NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

"PHARMACY MANAGEMENT SYSTEM"

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ABSTRACT

Nowadays, Pharmacy management system is one of the most essential tools that are mostly used in medical stores. It is mostly used to manage pharmacy related activities such as medical inventory, record keeping. Many pharmacies are still operating manually; they don't have adequate software to manage their daily activities. Pharmacy management systems can make the work easier by giving the details of the medicine when its name is entered. A computer gives the details of the medicine like the rate of medicine. It becomes very difficult in big medical stores to handle the details of all the medicines manually, so by using this pharmacy management system we can maintain the records of all the medicines.

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INTRODUCTION

The main objective of the project is to manage the administration of the pharmaceutical store and the database. This project is an analysis of the development and implementation of a pharmacy management system.This is done by creating a database of the available medicines in the shop. The primary purpose of the pharmacy management system is to increase the accuracy and improve the efficiency of the pharmacy store. The goal of this project is to develop software for the effective management of the store.This project is insight into the design and implementation of a Pharmacy Management System. Today management is one of the most essential features of all forms. Management provides sophistication to perform any kind of task in a particular form. This is a pharmacy management system used to manage most pharmacy related activities in the pharmacy.

A computer gives the details of the medicine like category of medicine, rate of medicine, and side effects of the medicine. It becomes very difficult in big medical stores to handle the details of all the medicines manually, so by using this pharmacy management system we can maintain the records of all the medicines. It is fed with the information whenever new medicines are brought and it is provided with a search option. When we enter the name of medicine it gives the details of medicine. MERN is a trending technology for today's developers as it provides an end-to-end framework that makes the entire development process relatively easy.

Basic Components of Mern includes:

1. MongoDB
2. Express.JS
3. React
4. Node.JS

MongoDB: - MongoDB is one of the latest candidates for data storage space. Very popular with document-oriented NoSQL functions, Map Reduce compute functions, and distributed key-value stores. This is one of the languages that full stack developers need to use. MongoDB is popular because it provides users with balanced functionality. For example, you may want to use features such as Queuing and MapReduce, but do not use them on a regular basis. MongoDB is useful for data that uses different queries. MongoDB has a similar architecture that makes it easy to handle large queries. MongoDB is very efficient when you have few relationships to manage. Large sets of relationships are inefficient, but they require less scaling and processing and can handle relationships very well. MongoDB is known for using the best features of its database management system. MongoDB includes documents: MongoDB is a document-oriented database. A document in MongoDB is a basic unit or basic building block of data. Here, a MongoDB document refers to a group of data in a row/record similar to a row/record in a relational database. Collection: A collection in MongoDB is a group of documents. Collection in MongoDB is similar to Table in SQL relational database. _id: Every document in the collection has an "_id" field that is used to uniquely identify the document in a particular collection; it acts as the primary key for the documents in the collection.

Express.JS: - Express is a minimal and flexible Node.js. web application framework that provides a robust feature set for developing web and mobile applications. This facilitates the rapid development of node-based web applications. You can configure the middleware to respond to HTTP requests. Defines a routing table used to perform various actions based on HTTP methods and URLs. Allows dynamic rendering of HTML pages based on passing arguments to the template.

React: - React (ReactJS) is a free open source front-end JavaScript library for building user interfaces based on UI components. React JS is a JavaScript library used in web development to create interactive elements on websites. ReactJS uses downward data flow. This is because it ensures that the smallest of changes that happen in child structure do not affect the parents. When an object is changed by a developer it needs to be made sure that only the particular objects are updated and

that just its state is modified. The data is bound together with the object and this structure sees.

Node.JS: - Node.js (Node) is an open source development platform for executing JavaScript code on the server side. Great for real-time applications. Easy scalability for modern applications. Affordable with full stack JS. Node.js is open source, highly scalable, and extremely fast.

LITERATURE SURVEY

The present pharmacy management system is manual and uses paper and pen therefore managing a very huge pharmacy with records stored on papers seems difficult to keep track of inventories.A major amount of time is taken for writing the order as the pharmacist needs to check through the stock balance and make and estimate the cost of each order.The customer goes to the shop and purchases the medicine required. So a lot of time is wasted. The complete process depends on the physical interactions . This whole process involves lots of effort and loss of time so to make everything easier and comforting our website provides a facility to get medicine at your very doorstep . Our Application aims to provide a list of all available medicines,medicine category and detailed information about the dosage and side-effects to the customers and online payment facility.

OBJECTIVE

The main aim of developing this application is to supply the medicines all over the country by just a single click and to reduce the time consumption. Online pharmacy is a web-based application. The User can purchase medicine online. Medicine is provided at your doorstep . As per the prescription, the user can search for medicine and useful information. This application provides information for daily consumption of medicine. Therefore the main objective is to reduce squandering of time and effort that customers put into this process of purchasing medicine .

PROBLEM STATEMENT

The main goal of the project is to automed records of medicines and customer payment positions and other related transactions made by the seller.

TECHNOLOGIES USED

ReactJs: It is a JavaScript library for building user interfaces used to build single-page applications and allows us to create reusable UI components.

Nodejs: Node.js is an open-source server environment that allows us to run JavaScript on the server.

Express.js: Express JS is a Node.js framework designed to build API's web applications cross-platform mobile apps quickly and make node js easy.

MongoDB: MongoDB is an open-source document database and leading NoSQL database.

METHODOLOGY

- The home page gives the overview of the website .
- The customers can view the medicines according to their category.
- When a particular category is selected all the medicines related to that category is displayed
- The detailed description of each medicines with important details like price,usage and side effects and be viewed
- The customers can add medicine with the required quantity to their cart.

- The cart and be updated with the quantity of the particular medicine
- The customer is also allowed to delete the medicine from the cart
- The system also includes test payment using stripe

Algorithm:

- Run the backend using the command npm start
- Run the frontend in the new terminal using the command npm start.
- The pharmacy application is running in google chrome.
- Browse the medicine according to category and add to cart
- Update the card and delete if the medicine not required
- The order can be completed with test payment using stripe ,the required details relating shipping and card information has be provided

CODE:-

https://github.com/madhuri080301/Pharmacy.git

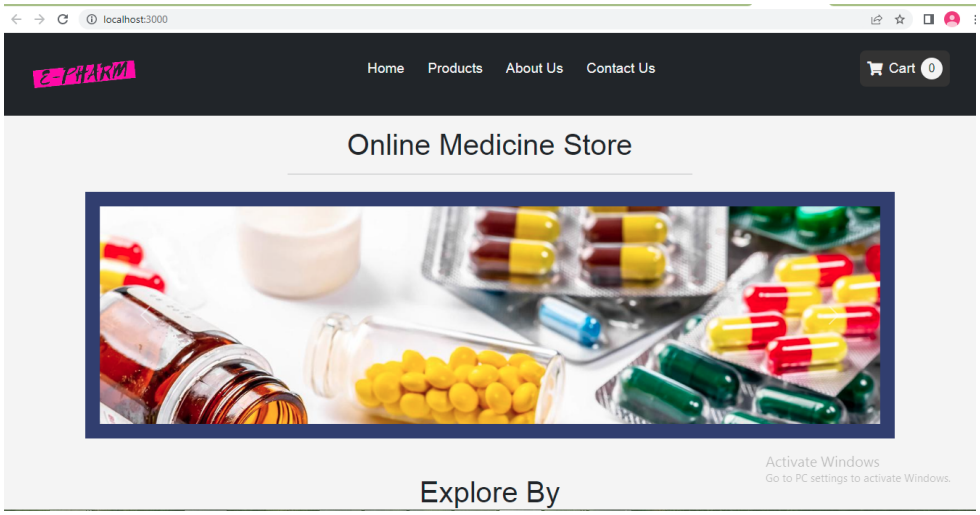
TESTING:-

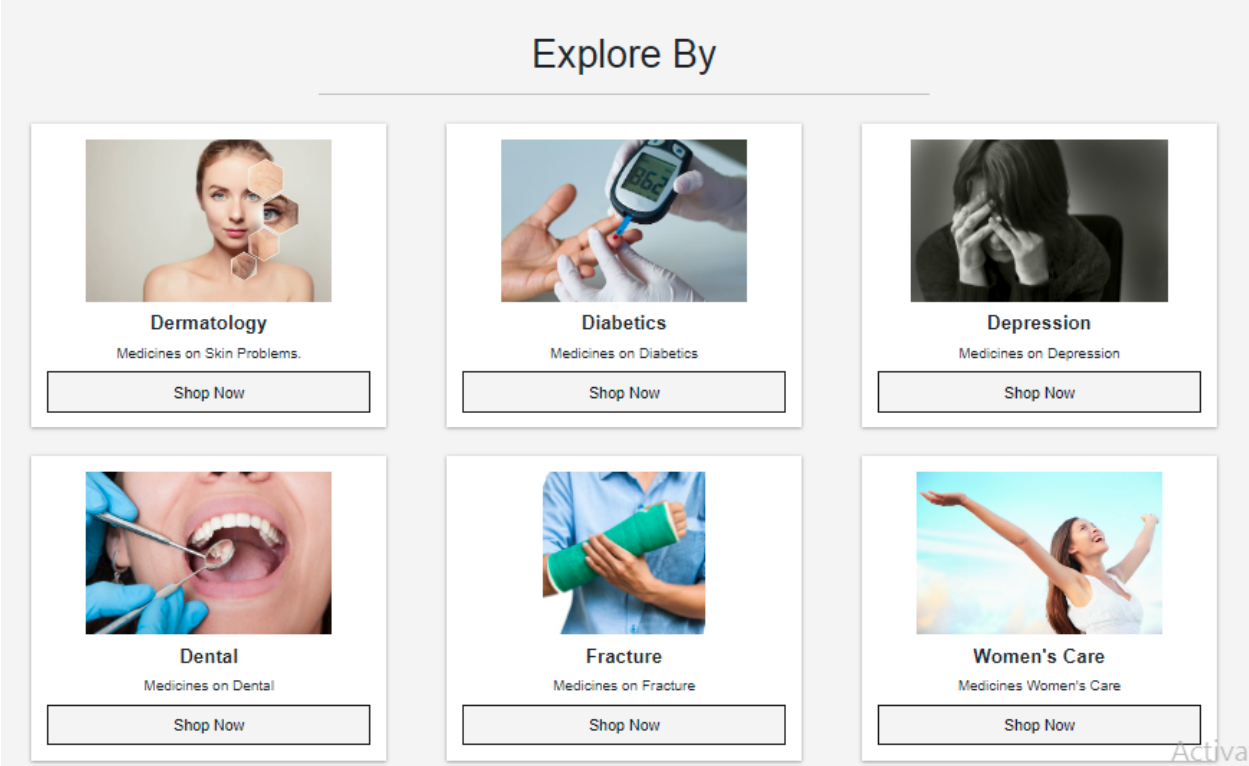
```
PS C:\Users\Admin\Desktop\bs\Pharmacy-Management-Application> npm start
npm WARN config global `--global`, `--local` are deprecated. Use `--location=global` instead.

> e-pharmacy-application@1.0.0 start
> node server.js

serve at http://localhost:5000
MongoDB connection SUCCESS
```

```
PS C:\Users\Admin\Desktop\bs\Pharmacy-Management-Application\frontend> npm start
npm WARN config global `--global`, `--local` are deprecated. Use `--location=global` instead.

> frontend@0.1.0 start
> react-scripts start

Compiled successfully!

You can now view frontend in the browser.

  Local:            http://localhost:3000
  On Your Network:  http://192.168.0.146:3000

Note that the development build is not optimized.
To create a production build, use npm run build.
```

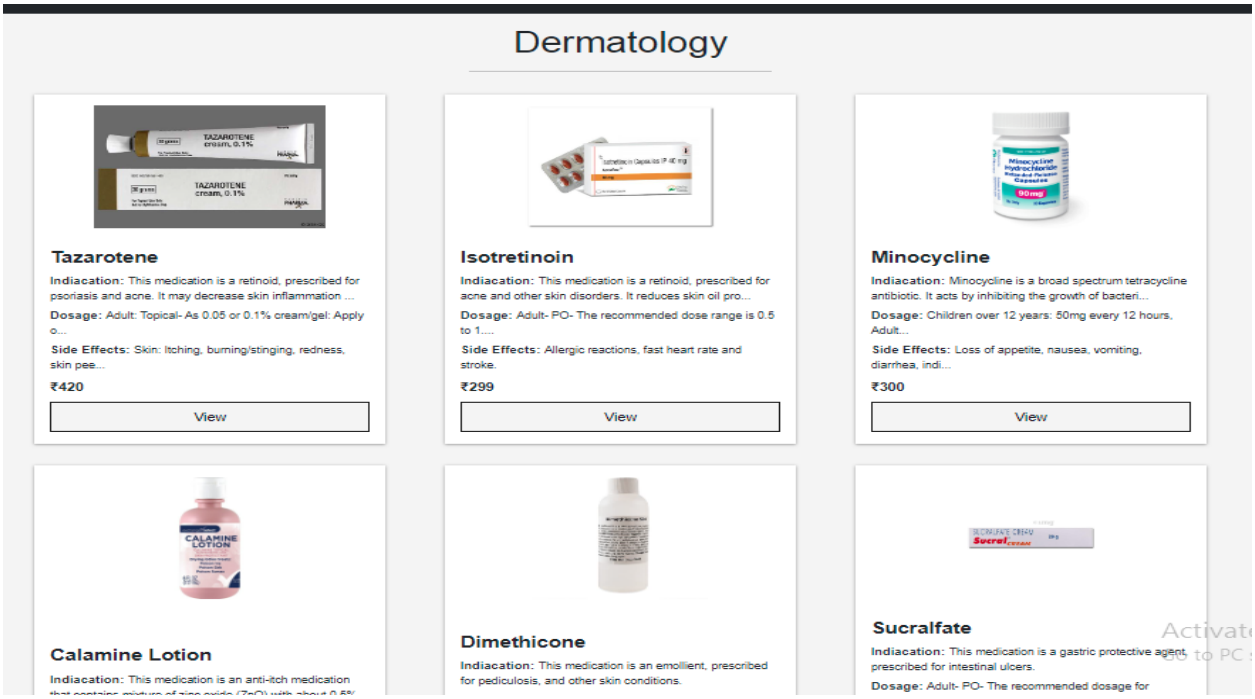
IMPLEMENTATION

EXPLORING THE CATEGORIES OF MEDICINE





DIFFERENT MEDICINES AVAILABLE IN EACH CATEGORY



Fracture

Abaloparatide

Indiacation: Abaloparatide is prescribed to treat osteoporosis in postmenopausal women who are at a high risk for fracture.

Dosage: The recommended adult dose is 80 mcg to be given subcutaneously (just under the skin) once a day

Side Effects: • Gastrointestinal: Nausea, pain in upper abdominal area, constipation, upset stomach.

₹350

View

Aspirin and Oxycodone

Indiacation: This combination medication is used to relieve moderate to severe pain.

Dosage: The usual dosage is one tablet every 6 hours as needed for pain.

Side Effects: Most common : Lightheadedness, dizziness, drowsiness or sedation, nausea and vomiting.

₹705

View

Metamizole

Indiacation: Metamizole is a painkiller used for the treatment of fever, headache, toothache, postoperative pain and other painful conditions.

Dosage: The recommended oral adult dose for metamizole is 500 mg 3-4 times up to a maximum dose of 4000 mg/day.

Side Effects: Skin: Severe skin reactions like toxic epidermal necrolysis

₹432

View

Diabetes

Alogliptin

Indiacation: Alogliptin is prescribed to reduce high blood sugar level in patients with type 2 diabetes along with diet control and exercise.It should not be used ...

Dosage: PO - The initial dose is based on patient's condition. Maximum recommended dose is 25/2000mg.

Side Effects: Upper respiratory tract infection, heart attack, throat inflammation, diarrhea, high blood pressure, headache, back pain and urinary tract infection.

₹405

View

Alogliptin and Metformin

Indiacation: Alogliptin and Metformin combination is used along with diet and exercise to improve blood sugar control or to treat hyperglycemia in patients with ty...

Dosage: (125mg/500mg)- Dose is based on patient's condition.

Side Effects: Lactic Acidosis and pancreatitis.Most Common: Upper respiratory tract infection, nasopharyngitis, diarrhea, hypertension, headache, back pain and urin...

₹500

View

Alogliptin and Pioglitazone

Indiacation: Alogliptin and Pioglitazone combination is used to treat high blood sugar level in patients with type 2 diabetes along with diet control and exercise....

Dosage: Dose is based on patient's condition. Maximum recommended dose is 25/45mg.

Side Effects: Inflammation of throat and nasal passages, back pain and upper respiratory tract infection.

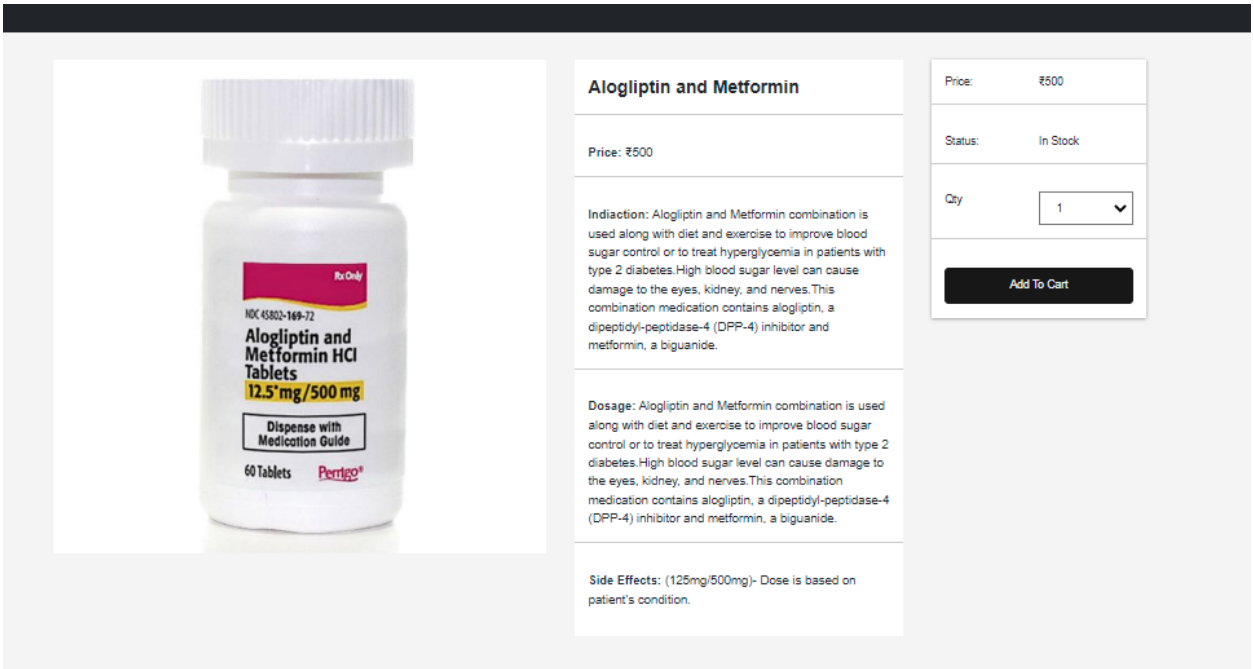
₹450

View

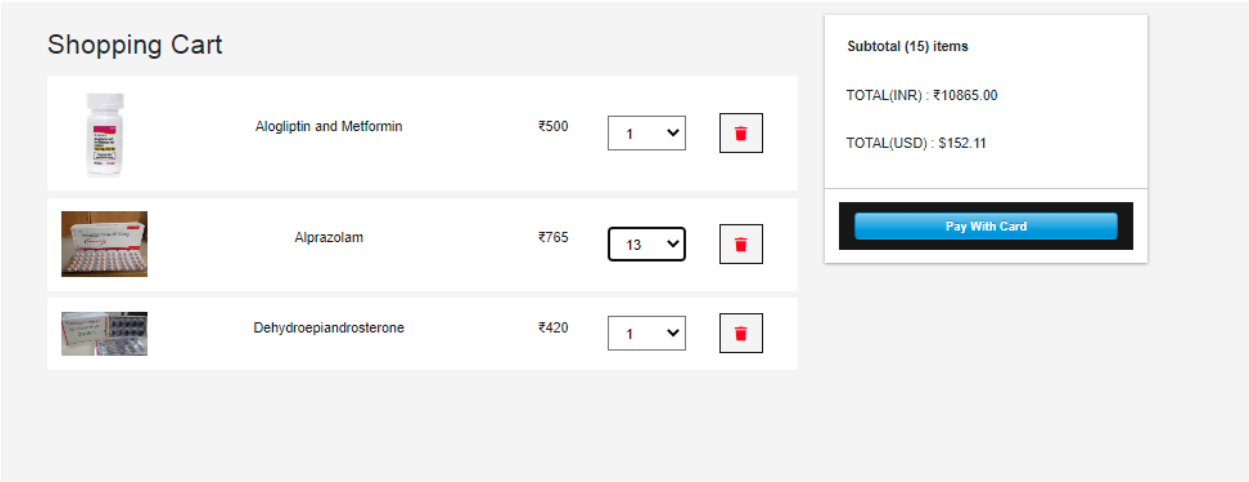
Diabinese

Colesevelam HCL

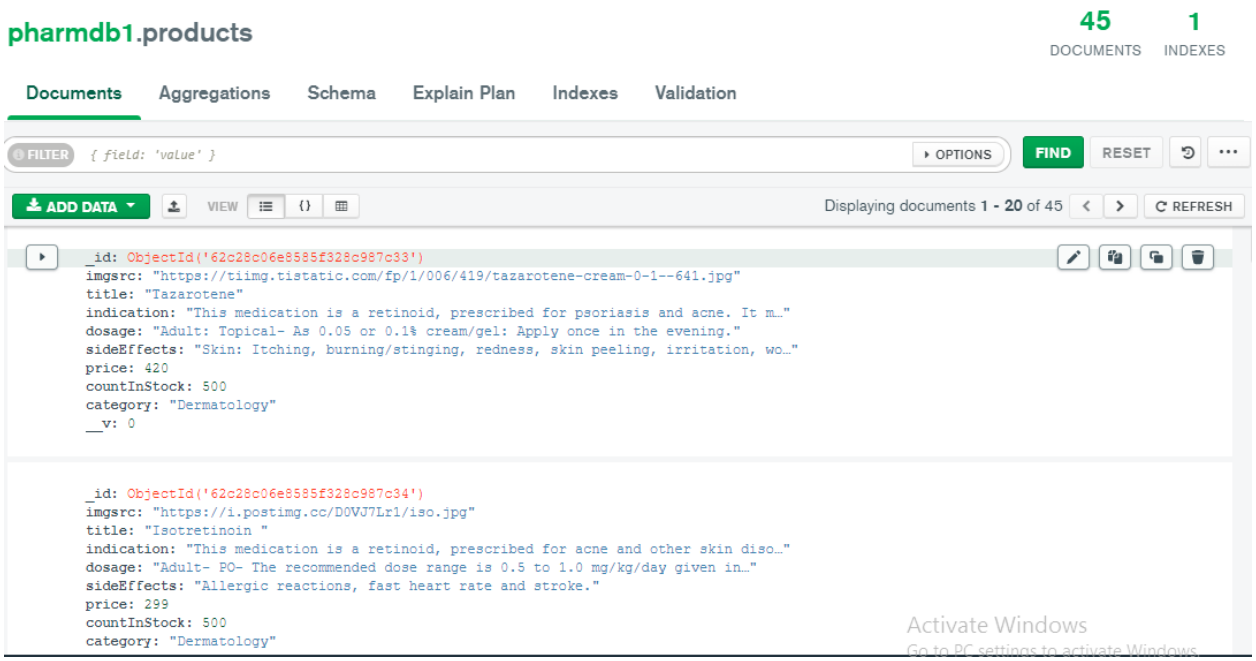
DETAILED DESCRIPTION OF A PARTICULAR MEDICINE



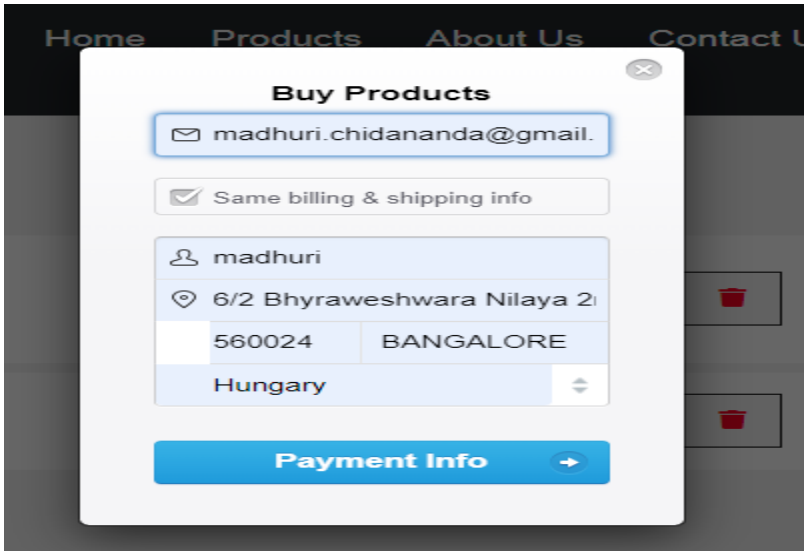
SHOPPING CART AND CHECKOUT



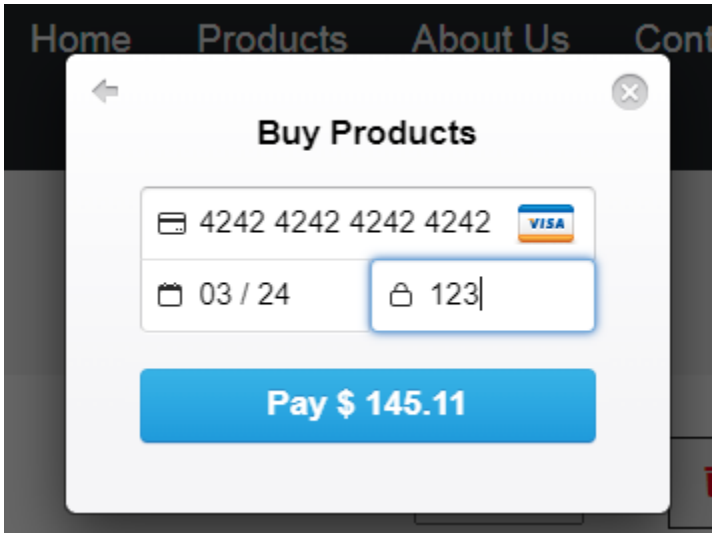
BACKEND



PAYMENT AND SHIPPING



CARD DETAILS(TEST CARD PROVIDED BY STRIPE)



CONCLUSION

The project has made us aware of the immense capabilities and the various uses of REACT, MONGO ,NODEJS and EXPRESS both individually and combined. We have raised one step further in terms of Designing and developing a combined management system of both stock managing and billing automation which can opt for any of the related stores.

Here we conclude that the Pharmacy Management System is developed to satisfy the complete needs of medical store for their necessary usage

REFERENCES AND BIBLIOGRAPHY

- https://www.w3schools.com/
- https://www.tutorialspoint.com/mongodb/index.htm
- https://morioh.com/p/d978f49c8bfe