AyurMed via E-Com using React

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Abstract - AyurMed via E-Com using React is trading in medical product using the Internet. This project deals with React JS framework using A9 algorithm on Visual Studio Code platform and responsive web design which aims to accommodate the presentation on mobile device. Due to Covid-19, medicine dearth is also an essential issue.

Therefore, reliable, fast, safe and user-friendly online based e-commerce web application has been designed. Literature review is the main method for making an examination on existing system and related work. A model is developed using React, firebase, React-router and JavaScript technologies using the Visual Studio.

By viewing this site, one can make a clear decision while buying a new medicine initially. Further, one can get to know information about the medicines and its advantages for our body.

1. INTRODUCTION

The aim of this project is to arrange relevant sites to make it easy for people to ready and explore. They do not have to waste time resizing and using multiple devices. Taping into the internet for improve health has become an obsession for many people all over the world after the covid pandemic. Ayurvedic medicines has been the most preferred not only for healing but also to boost immunity.

There are many research sites combining e-commerce and ayurvedic medicines. This uses basic responsive web design technology like react-router server and firebase for user authentication. It provides all data about ayurvedic medicines and which type of person can use it, resulting in a healthy world which is aiming towards self-care management.

Combining E-Health with network has its own advantage where data cannot be lost, it will be more flexible to use the product. Due to this product, people need not go searching for medicine shops and ask for doctors. They can read the details of each medicine clearly with its ingredients and with one click all the process will go on smoothly.

2. Existing System

In existing system, the detailed information is not shared about the medicines and there is no proper clarity, therefore leaving the customer not fully satisfied. And there is a lot of steps to carry out and it is essential to show prescription. Therefore, they have to send a picture of prescription, then authenticate if it is real or fake. They need to send OTPs to check if the customer is valid or not. For old people who find it hard to understand technology, this procedure becomes very hard.

Disadvantages:

1.Too many e-commerce websites for clothing, accessories, so there will be a huge confusion for customers to select a website.

2. Common technologies for most of the e-commerce websites are used, thereby leaving the security management loose. It will be easy for a hacker to hack into the system database.

3. Proposed System

Each medicine will have complete description and if they get doubts, they can just send an email or directly call the admin/me. Only after adding items to cart, they have the choice to login so that we can send them more updates and offers directly to their mobile phones. And lastly a payment gateway with which, one touch will make the customer's experience most affable and effortless.

Advantages:

1.Our prosed system uses unique technologies thereby leaving our security system strong.

2. All e-commerce websites are of clothing, accessories, but ours is of promoting ayurvedic medicines for the betterment of human health.

3. Making people aware of the advantages of ayurvedic medicines and without no side effects how it can improve their health.

4. System Design

The whole application frames apply to a client-server architecture. The web browsers become the most important application for the client. With firebase for user authentication and cloud firebase hosting, it makes the computer load look very simple and will reduce the system maintenance by upgrading costs and efforts which in turn will reduce the overall cost of ownership.

The biggest advantage is that we can operate all of it without installing any special software anywhere as long as there is one computer which has internet access and the user will need no maintenance.

4.1 Context Diagram

Context diagram in software engineering is a design that characterize the boundaries between multiple systems. It shows the that interaction with the system and this below figure shows the high-level view of how our system would look.

This figure represents all the behavioral data, the matching keywords and the semantic matching which happens when we use the proposed algorithm which is the A9 algorithm which is specially used for searching. And after the data have been collected, we can rank our products according to these patterns and get a successful result of products.

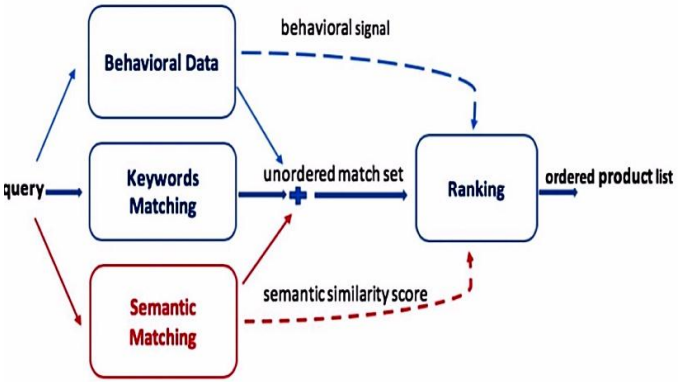

Fig:4.1 Context Diagram

4.2 Architectural Diagram

The architecture diagram is an ocular depiction of all elements that make up part of the design. Above all, it helps all the people involved in our product to understand the layout of our proposed product.

People who can be involved are mostly the engineers, designers, stakeholders etc.

Architectural Diagram is considered to be like a blueprint of a building where we can see the building as a whole and also in different categories like the interior viewing, pipe fittings, walls and floorplans.

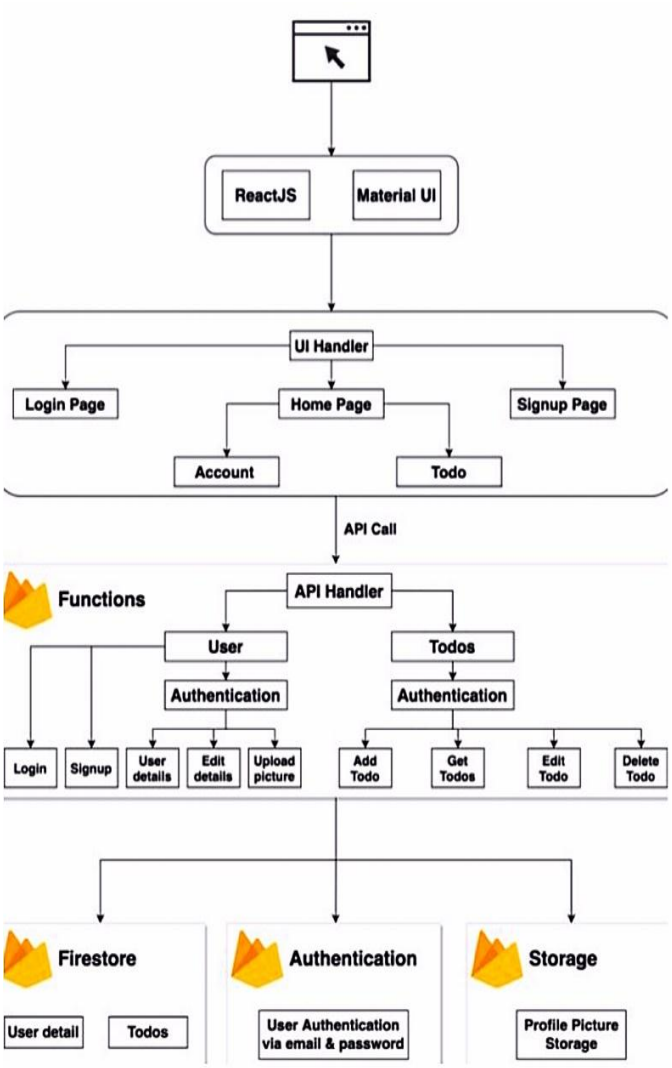

Fig:4.2 Architectural Design

4.3 Use case Diagram

A use case diagram is commonly quite smooth and simple as it does not show the facts:

1.It only encapsulates some of the relationship betwixt use case, actor and the system.

2. It does not display the order in the steps are performed to achieve the goal.

3. Use case diagram will consists only of few shapes.

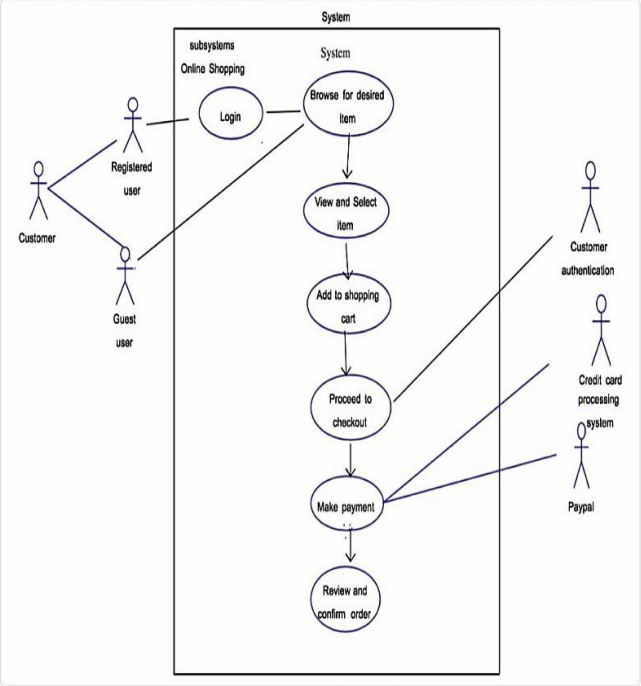

Fig 4.3: Use case Diagram

5. System Testing

Trying out is the process of determining the product's strengths and weaknesses. Moreover, testing is the process of running a programmed with the specific goal of identifying and correcting errors, as well as verifications of the program's functionality.

5.1 Unit Testing

In unit testing checking out utility developer exams the product. The entire utility is fashioned of distinct modules. Unit testing focuses on each sub-module unbiased of one or any other, to find mistakes. This allows the programmer to hit upon mistakes. even as testing the module the idea of trace and breakpoints are implemented at extraordinary degrees of trying out.

5.2 Integration Testing

Integration testing is intended to test the device as a whole. Its goal is to thoroughly test the device while all of its modules and sub modules are fully integrated. This testing is done to ensure that all of the modules that function together correctly while they are separate work together without any anomalies when they are combined.

5.3 System Testing

System testing can be defined in a variety of ways, but the most basic definition is that validation is successful when the system performs in a way that can be fairly predicted by the user. Validation testing ensures that the system satisfies all of the system's practical, behavioral, and overall performance requirements.

5.4 Test Cases

Sl. No.	Scenario	Action	Expected Result	Actual Result	Status
1	Accept the terms and conditions	Read the terms and condition Click on continue	The application should allow the user to navigate to the next page	As accepted	OK
2	Enter E-mail address	Enter a valid e-mail address	The application will allow the user to navigate to the next page	As accepted	OK
3	Enter password	Create a new password	It will allow the user to register	As accepted	OK
4	Homepage	It will display the products	Users can scroll and see more products	As accepted	OK
5	Checkout	Proceed to checkout	On this page, the user will see the subtotal of all the products added to the basket.	As accepted	OK
6	Logout	Click on Logout	Successfully Logged out	As accepted	OK
7	Wrong e-mail address	This user is not registered	Localhost will only show the error message	As accepted	OK
8	New user	Registration	It will save in database	As accepted	OK
9	Sign-in, we can save our email and password for future references	Automatic option to save	Localhost will show	As accepted	OK

Table 5.4 :Test cases

CONCLUSION

In conclusion, we can say that there is no end to products improvement. Even when there seems to be room for improvement, we should go towards making it more friendly application. Our goal is to feature ayurvedic medicines broadly and every person using the internet get a basic knowledge about medicines.

The objective I learnt was to build a fully functional e-commerce website with the help of React JS framework and IDE visual studio and mainly react-router-DOM on the server end. With an effective use of firebase for user authentication and cloud firebase for hosting and deployment. These formal methods have given this project a structure and necessary documentation for future upgrade.

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