

Illinois Institute of Technology

CSP 584 – Enterprise Web Applications

Team 3

Project Name: HEALTH HUB

(Web Application to search for Health clubs, Doctors, Pharmacy,
Hospitals, Health Insurances)

Team Members

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1. Home Page

The screenshot shows the Health Hub homepage. At the top right is a search bar with placeholder text "Eg: Doctors, Hospitals...". Below the search bar are links for "Login" and "Register". The main content area features a large "Welcome to Health Hub" banner with the tagline "Your one stop encyclopedia for medical services! Better Information. Better Health". To the left of the banner is a sidebar with sections for "Features" (Trending, Trending News on Twitter) and "Search For" (Doctors, Hospitals, Health Insurances, Health Clubs, Pharmacy). A decorative graphic of a hand holding a pen over a circular collage of words like "GIVE", "HEALTH", "WORK", "LIFE", "GIVING", etc., is centered below the banner.

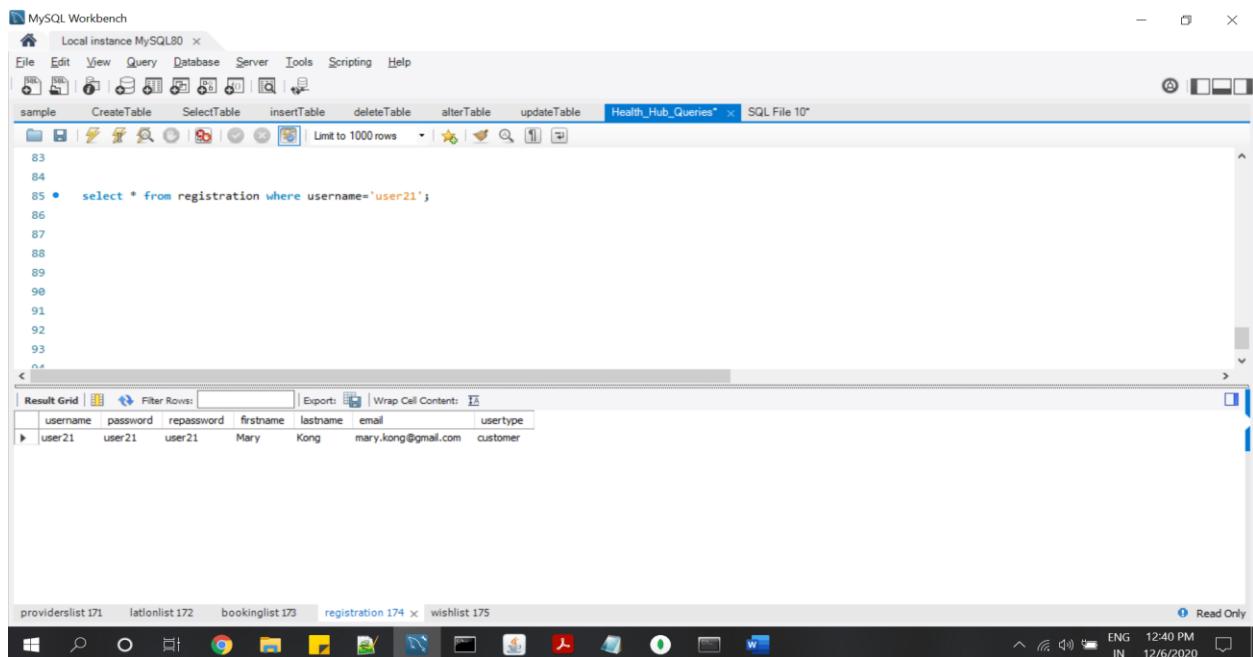
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2. Registration Page

The screenshot shows the Health Hub registration page. It has a similar header and sidebar to the home page. The main content is a "Register Here" section containing a form with fields for User ID, Password, Re-Password, First Name, Last Name, Email, and User Type (with a dropdown menu showing "Customer"). A "Create User" button is at the bottom of the form. A decorative graphic of a hand holding a pen over a circular collage of words like "GIVE", "HEALTH", "WORK", "LIFE", "GIVING", etc., is centered above the form.

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3. Login Page – user21 is registered & same is added to MYSQL



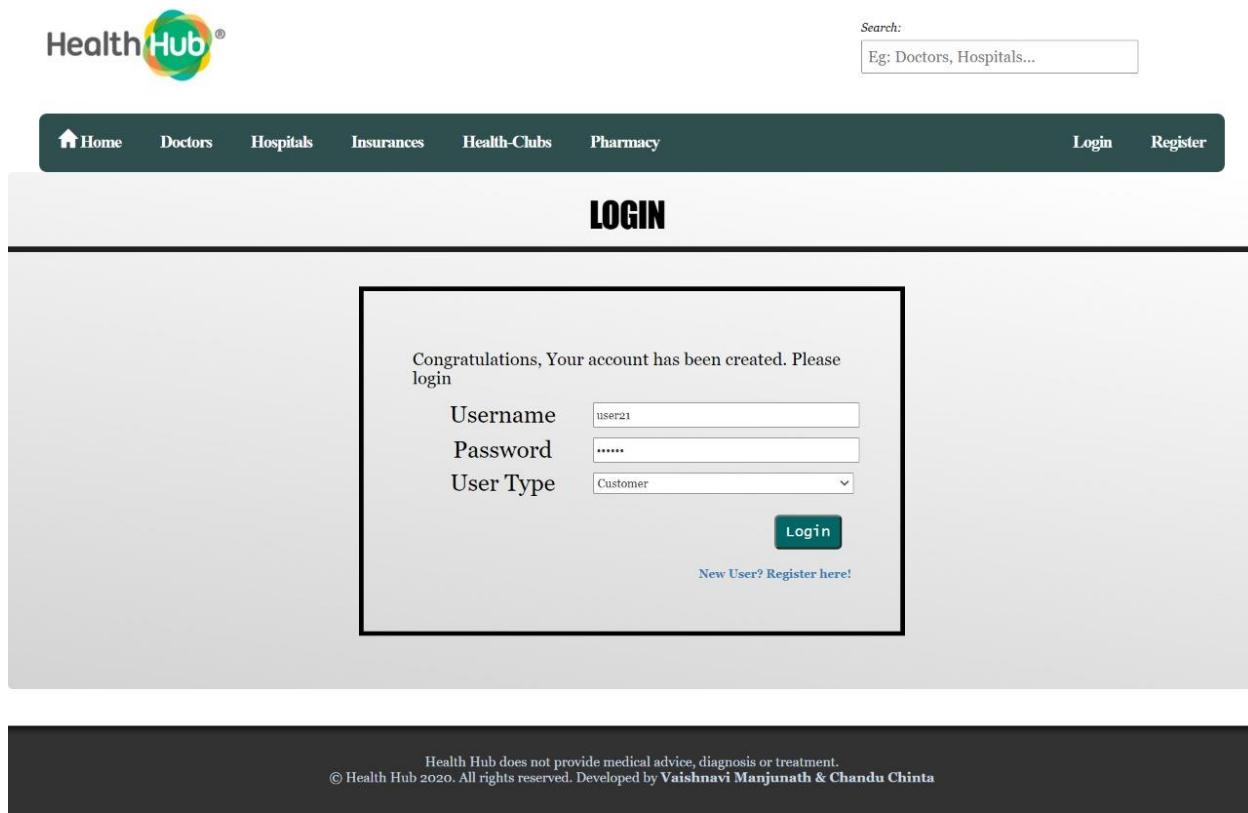
The screenshot shows the MySQL Workbench interface. A query window displays the following SQL code:

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85 • select * from registration where username='user21';
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The result grid shows one row of data:

username	password	repassword	firstname	lastname	email	usertype
user21	user21	user21	Mary	Kong	mary.kong@gmail.com	customer

The taskbar at the bottom shows several open windows, including providerslist, lationlist, bookinglist, registration (the current active window), and wishlist.



The screenshot shows the Health Hub login page. At the top, there is a navigation bar with links for Home, Doctors, Hospitals, Insurances, Health-Clubs, Pharmacy, Login, and Register. The main content area has a heading "LOGIN". Inside a form box, a message says "Congratulations, Your account has been created. Please login". The form fields are:

- Username: user21
- Password:
- User Type: Customer

A "Login" button is located below the form. At the bottom of the page, there is a footer with the text: "Health Hub does not provide medical advice, diagnosis or treatment. © Health Hub 2020. All rights reserved. Developed by Vaishnavi Manjunath & Chandu Chinta".

4. After logging using header navigation pages we can find doctors, hospitals, etc based on zipcode

The screenshot shows the Health Hub homepage. On the left, there's a sidebar with 'Features' (Trending, Trending News on Twitter) and 'Search For' (Doctors, Hospitals, Health Insurances, Health Clubs, Pharmacy). The main content area has a search bar with placeholder text 'Eg: Doctors, Hospitals...' and a button labeled 'Search Doctor near you!'. Below the search bar is a text input field containing '60616' and a 'Continue' button. At the bottom of the page, a dark footer bar contains the text 'Health Hub does not provide medical advice, diagnosis or treatment. © Health Hub 2020. All rights reserved. Developed by Vaishnavi Manjunath & Chandu Chinta'.

5. All Doctors near to given zipcode will be fetched and displayed on google maps

The screenshot shows the Health Hub homepage again. The sidebar and top navigation are identical to the previous screenshot. The main content area now displays a Google Map titled 'Doctor's Near 60616'. The map shows various neighborhoods in Chicago, with several red location pins indicating doctor offices. A callout box on the map provides details for two doctors: 'Laura Bailey' (Family Phys) at 'Robin Tong' (General Physician) located at '2901 S King Dr, Chicago, IL, 60616'. The map includes standard Google Map controls for zooming and panning. At the bottom of the page, a dark footer bar contains the text 'Health Hub does not provide medical advice, diagnosis or treatment. © Health Hub 2020. All rights reserved. Developed by Vaishnavi Manjunath & Chandu Chinta'.

6. By pressing the Name, detailed page will be shown where user can write review, view review, book appointment, add to wishlist

The screenshot shows the HealthHub homepage with a search bar at the top right. Below it is a navigation bar with links for Home, Doctors, Hospitals, Insurances, Health-Clubs, Pharmacy, Hello User21, Account, Wishlist, and Logout. On the left, there's a sidebar with sections for Features (Trending, Trending News on Twitter) and Search For (Doctors, Hospitals, Health Insurances, Health Clubs, Pharmacy). The main content area features a profile for Dr. Laura Bailey, a Family Physician with 11 years of experience, located at 2525 S Michigan Avenue, Chicago, IL, 60616. It includes buttons for View Review, Write Review, Add to wishlist, and Book an Appointment Now. A note below states: "Due to Covid19, All in-person visit are made through appointments only!"

7. When clicked Write Review

The screenshot shows the HealthHub homepage again, with the same layout and sidebar. The main content area now displays a "Review this Doctor" form for Dr. Laura Bailey. The form includes fields for Doctor Name (pre-filled with "Laura Bailey"), Your Name*, Fees Charged*, Your Zip*, Your City*, Your State*, Your Age*, Your Gender*, Your Occupation*, Review Rating*, Review Date*, and Review Text*. At the bottom is a "Submit Review" button.

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After submitting same will be stored in MongoDB

The screenshot shows the MongoDB Compass interface. The left sidebar displays the database structure under the 'Local' host (localhost:27017). The 'CustomerReviews' collection is expanded, showing its sub-collections: 'ProviderReviews', 'UserReviews', and 'local'. The 'ProviderReviews' sub-collection is selected, showing a single document with the following data:

```
_id: ObjectId("5fcfd295800c22a1d8c1fe339")
title: "ProviderReviews"
CustomerId: "user21"
ProviderName: "Laura Bailey"
ProviderFees: "150"
ProviderType: "Doctor"
CustomerName: "Vaishnavi Manjunath"
CustomerZIP: "60616"
CustomerCity: "Chicago"
CustomerState: "IL"
CustomerAge: "28"
CustomerGender: "Female"
CustomerOccupation: "Student"
ReviewRating: 4
ReviewDate: "2020-12-06"
ReviewText: "Best Doctor"
```

The main pane shows the document details with various edit and delete icons. The status bar at the bottom indicates 'Displaying documents 21 - 21 of 21'.

8. When clicked View Review

The screenshot shows the Health Hub website. The top navigation bar includes links for Home, Doctors, Hospitals, Insurances, Health Clubs, Pharmacy, Hello, User21, Account, Wishlist, and Logout. A search bar is also present.

The main content area features a sidebar with 'Features' (Trending, Trending News on Twitter) and 'Search For' (Doctors, Hospitals, Health Insurances, Health Clubs, Pharmacy). The main content area is titled 'Customer Reviews' and displays two review entries:

Provider Name: Laura Bailey
cust1 ★★★
26 Female Student 2020-12-04
Should improve with facilities
Doctor IL Chicago 60616

user21 ★★★★
28 Female Student 2020-12-06
Best Doctor
Doctor IL Chicago 60616

At the bottom of the page, a footer note states: 'Health Hub does not provide medical advice, diagnosis or treatment.' and '© Health Hub 2020. All rights reserved. Developed by Vaishnavi Manjunath & Chandu Chinta'

9. When clicked Add to Wishlist

The screenshot shows the Health Hub website interface. At the top, there is a search bar with placeholder text "Eg: Doctors, Hospitals...". Below the search bar is a navigation menu with links: Home, Doctors, Hospitals, Insurances, Health-Clubs, Pharmacy, Hello, User21, Account, Wishlist, and Logout. On the left side, there is a sidebar with two sections: "Features" and "Search For". The "Features" section contains links to Trending and Trending News on Twitter. The "Search For" section contains links to Doctors, Hospitals, Health Insurances, Health Clubs, and Pharmacy. The main content area is titled "Wishlist". It shows a table with one row for "user21". The table has columns for "User Name" (containing "user21") and "Delete" (a button). Below the table, there is a card with details about a user named "Laura Bailey": "Doctor", "2525 S Michigan Avenue, Chicago, IL, 60616". At the bottom of the page, there is a footer with a disclaimer: "Health Hub does not provide medical advice, diagnosis or treatment. © Health Hub 2020. All rights reserved. Developed by Vaishnavi Manjunath & Chandu Chinta".

Same entry will be added to MySQL database table

The screenshot shows MySQL Workbench. The query window displays the following SQL code:

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11 • select * from wishlist where username='user21';
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10. When Book an Appointment Now clicked

The screenshot shows the Health Hub website interface. On the left, there's a sidebar with 'Features' (Trending, Trending News on Twitter) and 'Search For' (Doctors, Hospitals, Health Insurances, Health Clubs, Pharmacy). The main content area has a 'Book Appointment' header and a 'Make an appointment' form. The form includes fields for date (12/07/2020), time (10:00), and full name (Angel Serna), with a 'confirm' button. A note at the bottom states 'Note: Office hours are 9am to 6pm'. At the bottom of the page, there's a footer with copyright information: 'Health Hub does not provide medical advice, diagnosis or treatment. © Health Hub 2020. All rights reserved. Developed by Vaishnavi Manjunath & Chandu Chinta'.

After confirmation, booking will be added to MySQL database and same can be seen in Account page

The screenshot shows MySQL Workbench with a query window running a SQL select statement. The results are displayed in a grid:

username	pname	pid	pctype	padress
user21	Laura Bailey	doct5	Doctor	2525 S Michigan Avenue, Chicago, IL, 60616

The status bar at the bottom shows tabs for providerslist, lationlist, bookinglist, registration, and wishlist, with the bookinglist tab currently active. The system tray at the bottom right shows the date and time as 12/6/2020, 1:07 PM.

Account Page – where booking confirmation can be seen and also appointment can be cancelled

The screenshot shows the Health Hub account page. At the top, there is a search bar with placeholder text "Eg: Doctors, Hospitals...". Below the search bar is a navigation menu with links for Home, Doctors, Hospitals, Insurances, Health-Clubs, Pharmacy, Hello, User21, Account, Wishlist, and Logout. On the left side, there is a sidebar titled "Features" containing links for Trending and Trending News on Twitter. Another sidebar titled "Search For" contains links for Doctors, Hospitals, Health Insurances, Health Clubs, and Pharmacy. The main content area is titled "Account" and displays a table with a single row of data. The table columns are ID, Your Full Name, Doctor Name, Appointment Date, Appointment Time, and Appointment At/With. The data in the table is as follows:

	ID	Your Full Name	Doctor Name	Appointment Date	Appointment Time	Appointment At/With
<input type="radio"/>	78	Angel Serna	Laura Bailey	2020-12-07	10:00	Doctor

Next to the last column is a blue button labeled "Cancel Booking". At the bottom of the page, there is a footer with the text "Health Hub does not provide medical advice, diagnosis or treatment. © Health Hub 2020. All rights reserved. Developed by Vaishnavi Manjunath & Chandu Chinta".

11. Based on customer reviews, on the Home page top 3 recommendation will be shown as carousel feature

The screenshot shows a Jupyter Notebook interface with the title "jupyter ProductRecommender Last Checkpoint: 12 minutes ago (autosaved)". The notebook has a toolbar with File, Edit, View, Insert, Cell, Kernel, Widgets, Help, Trusted, Python 3, and Logout. The code cell contains the following Python code:

```
out.close()

cust1 ['CAREPLUS CVS/PHARMACY', 'Aetna Life Healthinsurance Company', 'Carmen Cardinale']
user1 ['Aetna Life Healthinsurance Company', 'CAREPLUS CVS/PHARMACY', 'Robin Tong']
user2 ['DEV PHARMACY', 'Carmen Cardinale', 'Michael Cooley']
user3 ['Aetna Life Healthinsurance Company', 'Michael Cooley', 'Methodist Hospital of Chicago']
user4 ['Robin Tong', 'Coventry Health Care of Illinois Inc', 'Rachel Colfer']
user5 ['DEV PHARMACY', 'Robin Tong', 'Methodist Hospital of Chicago']
user6 ['Methodist Hospital of Chicago', 'Aetna Life Healthinsurance Company', 'Carmen Cardinale']
user7 ['Rachel Colfer', 'Kristin Crouse', 'Carmen Cardinale']
user8 ['Robin Tong', 'Methodist Hospital of Chicago', 'Rachel Colfer']
user9 ['CAREPLUS CVS/PHARMACY', 'Carmen Cardinale', 'Aetna Life Healthinsurance Company']
user10 ['Methodist Hospital of Chicago', 'CAREPLUS CVS/PHARMACY', 'Kristin Crouse']
user11 ['Rachel Colfer', 'Michael Cooley', 'CAREPLUS CVS/PHARMACY']
user12 ['Kristin Crouse', 'Michael Cooley', 'Carmen Cardinale']
user13 ['Rachel Colfer', 'Aetna Life Healthinsurance Company', 'Michael Cooley']
user14 ['Jodi Conlan', 'Rachel Colfer', 'CAREPLUS CVS/PHARMACY']
user15 ['CAREPLUS CVS/PHARMACY', 'Carmen Cardinale', 'Methodist Hospital of Chicago']
user21 ['Rachel Colfer', 'Carmen Cardinale', 'Robin Tong']
```

The output cell shows the same list of recommendations. The status bar at the bottom indicates the system is ENG IN, the time is 1:28 PM on 12/6/2020, and the battery level is low.

Search:

Eg: Doctors, Hospitals...

[Home](#) [Doctors](#) [Hospitals](#) [Insurances](#) [Health-Clubs](#) [Pharmacy](#)[Hello, User21](#) [Account](#) [Wishlist](#) [Logout](#)**Features**

- Trending
- Trending News on Twitter

Search For

- Doctors
- Hospitals
- Health Insurances
- Health Clubs
- Pharmacy

Welcome to Health Hub

Your one stop encyclopedia for medical services!

Better Information. Better Health

**Recommended Providers****Dr. Carmen Cardinale**

Doctor
1425 N Randall Road, Elgin, IL, 60123

[View Review](#)[Write Review](#)[Add to wishlist](#)[Book an Apointment Now](#)**Dr. Robin Tong**

Doctor
2901 S King Dr, Chicago, IL, 60616

[View Review](#)[Write Review](#)[Add to wishlist](#)[Book an Apointment Now](#)

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From recommender feature, user can directly book an appointment and also can be added to wishlist. Also reviews can be written as well as viewed.

12. When left navigation page link is clicked, the complete list of doctors, hospitals etc., can be viewed

The screenshot shows the HealthHub website interface. At the top, there is a navigation bar with links for Home, Doctors, Hospitals, Insurances, Health Clubs, Pharmacy, Hello User21, Account, Wishlist, and Logout. A search bar is located at the top right. On the left, there are two sidebar sections: 'Features' (listing Trending and Trending News on Twitter) and 'Search For' (listing Doctors, Hospitals, Health Insurances, Health Clubs, and Pharmacy). The main content area is titled 'HealthInsurance Lists' and displays a grid of provider entries. Each entry includes the provider's name, type (e.g., HMO/POS), experience (e.g., 12 years), address (e.g., 2019 South Naperville, Chicago, IL, 60134), insurance fee (e.g., 1000.0\$ Insurance Fee), and a 'View Review' button.

Health Alliance Medical Plans HMO/POS 12 years experience overall 2019 South Naperville, Chicago, IL, 60134 1000.0\$ Insurance Fee View Review	Medical Associates Health Plan HMO/POS 10 years experience overall 20530 North Rand Road, Chicago, IL, 60005 2000.0\$ Insurance Fee View Review
Aetna Health Inc. HMO/POS 10 years experience overall 1310 Commons Drive, Chicago, IL, 60462 3000.0\$ Insurance Fee View Review	Aetna Life Healthinsurance Company PPO/EPO 5 years experience overall 66 S Arlington Heights, Chicago, IL, 60440 4000.0\$ Insurance Fee View Review
Blue Cross and Blue Shield of Illinois HMO 5 years experience overall 207 South Washington, Chicago, IL, 60540 4000.0\$ Insurance Fee View Review	Humana Health Plan, Inc. HMO/POS 15 years experience overall 930 Church Street, Chicago, IL, 60123 2000.0\$ Insurance Fee View Review
Humana Healthinsurance Company PPO 6 years experience overall 14662 La Grange Road, Chicago, IL, 60525 5000.0\$ Insurance Fee View Review	United Healthcare Services, Inc. PPO 5 years experience overall 137 N Weber Road, Chicago, IL, 60156 5000.0\$ Insurance Fee View Review
Watson Health services HMO/POS 9 years experience overall 2727 W 75th Street, Chicago, IL, 60601 4000.0\$ Insurance Fee View Review	Cigna HealthCare of St. Louis, Inc. HMO/POS 5 years experience overall 900 Milwaukee Avenue, Chicago, IL, 60657 2000.0\$ Insurance Fee View Review
Coventry Health Care of Illinois, Inc. HMO/POS 14 years experience overall 18 W 64 West 22nd Street, Chicago, IL, 60031 2000.0\$ Insurance Fee View Review	Coventry Health Care of Illinois, Inc. PPO 7 years experience overall 6681 Grand Avenue, Chicago, IL, 60077 6000.0\$ Insurance Fee View Review
Union Health Service HMO 9 years experience overall 2813 N Broadway Street, Chicago, IL, 60173 6000.0\$ Insurance Fee View Review	

When the name is clicked detailed page of that provider will be shown

13. When Trending page is clicked which is present on left navigation, all the trending providers based on rating, zipcode will be shown

The screenshot displays the HealthHub website interface. At the top, there is a navigation bar with links for Home, Doctors, Hospitals, Insurances, Health-Clubs, Pharmacy, Hello User21, Account, Wishlist, and Logout. A search bar is also present. On the left side, there are two sidebar sections: 'Features' (listing Trending and Trending News on Twitter) and 'Search For' (listing Doctors, Hospitals, Health Insurances, Health Clubs, and Pharmacy). The main content area is titled 'Trending' and shows a list of 'Best Providers' with their names and ratings. Below this is a section titled 'Most Reviewed Providers by Zipcode' with a list of zip codes and their review counts. At the bottom, there is a section titled 'Most Reviewed Providers' with a list of providers and their review counts. A footer at the very bottom contains a disclaimer about medical advice and copyright information.

Trending

Best Providers

Name	Rating
Methodist Hospital of Chicago	5.0
Kristin Crouse	5.0
Carmen Cardinale	5.0
CAREPLUS CVS/PHARMACY	5.0
Aetna Life Healthinsurance Company	5.0

Most Reviewed Providers by Zipcode

Zipcode	Reviews
60616	3
60004	2
60608	2
60638	1
60435	1

Most Reviewed Providers

Name	Reviews
Robin Tong	2
Laura Bailey	2
MARIANOS FRESH MARKET PHARMACY	2
Coventry Health Care of Illinois Inc	1
La Rabida Children	1

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14. When Trending News on Twitter is clicked which is present on left navigation, options will be given to user to enter screen name or keyword – based on which real time tweets will be fetched through Twitter API

The screenshot shows the Health Hub website interface. At the top, there is a navigation bar with links for Home, Doctors, Hospitals, Insurances, Health-Clubs, Pharmacy, Hello, User21, Account, Wishlist, and Logout. On the left side, there are two vertical menus: 'Features' (with 'Trending' and 'Trending News on Twitter') and 'Search For' (with 'Doctors', 'Hospitals', 'Health Insurances', 'Health Clubs', and 'Pharmacy'). The main content area has a title 'Trending Tweets on Twitter' and a sub-instruction 'Search for trending tweets on Twitter based on Screen name or of any keyword'. It features a search input field containing 'Screen Name' and another input field containing 'covid19', with a 'Go' button below them. A footer at the bottom of the page contains the text 'Health Hub does not provide medical advice, diagnosis or treatment.' and '© Health Hub 2020. All rights reserved. Developed by Vaishnavi Manjunath & Chandu Chinta'.

Once pressed go, python script will be triggered and data will be fetched into Tweets.txt file, from that tweets will be shown to user

The screenshot shows a Windows Notepad window titled 'Tweets.txt - Notepad'. The window displays a series of tweets from various users. Some of the visible text includes:

```

File Edit Format View Help
@IEFKUH This tweet says:
Breaking
Figures show that # Covid19 is not such a big threat.

Yes, many doctors have be.. https://t.co/tZRwPwfKjn
RT @TOPublicHealth: Toronto has a voluntary isolation centre available for individuals living with others who need a free, safe & comfortab...
#IVD2020

We join @UNVolunteers to #GiveAHeart to all the Volunteer who serve the communities during #Covid19.. https://t.co/SS8BnDpHOv
RT @FelipeCalderon: México, campeón mundial de muertes confirmadas como porcentaje de casos confirmados de #COVID19. "Ya domamos la pandemi...
Molécula anti-Covid19 : l'Institut Pasteur de Lille espère des résultats à partir de mai 2021
https://t.co/nzGmmlbik
RT @cpeedell: It's always public sector workers who are expected to do extra work for free during crises like the pandemic (eg volunteering...
@LBC No Deal #Brexit will be fantastic.

With the 48% tariff on BMWs and other German car producers, the UK governme... https://t.co/M2WzpnOP9b
RT @AdamSchefter: Ravens' QB Lamar Jackson is expected to come off Reserve/COVID19 list and start Tuesday vs. the Dallas Cowboys, per sourc...
RT @MarmotteDroite: Selon Alain Fischer, en charge de la campagne de vaccination en France,
Il faudra plusieurs mois pour "savoir si le v...
RT @ReedCurtis: We have seen this #FHM #wold #tegnell #linde racist rhetoric before. Historically, racist language was used to scapegoat "o...
RT @cpeedell: It's always public sector workers who are expected to do extra work for free during crises like the pandemic (eg volunteering...
RT @SooChoiFolder: JN : Hello, we are BTS. Because of our ARMYs we could receive the Best Group award. Actually we got depressed and felt e...

```

The status bar at the bottom of the Notepad window shows 'Ln 4, Col 29' and other system information.

Features

- Trending
- Trending News on Twitter

Search For

- Doctors
- Hospitals
- Health Insurances
- Health Clubs
- Pharmacy

Trending Tweets on Twitter

@IEFKUH This tweet says:

Breaking

Figures show that # Covid19 is not such a big threat.

Yes, many doctors have be? <https://t.co/tZRwPwfKjn>

RT @TOPublicHealth: Toronto has a voluntary isolation centre available for individuals living with others who need a free, safe & comfortab?

#IVD2020

We join @UNVolunteers to #GiveAHeart to all the Volunteer who serve the communities during #Covid19?
<https://t.co/S88BnDpHOv>

RT @FelipeCalderon: Mxico, campeon mundial de muertes confirmadas como porcentaje de casos confirmados de #COVID19. ?Ya domamos la pandemi?

Molecule anti-#Covid19 : l'Institut Pasteur de Lille espere des resultats partir de mai 2021

<https://t.co/nzGmmibiKs>

RT @cpeedell: It's always public sector workers who are expected to do extra work for free during crises like the pandemic (eg volunteering)?

@LBC No Deal #Brexit will be fantasic.

With the 48% tariff on BMWs and other German car producers, the UK governme? <https://t.co/M2WzpnOP9>

RT @AdamSchechter: Ravens' QB Lamar Jackson is expected to come off Reserve/COVID19 list and start Tuesday vs. the Dallas Cowboys, per sourc?

RT @MarmotteDroite: Selon Alain Fischer, en charge de la campagne de vaccination en France,

Il faudra plusieurs mois pour "savoir si le v?

RT @ReedCurtis: We have seen this #FHM #wold #tegnell #linde racist rhetoric before. Historically, racist language was used to scapegoat "o?

RT @cpeedell: It's always public sector workers who are expected to do extra work for free during crises like the pandemic (eg volunteering)?

RT @SooChoiFolder: JN : Hello, we are BTS. Because of our ARMYs we could receive the Best Group award. Actually we got depressed and felt e?

15. Users can directly search Doctors, Hospitals etc., by using search bar. Auto complete feature is implemented to show list of providers with the user's keyword entered

The screenshot shows the HealthHub homepage. At the top, there is a navigation bar with links for Home, Doctors, Hospitals, Insurances, Health Clubs, Pharmacy, and Logout. A search bar is located at the top right. Below the navigation bar, there is a sidebar with sections for 'Features' (Trending and Trending News on Twitter) and 'Search For' (Doctors, Hospitals, Health Insurances, Health Clubs, Pharmacy). The main content area features a large graphic with the word 'HEALTH' in the center, surrounded by various positive words like 'GIVE', 'LOVE', 'WORK', 'HUMAN', 'TEAM', and 'GIVING'. To the right of the graphic is a list of recommended providers, each with a name, address, and four buttons: 'View Review', 'Write Review', 'Add to wishlist', and 'Book an Apointment Now'. The footer contains a disclaimer about medical advice and copyright information.

Welcome to HealthHub
Your one stop encyclopedia for
Better Information. Better Choices.

Recommended Providers

Dr. Rachel Colfer
Doctor
2525 S Michigan Avenue,
Chicago, IL, 60616

Dr. Carmen Cardinale
Doctor
1425 N Randall Road, Elgin, IL,
60123

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Once user selects any provider, the detailed page of respective provider will be shown



Search:

Eg: Doctors, Hospitals...

[Home](#)[Doctors](#)[Hospitals](#)[Insurances](#)[Health-Clubs](#)[Pharmacy](#)[Hello, User21](#)[Account](#)[Wishlist](#)[Logout](#)**Features**

- Trending
- Trending News on Twitter

Search For

- Doctors
- Hospitals
- Health Insurances
- Health Clubs
- Pharmacy

Advocate Illinois Masonic Medical Center

Community Hospital
12 years of medical service providers
836 W Wellington
Chicago, IL, 60657
\$300.0 Consultation fee at clinic

[View Review](#)[write Review](#)[Add to wishlist](#)[Book an Appointment Now](#)

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All the above features are implemented shown for Doctor same way hospitals, health clubs, health insurances, pharmacy can be searched, reviewed, booking appointment can be done.

16. Register and Login in as Admin

Search:

Eg: Doctors, Hospitals...

[Home](#)[Doctors](#)[Hospitals](#)[Insurances](#)[Health-Clubs](#)[Pharmacy](#)[Login](#) [Register](#)**Register Here**

User ID	<input type="text" value="admin21"/>
Password	<input type="password" value="....."/>
Re-Password	<input type="password" value="....."/>
First Name	<input type="text" value="Sunny"/>
Last Name	<input type="text" value="Lint"/>
Email	<input type="text" value="sunny.lint@gmail.com"/>
User Type	<select value="Admin">Admin</select>

[Create User](#)

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Search:

Eg: Doctors, Hospitals...

[Home](#) [Doctors](#) [Hospitals](#) [Insurances](#) [Health-Clubs](#) [Pharmacy](#)

[Login](#) [Register](#)

LOGIN

Congratulations, Your account has been created. Please login

Username	<input type="text" value="admin21"/>
Password	<input type="password" value="....."/>
User Type	<input type="text" value="Admin"/>

[Login](#)

[New User? Register here!](#)

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After logging in admin will have options to manage providers and also analyze the data



Search:

Eg: Doctors, Hospitals...

[Home](#) [Doctors](#) [Hospitals](#) [Insurances](#) [Health-Clubs](#) [Pharmacy](#) [Hello,Admin21](#) [ManageProviders](#) [DataAnalytics](#) [Logout](#)

Features

- Trending
- Trending News on Twitter

Search For

- Doctors
- Hospitals
- Health Insurances
- Health Clubs
- Pharmacy

Welcome to Health Hub

Your one stop encyclopedia for medical services!

Better Information. Better Health



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17. An admin can add, delete, update providers which will be updated in MySQL database

The screenshot shows the Health Hub website interface. At the top, there is a navigation bar with links for Home, Doctors, Hospitals, Insurances, Health-Clubs, Pharmacy, Hello,Admin21, ManageProviders, DataAnalytics, and Logout. A search bar is located at the top right. On the left, there is a sidebar with sections for Features (Trending, Trending News on Twitter) and Search For (Doctors, Hospitals, Health Insurances, Health Clubs, Pharmacy). The main content area is titled "Manage Providers" and contains three buttons: "Add Provider", "Update Provider", and "Delete Provider". At the bottom of the page, there is a footer with a disclaimer about medical advice and copyright information.

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18. When Add provider is clicked

The screenshot shows the Health Hub website interface, specifically the "Add Provider" form. At the top, there is a navigation bar with links for Home, Doctors, Hospitals, Insurances, Health-Clubs, Pharmacy, Hello,Admin21, ManageProviders, DataAnalytics, and Logout. A search bar is located at the top right. The main content area is titled "Add Provider" and has a sub-section titled "Enter Provider Details". The form contains various input fields for provider information: Provider Type (Doctor), ProviderID (doctor123), Provider Name (Louis Penn), Provider Fees (120.00), Provider Image (doctor.jpg), Provider Experience (7), Provider Speciality (Cardiologist), Provider Street Address (3100 S King Dr), Provider City (Chicago), Provider State (IL), Provider ZipCode (60616), Provider Latitude (41.125858), and Provider Longitude (-87.41477). A "Add Provider" button is located at the bottom of the form. At the bottom of the page, there is a footer with a disclaimer about medical advice and copyright information.

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Provider will be added to MySQL database once Add Provider button is clicked

The screenshot shows the MySQL Workbench interface. The top menu bar includes File, Edit, View, Query, Database, Server, Tools, Scripting, and Help. Below the menu is a toolbar with icons for connecting, disconnecting, creating, selecting, inserting, deleting, altering, updating, and running queries. The main window has tabs for sample, CreateTable, SelectTable, insertTable, deleteTable, alterTable, updateTable, Health_Hub_Questions (which is selected), and SQL File 10*. The SQL editor contains the following code:

```
82  
83  
84  
85 • select * from providerslist;
```

The results grid displays the following data:

	id	name	staddress	city	stat	zipcode	specialty	image	experience	fees	type	latitude	longitude
doct87	Katelyn Cullinan	4646 N Marine Drive	Chicago	IL	60640		Radiologist	doct87.jpg	18	190	Doctor	41.967148	-87.649644
doct88	Ellen Czajka	4646 N Marine Drive	Chicago	IL	60640		Anesthesiologist	doct88.jpg	22	200	Doctor	41.964578	-87.649341
doct9	Lev Barats	251 E Huron Street	Chicago	IL	60611		Surgeon	doct9.jpg	20	160	Doctor	41.89773	-87.61262
doctor123	Louis Pent	3100 S King Dr	Chicago	IL	60616		Cardiologist	doct0.jpg	7	120	Doctor	41.125858	-87.41477
HealthClub1	CydeBar HealthClub	2000 N Clybourn	Chicago	IL	60614		Interval Traning gyms, Sport Club	club1.jpg	16	300	HealthClub	41.917583	-87.659511
HealthClub11	Pilates Advantage	1 South Franklin St	Chicago	IL	60606		Interval Traning gyms, Sport Club	club11.jpg	3	1000	HealthClub	41.881576	-87.633069
HealthClub12	Body by Drake personal...	1022 S Canal	Chicago	IL	60607		Gym, Nutritionists, Health Coach	club12.jpg	10	600	HealthClub	41.869494	-87.639119
HealthClub13	Wattage physical therapy	21075 S La Grange Rd	Chicago	IL	60423		Gym, Physical Therapy, Day	club13.jpg	12	1100	HealthClub	41.50698	-87.849016
HealthClub15	Infinite Motion fitness	1247 West Lane Rd	Chicago	IL	61115		Counselling and mental health	club15.jpg	5	900	HealthClub	42.365479	-89.032944
HealthClub16	Etwon Fitness club	2442 West 95th Street	Chicago	IL	60605		Gyms, Trainers, Massage Therapy	club16.jpg	4	1200	HealthClub	41.72107	-87.682842
HealthClub17	Lincon Park Fitness center	794 Skokie Blvd	Chicago	IL	60062		Interval Traning gyms, Sport Club	club17.jpg	16	500	HealthClub	42.137929	-87.791876

19. When update Provider is clicked, above doctor fees is updated from 120 to 220



Search: Eg: Doctors, Hospitals...

[Home](#) [Doctors](#) [Hospitals](#) [Insurances](#) [Health-Clubs](#) [Pharmacy](#) [Hello,Admin21](#) [ManageProviders](#) [DataAnalytics](#) [Logout](#)

Update Provider

Enter Provider Details

Provider Type*	Doctor
ProviderID*	doctor123
Provider Name*	Louis Pent
Provider Fees*	220.0
Provider Image*	docto.jpg
Provider Experience*	7
Provider Speciality*	Cardiologist
Provider Street Address*	3100 S King Dr
Provider City*	Chicago
Provider State*	IL
Provider ZipCode*	60616
Provider Latitude*	41.125858
Provider Longitude*	-87.41477

update Provider

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Once the update provider button is clicked, the data is updated in MySQL database

The screenshot shows the MySQL Workbench interface. In the top-left pane, there is a code editor with the following SQL query:

```
82  
83  
84  
85 • select * from providerslist;  
86  
87  
88  
89  
90  
91  
92  
??"
```

In the bottom-right pane, there is a "Result Grid" displaying the data from the providerslist table. The columns are: id, name, address, city, state, zipcode, specialty, image, experience, fees, type, latitude, and longitude. The data includes various providers like Katelyn Cullinan, Ellen Czajka, Lev Barats, and several HealthClub entries.

When Delete Provider is clicked, the provider will be deleted from the MySQL database

The screenshot shows the Health Hub website. At the top, there is a search bar with placeholder text "Eg: Doctors, Hospitals...". Below the search bar, there is a navigation menu with links: Home, Doctors, Hospitals, Insurances, Health-Clubs, Pharmacy, Hello,Admin21, ManageProviders, DataAnalytics, and Logout.

The main content area has a title "Delete Provider". Below it, there is a form titled "Enter Provider Details" with a "ProviderID*" input field containing "doctor123" and a "Delete Provider" button.

At the bottom of the page, there is a footer with the following text:

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The same will be deleted from MySQL once button is pressed

A screenshot of the MySQL Workbench application. The title bar says "MySQL Workbench" and "Local instance MySQL80". The menu bar includes File, Edit, View, Query, Database, Server, Tools, Scripting, and Help. The toolbar has icons for sample, CreateTable, SelectTable, insertTable, deleteTable, alterTable, updateTable, and Health_Hub_Quires*. The SQL editor contains the following code:

```
82  
83  
84  
85 • select * from providerslist where id='doctor123';  
86  
87  
88  
89  
90  
91  
92  
93
```

The Result Grid shows the following data:

id	name	staddress	city	stat	zipcode	specialty	image	experience	fees	type	latitude	longitude
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

20. An admin can work/manage data analytics and do data visualization

The screenshot shows the Health Hub website interface. At the top, there is a navigation bar with links for Home, Doctors, Hospitals, Insurances, Health-Clubs, Pharmacy, Hello,Admin21, ManageProviders, DataAnalytics, and Logout. A search bar is also present.

On the left side, there are two sidebar menus:

- Features**
 - Trending
 - Trending News on Twitter
- Search For**
 - Doctors
 - Hospitals
 - Health Insurances
 - Health Clubs
 - Pharmacy

In the center, there are several sections:

- Analyze the Data**
 - Data Analytics
 - Data Visualization
- Providers Information**
 - List of Providers
 - Provider Graph Report

At the bottom, there is a footer note: "Health Hub does not provide medical advice, diagnosis or treatment. © Health Hub 2020. All rights reserved. Developed by Vaishnavi Manjunath & Chandu Chinta"

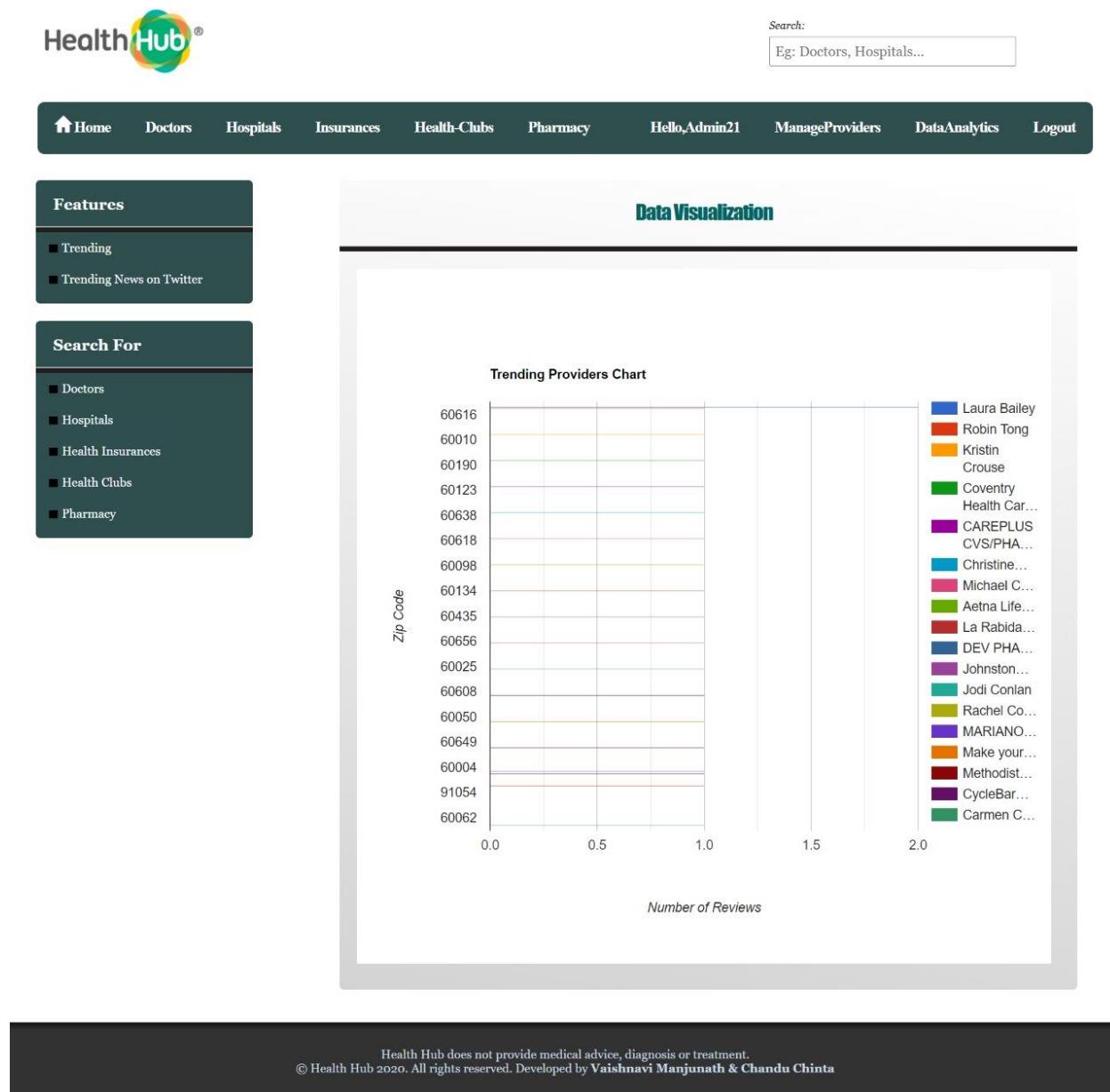
When admin wants to analyze the data, he can do it two ways through Data Analytics and Data Visualization

Data Analytics is clicked, admin will be asked to choose provider, once chosen data related to provider will be shown based on the different options selected

The screenshot shows the Health Hub interface. At the top, there is a navigation bar with links for Home, Doctors, Hospitals, Insurances, Health Clubs, Pharmacy, Hello Admin21, Manage Providers, Data Analytics, and Logout. A search bar is also present. On the left, there are two sidebar sections: 'Features' (with Trending and Trending News on Twitter) and 'Search For' (with options for Doctors, Hospitals, Health Insurances, Health Clubs, and Pharmacy). The main content area is titled 'Data Analytics on Review for Doctors' and contains a form for selecting provider details like Name, Fees, Rating, City, Zip code, and Group By options (City, Count, Detail). Below the form, a note states: 'Health Hub does not provide medical advice, diagnosis or treatment. © Health Hub 2020. All rights reserved. Developed by Vaishnavi Manjunath & Chandu Chinta'.

This screenshot shows the Health Hub interface again. The layout is similar to the previous one, with the same navigation bar, search bar, and sidebar sections for Features and Search For. The main content area is titled 'Data Analytics on Review' and displays two tables of review data. The first table shows reviews for 'Robin Tong' with details: Rating 4, Fees 150, User City Chicago, User ZIP 60616, Date 2020-12-04, and Review Text 'Well handed doctor'. The second table shows reviews for another provider with details: Rating 4, Fees 200, User City Erlangen, User ZIP 91054, Date 2020-12-04, and Review Text 'Did good job with my problems'. Below the tables, a note states: 'Health Hub does not provide medical advice, diagnosis or treatment. © Health Hub 2020. All rights reserved. Developed by Vaishnavi Manjunath & Chandu Chinta'.

Data Visualization is clicked, view chart button will be show when pressed, chart will be shown for Number of Reviews v/s Zip code



List of Providers button is clicked, an option to choose provider will be asked

The screenshot shows the Health Hub application interface. At the top, there is a logo for "Health Hub" with a green circular icon. To the right of the logo is a search bar with placeholder text "Eg: Doctors, Hospitals...". Below the header is a navigation bar with links: Home, Doctors, Hospitals, Insurances, Health Clubs, Pharmacy, Hello, Admin21, Manage Providers, Data Analytics, and Logout. On the left side, there are two dark grey sidebar panels. The top sidebar is titled "Features" and contains two items: "Trending" and "Trending News on Twitter". The bottom sidebar is titled "Search For" and contains a list of categories: Doctors, Hospitals, Health Insurances, Health Clubs, and Pharmacy. The main content area is titled "List of all Pharmacies" and displays a table with eight rows of data. The table has columns for Pharmacy Name, Pharmacy Type, Pharmacy Experience, Pharmacy Name, Pharmacy Type, Pharmacy Experience, and an empty column. The data is as follows:

Pharmacy Name	Pharmacy Type	Pharmacy Experience	Pharmacy Name	Pharmacy Type	Pharmacy Experience	
COSTCO PHARMACY #1107	Pharmacy	10	CORE CENTER PHARMACY	Pharmacy	9	
COMMUNITY PHARMACY AT MERCY HOSPITAL	Pharmacy	5	B&K DRUGS	Pharmacy	10	
ARMITAGE PHARMACY, INC	Pharmacy	10	CAREPLUS CVS/PHARMACY	Pharmacy	10	
CENTRAL DRUGS	Pharmacy	5	COLUMBIA PHARMACY INC	Pharmacy	3	
FANTUS HEALTH CENTER REFILL PHARMACY	Pharmacy	3	FARMACIA CENTRO MEDICO	Pharmacy	9	
GMP PHARMACY SCMS	Pharmacy	5	BRONZEVILLE PHARMACY	Pharmacy	6	
OSCO DRUG #3422	Pharmacy	10	NORTHWEST COMMUNITY PHARMACY	Pharmacy	9	
MARIANOS FRESH MARKET PHARMACY	Pharmacy	4	MARIANOS FRESH MARKET PHARMACY	Pharmacy	4	
DEV PHARMACY	Pharmacy	8	CVS PHARMACY #01161	Pharmacy	7	
WALGREENS #00039	Pharmacy	10	OSCO DRUG #3461	Pharmacy	9	

When Provider Graph Report is clicked, a graph with all providers will be displayed on chart with their experience in their respective field

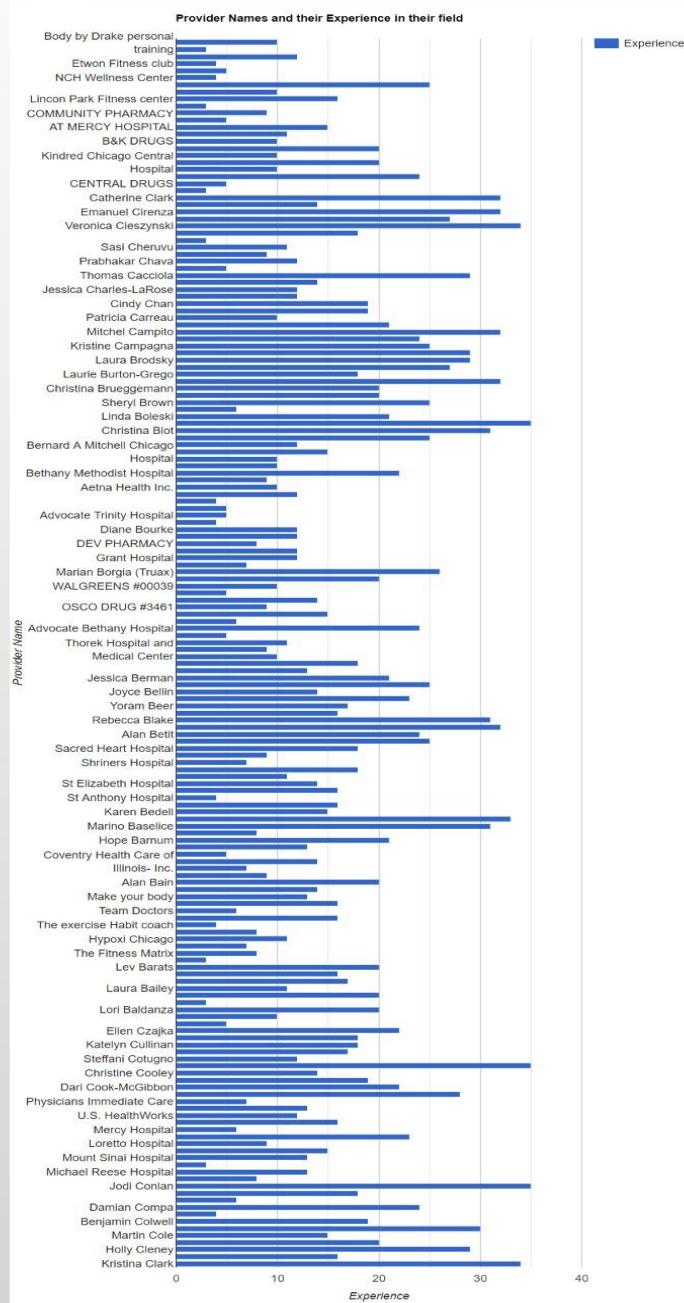
Features

- Trending
- Trending News on Twitter

Search For

- Doctors
- Hospitals
- Health Insurances
- Health Clubs
- Pharmacy

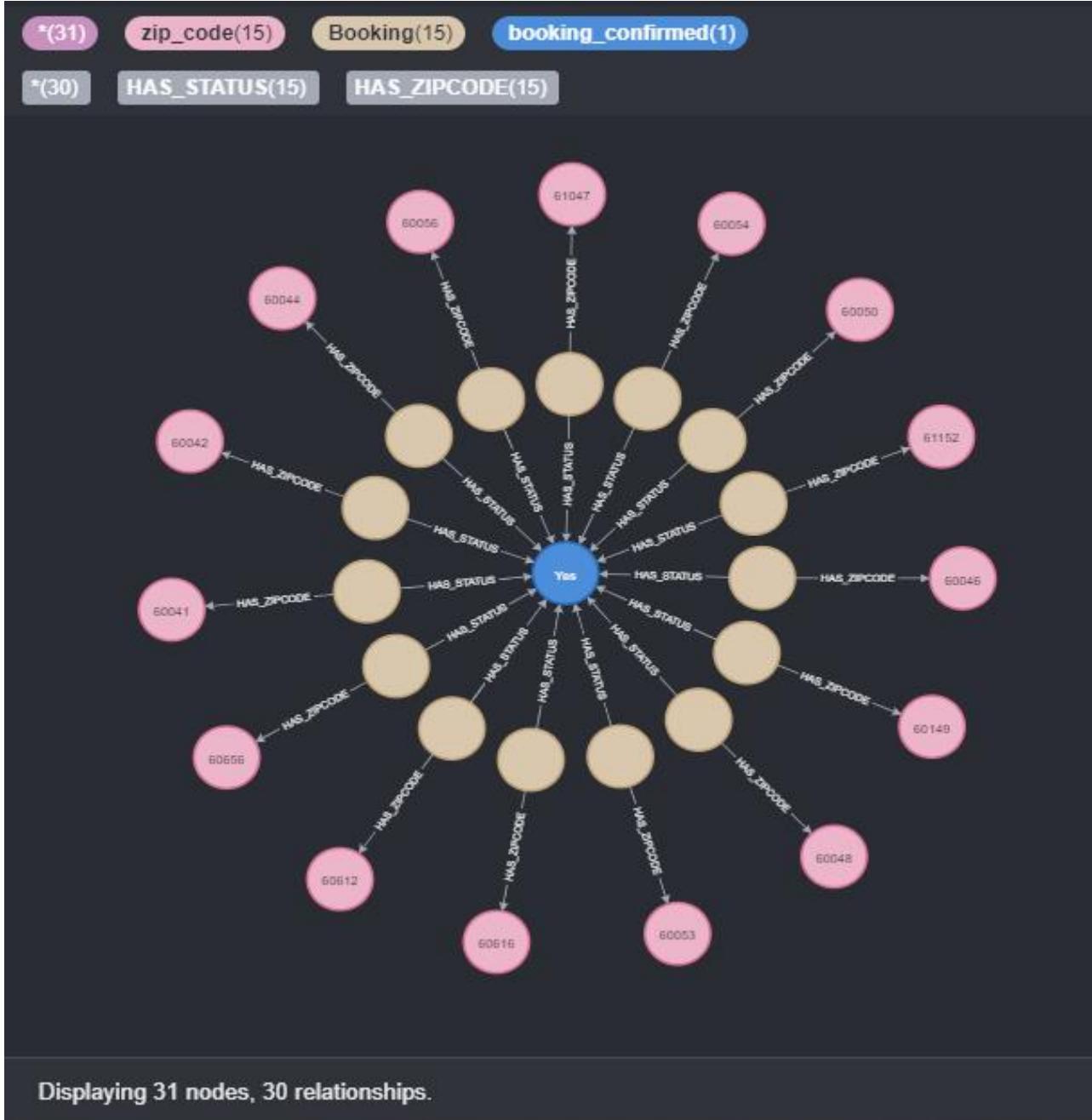
Bar Chart of Providers



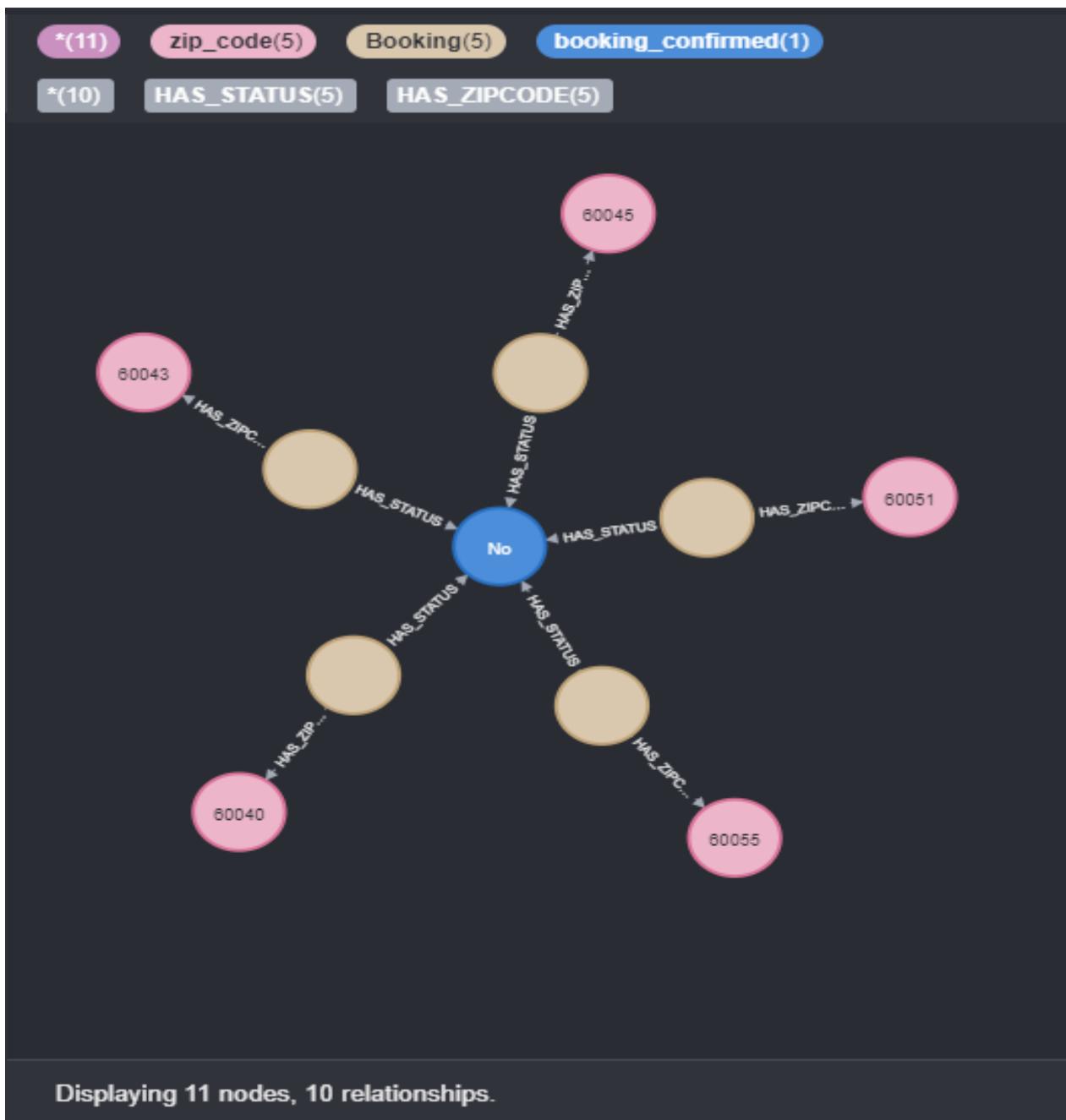
21. Booking transactions file is loaded into Neo4j to generate the nodes

```
1 LOAD CSV WITH HEADERS FROM "file:///transactions1.csv" AS line
2 WITH line
3 MERGE (c:Customer {name: line.Customer_Name})
4 MERGE (b:Booking {cid: line.CID, booking_date: line.Booking_Date, booking_time: line.Booking_Time, pname: line.Provider_Name, ptype: line.Provider_Type})
5 MERGE (z:zip_code {Zip_Code: toInteger(line.Zip_Code)})
6 MERGE (s:booking_confirmed {Booking_Confirmed: line.Booking_Confirmed})
7 MERGE (c)-[:BOOKED]->(b)
8 MERGE (b)-[:HAS_RATING]->(rat)
9 MERGE (b)-[:HAS_ZIPCODE]->(z)
10 MERGE (b)-[:HAS_STATUS]->(s)
11 MERGE (b)-[:HAS_STATUS]->(s)
12 RETURN line
```

Once the data is loaded into GraphDB, all the bookings which were confirmed is displayed



All the bookings which were not confirmed is also displayed



All Provider Bookings with Review Rating > 2

