

Project Report On
Don't Let your Health Down (DLHD)

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in partial fulfillment for the award of the degree of
Bachelor of Technology In Information Technology at



Department of Information Technology
National Institute of Technology Karnataka, Surathkal

DECLARATION

We hereby declare that the report of the B.Tech Project - I (IT254) entitles “DLHD”, which is being submitted to the National Institute of Technology Karnataka, Surathkal, is a bonafide report of the work being carried out by us. The material contained in this report has not been submitted to any other University or Institution.

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Place: NITK, SURATHKAL

Date: 1st December 2020

CERTIFICATE

This is to certify that the U.G. Project Work Report entitled “**DLHD**” submitted by Mr. Gaurav Chaurasia (181CV155), Upendra Pal (181ME282), and Jai Khandelwal (181MN016) as the record of the work carried out by them is accepted as the U.G. Minor Project - I report submission in partial fulfillment of the requirements for the award of the degree of BACHELOR OF TECHNOLOGY in INFORMATION TECHNOLOGY in the DEPARTMENT OF INFORMATION TECHNOLOGY, N.I.T.K, Surathkal during the year 2020-2021, is a bonafide work carried out by them under my supervision and guidance.

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Biju R. Mohan

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ABSTRACT

DLHD is a healthcare management system developed to provide mainly healthcare-related facilities data and insights in things like disease data, medicine data .etc which is not very easily available in this ocean of data in this application all users are assigned a Role depending on which he/she can perform certain tasks i.e. a user authorized as Doctor main add disease and the medicine into the database which other users can refer in need.

also, this app has a module called maps which is basically a tracker whose purpose is to track users with any contagious disease and other use could get alert on the basis of that as we all know in the current scenario of COVID-19 which very risky because of its very high contagious in nature so this app plays a vital role in taking extra care of the user and make sure that any user with symptom does not get in contact with other users to stop the spread of this disease.

Overview

This project is divided into some part or modules the first module is mainly based on IO operation and giving the user the data of there need for example it has a medicine page and a disease page which contains the detail of many medicines and the disease which all can only be register to our database by an authorized user with doctor role which can only be assigned by an admin user and which can be assigned only by a user with administrative access to the database itself.

The second module is basically a tracker which can locate a user's location in this module an authenticated user can add his/her location just by clicking the button in the menu, he can perform CRUD operation on his location, and if any user has symptoms of any contagious disease they can add their locations and all other users would be able to see them on the map with a red mark which represents danger and other users should take extra care while walking through that area.

Goals

1. To make needed data available to the needy.
2. Learn and Implement web nodejs, express, ejs, passport, OAuth...etc
3. Learn the use of databases in web applications like MongoDB (used for projects) which is a NoSQL database.

4. Design Schema for DLHD web app.
5. Understand Oop's(Object Oriented Programming).
6. Understand and Implement MVC(Model View Controller) architecture
7. Generating APIs and working with the third party apis
8. Using Google Maps Javascript API, Google Geospatial API...etc
9. Searches functionality with diff options

Specifications

This web application has lots of features like the capability to track a user's location with accuracy..etc.

1. This user can check any medicine, disease details entered by authorized DOCTORS.
2. Users can search for any medicine or disease.
3. Users can search for medicine by its name or the disease name for which any medicine is used.
4. Proper authentication is present to keep data safe and secure.
5. Third-party authentication is also present (OAuth2.0).
6. Users can see other users nearby with symptoms of any contagious disease.
7. Users can perform CRUD on geospatial data. (create, read, delete, update)

References and useful link

<https://developers.google.com/maps/documentation/javascript/geot-api-key>

<https://developers.google.com/maps/documentation/geolocation/overview>

<https://developers.google.com/identity/protocols/oauth2>

<http://www.passportjs.org/>

<http://www.passportjs.org/packages/passport-google-oauth2/>

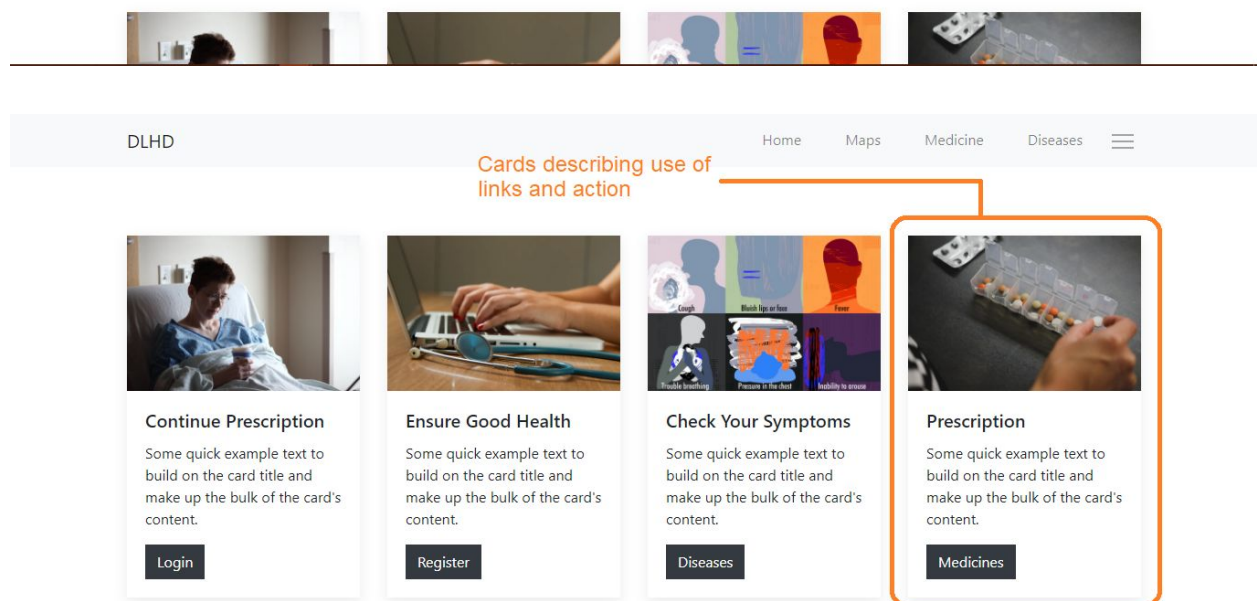
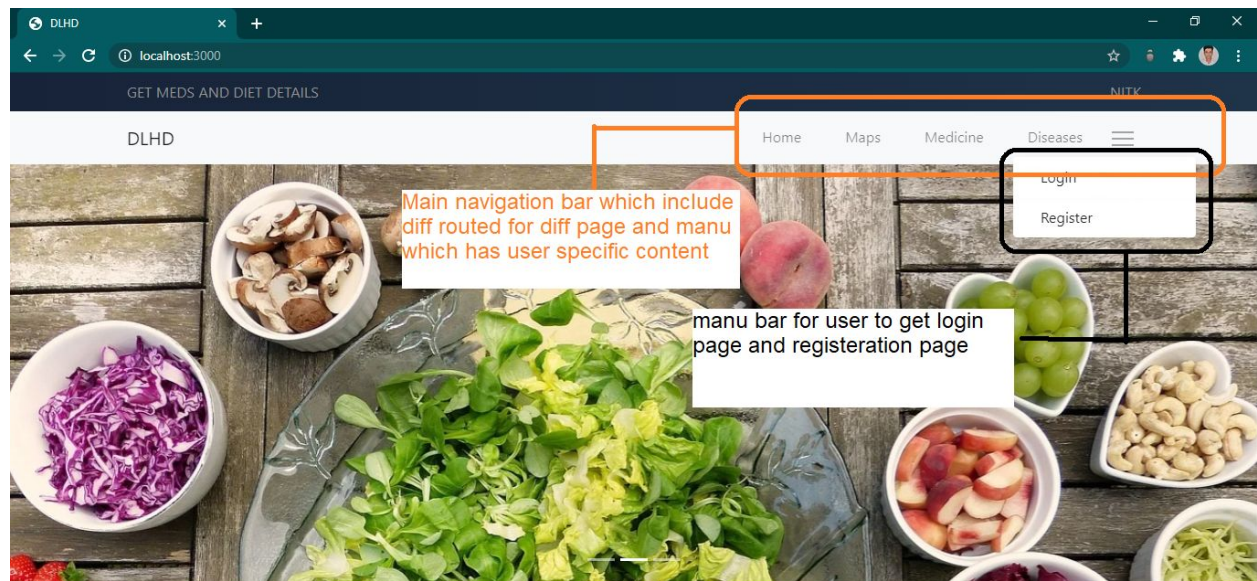
<http://www.passportjs.org/docs/authenticate/>

<http://expressjs.com/>

<https://nodejs.org/en/docs/>

Code: <https://github.com/gaurav-chaurasia/IT254-PROJECT>

Working of web app is shown in screenshots below



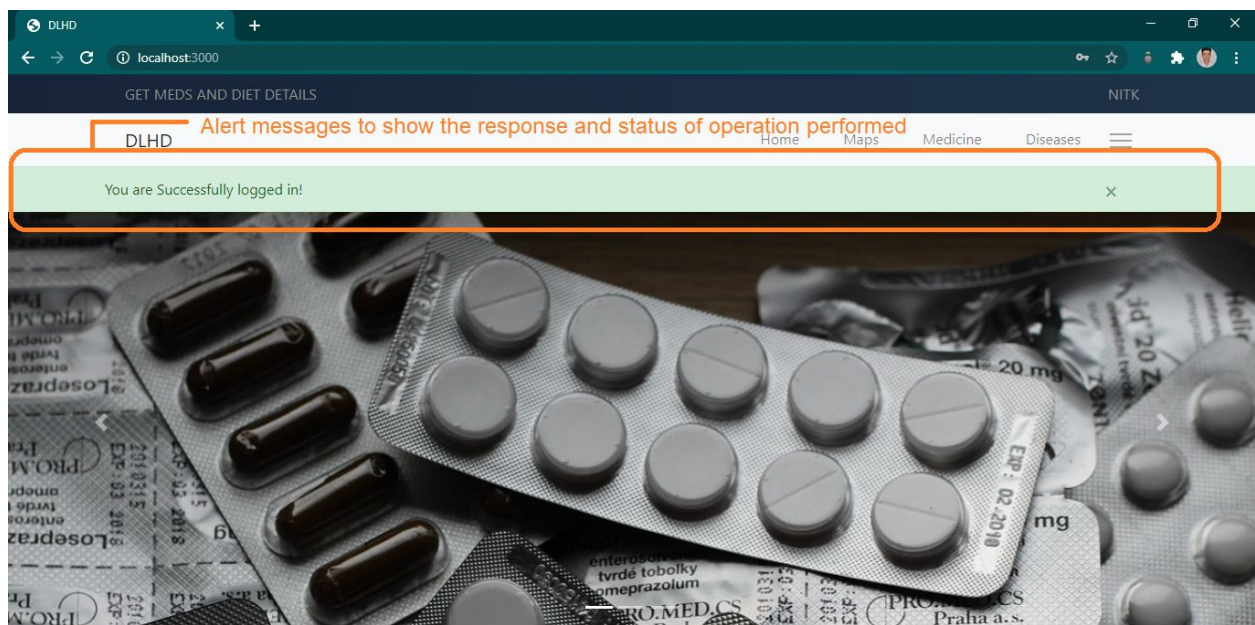
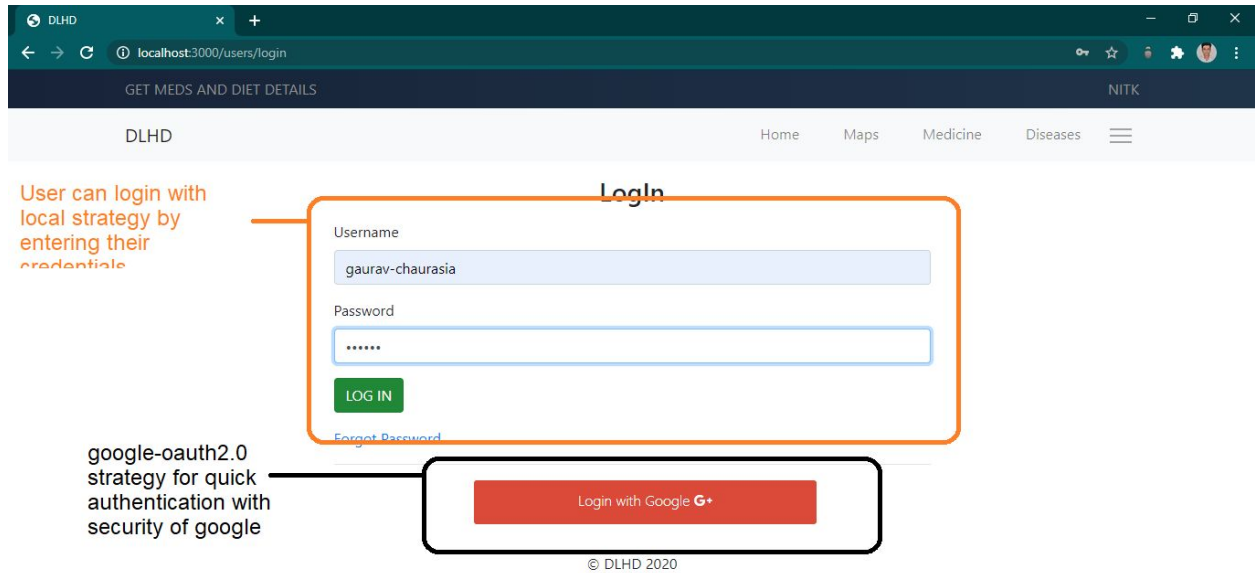
Top Diseases

flu	body ache	covid-19
Influenza is a viral infection that attacks	Body aches are common. They can result	Coronavirus disease (COVID-19) is an

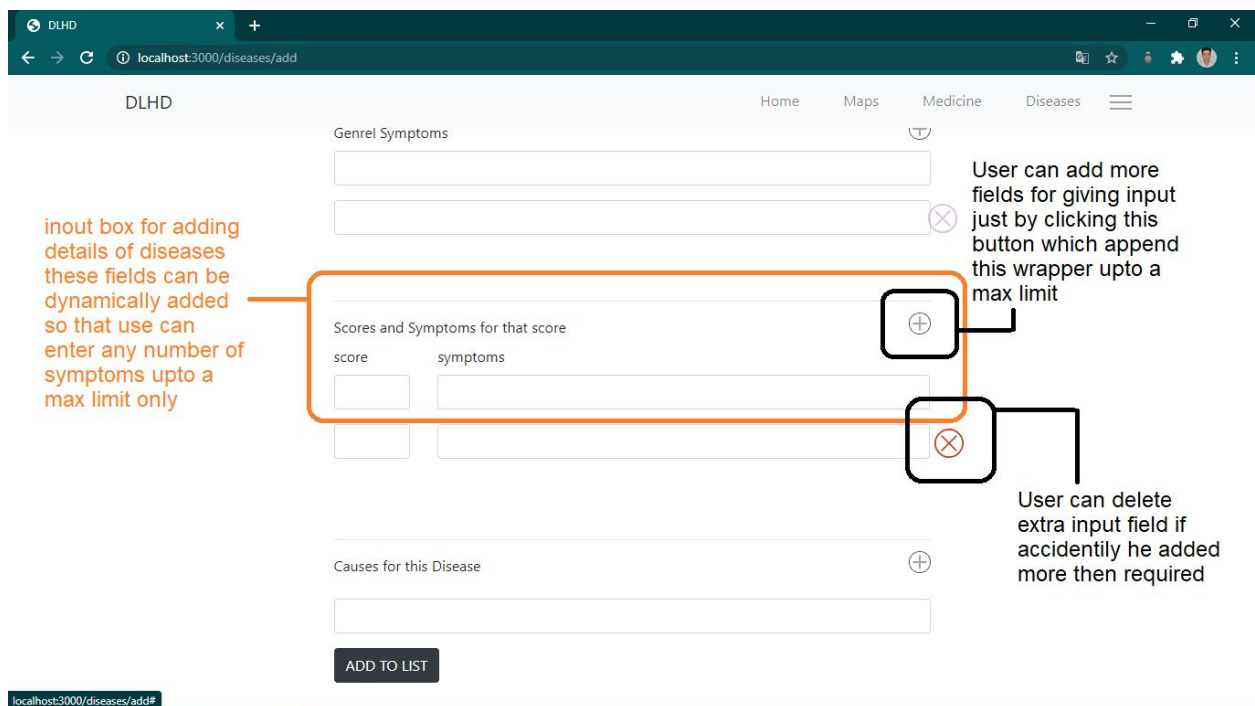
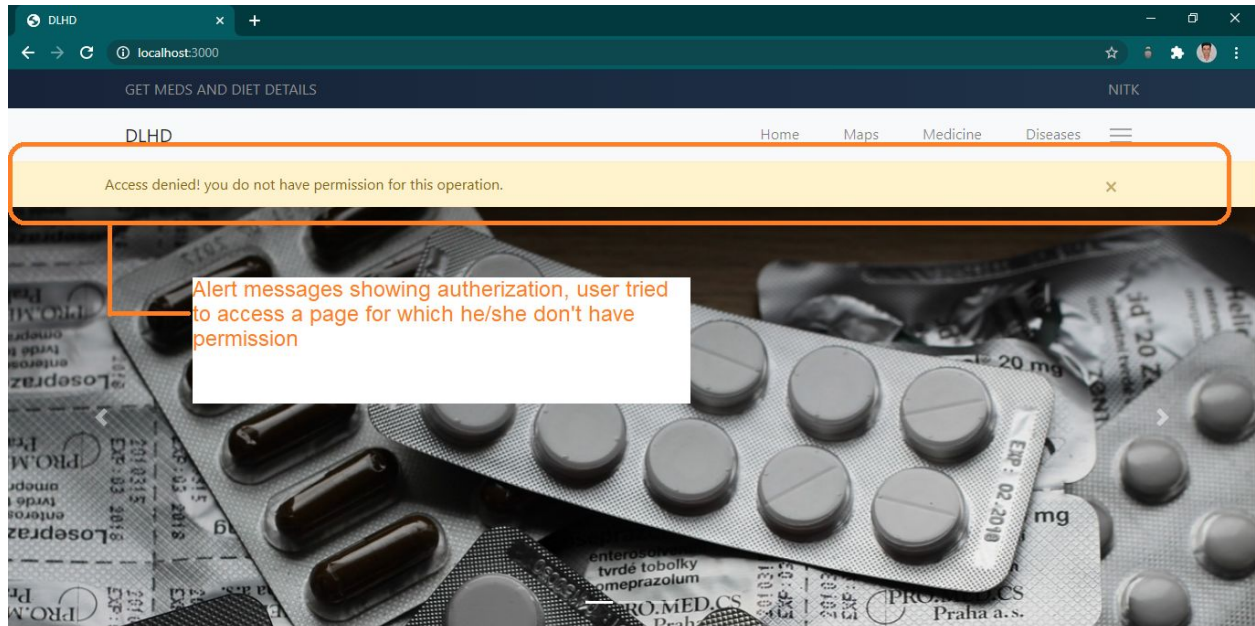


User can log in via local strategy or OAuth strategy

Alerts are also shown after redirection



User tries to access a page or perform operation for which he has no permission



These select options are being retrieved from the database and referenced to medicins for data consistency

The screenshot shows a web browser window with the address bar displaying 'localhost:3000/medicines/add'. The page has a header with 'DLHD' and navigation links for 'Home', 'Maps', 'Medicine', and 'Diseases'. Below the header is a form with a 'Description' text area and a 'Scores and Disease Name' section. The 'Scores and Disease Name' section contains a 'score' input field and a 'disease name' dropdown menu. The dropdown menu is open, showing a list of diseases with their corresponding scores: fever { scores: [1,2,3,4] }, headache { scores: [1,2] }, loose motion { scores: [1,2] }, covid-19 { scores: [1,2,3] }, body ache { scores: [1,2,3,4] }, and flu { scores: [1,2,3,4,5] }. An orange box highlights the 'disease name' dropdown and the list of options. An orange arrow points from the text 'Here User can add disease name from select option for which this medicine can be used and these options are also dynamic' to the dropdown. Another orange arrow points from the text 'These options are being retrieved from database from disease collaction and then reference to the disease is being stored in mmedicine document in medicine collaction' to the dropdown list. A black box highlights the dropdown list, and a black arrow points from the text 'These options are being retrieved from database from disease collaction and then reference to the disease is being stored in mmedicine document in medicine collaction' to the dropdown list. A black button labeled 'ADD TO LIST' is located below the dropdown list.

DLHD

Home Maps Medicine Diseases

Description

Here User can add disease name from select option for which this medicine can be used and these options are also dynamic

Scores and Disease Name

score disease name

fever { scores: [1,2,3,4] }

fever { scores: [1,2,3,4] }

headache { scores: [1,2] }

loose motion { scores: [1,2] }

covid-19 { scores: [1,2,3] }

body ache { scores: [1,2,3,4] }

flu { scores: [1,2,3,4,5] }

ADD TO LIST

These options are being retrieved from database from disease collaction and then reference to the disease is being stored in mmedicine document in medicine collaction

User can perform a search on disease and medicine

The screenshot shows the DLHD application interface. At the top, there is a navigation bar with 'DLHD' and links to 'Home', 'Maps', 'Medicine', and 'Diseases'. Below the navigation bar, there is a search section. On the left, a dropdown menu labeled 'medicine name' is shown. To its right is a search input field with the placeholder text 'search by medicine or disease name...'. Below the search input field, there are two search results displayed. The first result is for 'pepto-bismol', which includes a description: 'Bismuth subsalicylate, sold as generic and under the brand name Pepto-Bismol, is an antacid elixir medication used to treat temporary discomforts of the stomach and gastrointestinal tract, such as nausea, heartburn, indigestion, upset stomach, and diarrhea.' Below the description is a button labeled 'scores and diseases'. The second result is for 'ibuprofen', which includes a description: 'Ibuprofen is a medication in the nonsteroidal anti-inflammatory drug class that is used for treating pain, fever, and inflammation. This includes painful menstrual periods, migraines, and rheumatoid arthritis. It may also be used to close a patent ductus arteriosus in a premature baby.' Below the description is a button labeled 'scores and diseases'.

User can choose option for search like disease name or medicine name

User can write his/her query in this box

Search results are listed below

pepto-bismol

Bismuth subsalicylate, sold as generic and under the brand name Pepto-Bismol, is an antacid elixir medication used to treat temporary discomforts of the stomach and gastrointestinal tract, such as nausea, heartburn, indigestion, upset stomach, and diarrhea.

scores and diseases

ibuprofen

Ibuprofen is a medication in the nonsteroidal anti-inflammatory drug class that is used for treating pain, fever, and inflammation. This includes painful menstrual periods, migraines, and rheumatoid arthritis. It may also be used to close a patent ductus arteriosus in a premature baby

scores and diseases

The screenshot shows the DLHD application interface. At the top, there is a navigation bar with 'DLHD' and links to 'Home', 'Maps', 'Medicine', and 'Diseases'. Below the navigation bar, there is a search section. On the left, there is a button labeled 'GET MEDS AND DIET DETAILS'. To its right is a search input field with the placeholder text 'search by disease name...'. Below the search input field, there is a search result displayed for 'flu'. The result includes a description: 'Influenza is a viral infection that attacks your respiratory system — your nose, throat, and lungs. Influenza is commonly called the flu, but it's not the same as stomach "flu" viruses that cause diarrhea and vomiting. Symptoms include fever, chills, muscle aches, cough, congestion, runny nose, headaches, and fatigue'.

GET MEDS AND DIET DETAILS

NITK

DLHD

Home Maps Medicine Diseases

Disease their cause, and symptoms

diseases, infractions, levels of diff diseases with symptoms are listed below you can filter them by simply writing keywords for a particular disease.

search by disease name...

flu

Influenza is a viral infection that attacks your respiratory system — your nose, throat, and lungs. Influenza is commonly called the flu, but it's not the same as stomach "flu" viruses that cause diarrhea and vomiting. Symptoms include fever, chills, muscle aches, cough, congestion, runny nose, headaches, and fatigue

