is no account in the database, alert shows up (Figure 11).
- Example

Figure 10:

FireRx

Back to Home

Login to Your FireRx Account

Email

Password

Login

Register

Figure 11:

FireRx

Login to Your FireRx Account

test2@gatech.edu

[Invalid email or password]

Password

[Invalid email or password]

Login

Register

Search (logged in)

The functionality of search with logged in is similar to the search without logged in. Please reference to the steps in section "Search (no login)". The main difference is there are two more tabs "Account" and "Med History" that user can get access to (Figure 12).

- ● Example:

Figure 12:

FireRx

Welcome Archie, Wang !   Logout

Search   Account   Med History

Find the lowest price for your prescriptions

Type your drug name (like aspirin, terbinafine, etc)   Search

Major Features:

* Compare drug price along different discount programs

* Run a search across multiple meds with sortable results

* Create your own account to keep track of meds

Search Results (logged in)

The functionality of search results with logged in is similar to the search results without logged in. Please reference to the steps in section "Search (no login)". The main difference is user can click "Back to the main menu" to be directed to search page with logged in.
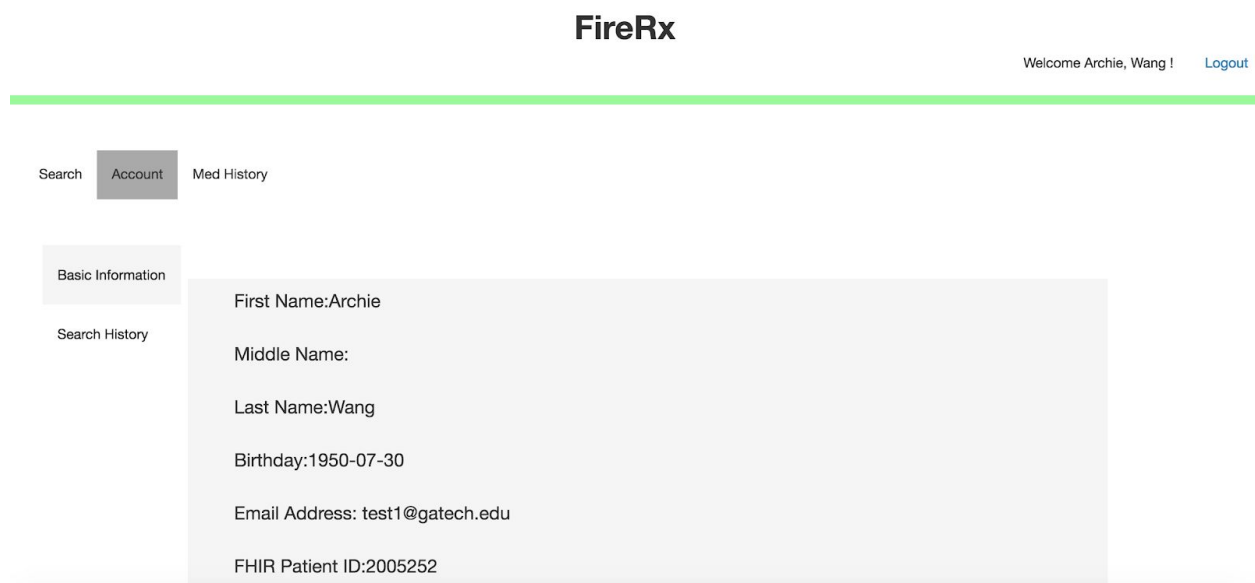
Account (logged in)

Account contains two major parts. The default page is "Basic Information" which shows the user's profile. The "Searched Medication" shows the search history.

Basic Information

- Steps
  - It is the default page once user clicks the "Account" link.
  - It shows the user's name, birthday, email, and FHIR patient id (Figure 13).
  - The webpage directs to the search page (logged in).
- Example

Figure 13:

Searched Medications

- Steps
  - Under the "Account" page, click the tab "Searched Medications"
  - The new page shows searched medication, date, best price, and store (Figure 14).

● Example

Figure 14:

FireRx

Welcome Archie, Wang !   Logout

Search   Account   Med History

Basic Information

Search History

Searched Medication	Date	Best Price	Store
terbinafine tablet 250mg 30 tablets	2018-Apr-21	4	Walmart
Lithium Bromide capsules 300mg 90 capsules	2018-Apr-21	4	Walmart

Med History (logged in)

● Steps
   ○ Once user signs in, the tab "Med History" is shown on the navigation bar
   ○ Click the tab "Med History"
   ○ The page shows user's medication history, status, dosage & usage (Figure 15)
● Example

Figure 15:

FireRx

Welcome Archie, Wang !   Logout

Search   Account   Med History

Medication	Status	Dosage And Usage
zolpidem 5mg sublingual tablet	active	1 tab before bed
beclomethasone dipropionate 40mcg aerosol	active	2 puffs twice daily
terbinafine 250mg	active	1 tab once daily
isosorbide mononitrate 20mg	active	once daily at bedtime
gabapentin 600mg	active	twice daily
lisinopril 20mg	active	once daily