1. INTRODUCTION

PROJECT DETAILS

This project "**Multi Franchise Ecommerce Web-App**" provides a complete one platform solution for Network Marketing Leaders, Customers & Distributors to do business in a digitalized way and help to manage the entire records of data digitally secure , safe and effectively and make easy for customers to purchase products from home.

PURPOSE

The main focus to develop this software is to providing all facilities like any ecommerce platform for user to purchase products online. This software includes maintaining month wise bills for each Distributors Separately.

SCOPE

All Distributors maintain their customer bill records, providing their customers to facility of online purchasing/Tracking Order/Delivery/Payment Status like Amazon, Flip Kart.

OBJECTIVE

The objective of this system is to provide is this software will help to save time of customer to save their time to purchase products from network marketing company offline and save time of distributors to maintain bill record of customer.

TECHNOLOGY AND LITERATURE REVIEW

Frontend : HTML, CSS, JavaScript , Ajax , JQuery

Backend : PHP

Database: MySQL

Machine Learning - Python

2. PROJECT MANAGEMENT

FEASIBILITY STUDY

Technical Feasibility

After considering our project functionalities and technical needs we decided to go with the following technologies –

Frontend – Html, CSS, JavaScript, JQuery, Ajax
Backend – PHP
Database – MySQL
Machine Learning – Python

All the above-mentioned technologies are open sources therefore it is feasible to use with the knowledge of basics in each of them it would be easy for us to manage the project too. Also, all these technologies are very famous now a days and gives the best performance to any application. It gives the user-friendly environment to users of the application.

Time Schedule Feasibility

The planning for our project completion is as follows:
    After declaration and information of the subject, we started thinking about the project title and frameworks. We finalized our topic and discussed it with respected faculty member. Initially we gathered & analyzed all the requirements by the beginning of January 2023.
    We prepared the SRS document right after that. In mid of January 2023, we design the UI and some basic backend work. This was followed by the required diagrams. For coding and unit testing 4 to 6 weeks and for system and integration testing another 2 weeks were covered.
     We are ready for its demonstration in the submission week along with the report. Being a 2 member's team, we were able to complete our project in the estimated time.

Operational Feasibility

In the current scenario where the virtual world is the new normal, our project will excel greatly along the frequent users who want to avail services online.

We have kept the user interface of mobile interface pretty simple and handy so everyone can take advantage of it and use it without any inconvenience. Using the Php and Python, our website is operated very fast and with high performance. Due to its user-friendly look, users won't feel in inconvenience while using it even for the first time.

Implementation Feasibility

The Functional requirements of our project will be easily fulfilled by the technologies we have mentioned.

All the technologies we are using are easily supported by all the browsers. All these technologies are well supported in the tool we used for coding (i.e., VScode). Hence, the implementation is feasible.
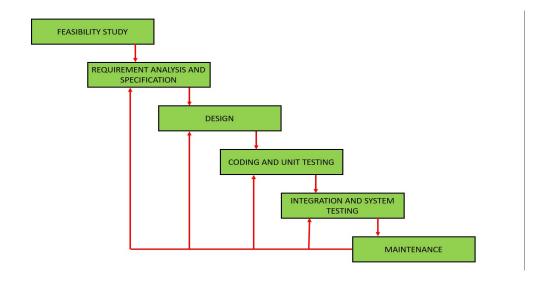
PROJECT PLANNING

Project Development Approach and Justification

The software development approach we used for
our project: Iterative Waterfall Model

This includes the stages like:

1.Feasibility Study
2.Requirement Analysis
3.Design
4.Coding
5.Testing
6.Maintenance

We choose this model because it gives us the flexibility to get back to a stage when it needs some redo tasks.

Our entire approach was trial and error and learns as we need. By choosing the iterative waterfall we get the liberty of flexibility and the risk management can be done easily.

Project Plan

Sr. No	Documents	Timeline
1	Thinking for Project Definition	Mid of December
2	Approval for the project title and framework	End of December
3	Implementation	January, February
4	Testing	Starting of March
5	Documentation	End of March

Roles and Responsibility

Name	Analysis	Design	Coding	Testing	Documentation	Maintenance
Neel	✓	✓	✓	✓	✓	✓
Apar	✓	✓	✓	✓	✓	✓

3. SYSTEM STUDY REQUIREMENT

STUDY OF CURRENT SYSTEM

During our study and analysis for our definition, we came across that there doesn't exist any system which will help to multiple distributors of Network Marketing Company and their users. So our target is to make platform where all distributors can come together in one platform like Amazon.

USER CHARACTERISTICS

1. Owner – Register New Distributors

2. Distributors – Keep Track Of Orders, Maintain bill's of Customer month wise.

3. Customer– View products, purchase products, Keep track of their products.

HARDWARE AND SOFTWARE REQUIREMENTS

For all the actors the basic software requirements are as follows
- Good Browser
- Good internet connection

For all the patients the basic hardware requirements are as follows

- Device to run this Web-app.

CONSTRAINTS

- As it is a web-based constantly needs internet
- Response time can vary depending on the browser and speed of internet connection.

4. SYSTEM ANALYSIS

REQUIREMENTS OF NEW SYSTEM

Functional Requirements

1) Manage Customer

Sign In
Description: Enter Customer id and password. If Customer record exists thenshow dashboard else go back to login page.
Input: Customer details
Output: Dashboard

2) View Order History

Description: Customer can view his order history by login to his account.
Prerequisite: Customer must be logged in to application.
Output: Customer can see and take it print as well as track payment and order delivery status.

3) Purchasing Products

Description: Customer can purchase products
Input: Enter Details
Output: Order Done

4) Contact

Description: Customer can contact with any me
Input: Message to distributors
Output: Message sent

5) Search for Distributors

Description: Select distributors unique id
Input: Search with city, find distributors unique id
Output: Got it

Distributors Interface

1) Distributors Login

Description: Distributors should log in to his portal to do task. Doctor willrequire to log in every day due to security.
Input: ID and password
Output: Confirmation

2) Delete/Modify Products Details

Description: To change products' details (name, price)
Input: Updated products' details
Output: Update confirmation

3) Order Products Details

Description: To pack order and update delivery status
Input: Update payment, order delivery, gift status
Output: Users can track everything
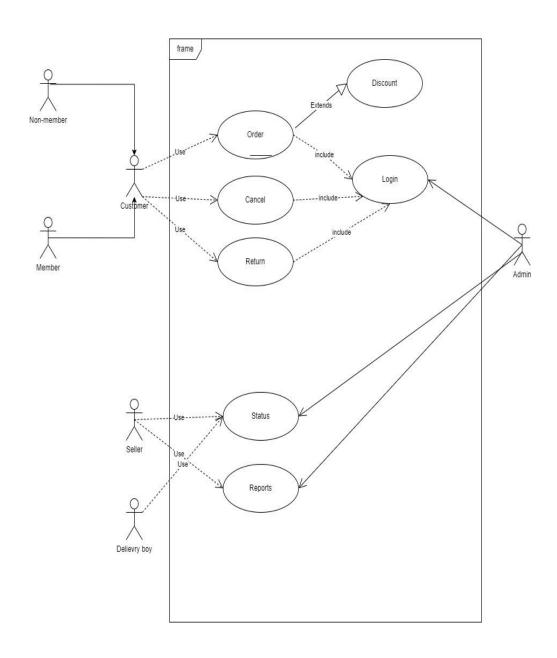
Non-Functional Requirements

- These are the requirements that are not functional in nature. Especially these are the constraints the system must work within.

1) **Database:** To store records of products details, customer details along with their billing history and other related information. MySQL will be used to store all the data.

2) **Operating System:** The software will be designed to run in every System.
For Distributors: **Windows/MacOS** is required.
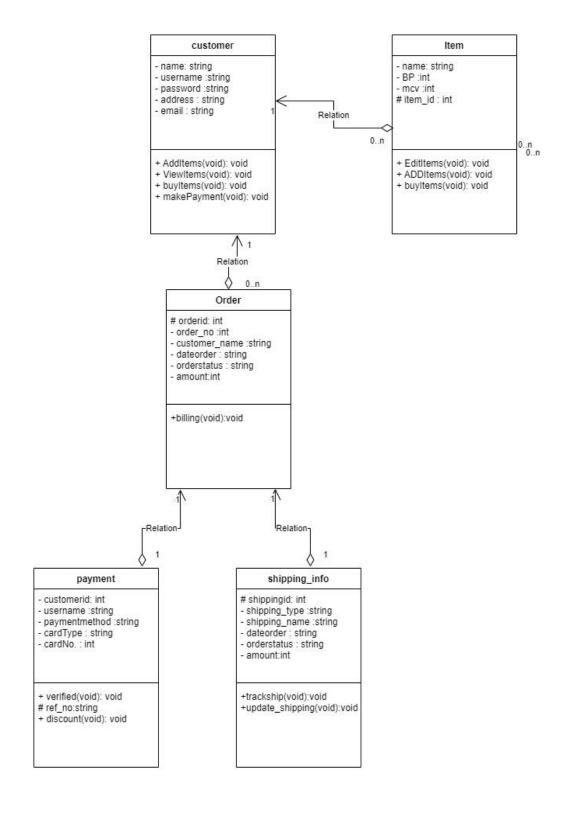For Customers: **Windows/MacOS** is required.

3) **Development Tools:** For development of the software, **VSCode** IDE is required. For software testing, **Postman** is used.

4) **Safety Requirements:** If there is extensive damage to a wide portion of the database due to catastrophic failure, such as disk crash, the recovery method restores a past copy of the database that was backed up to archival storage and reconstructs a

more concurrent state by reapplying or redoing the operations of committed transactions from the backed up log, up to time of failure.

5) **Security Requirements:** Security systems need database storage just like many other applications. However, the special requirements of the security market mean that vendors must choose their database partner carefully.
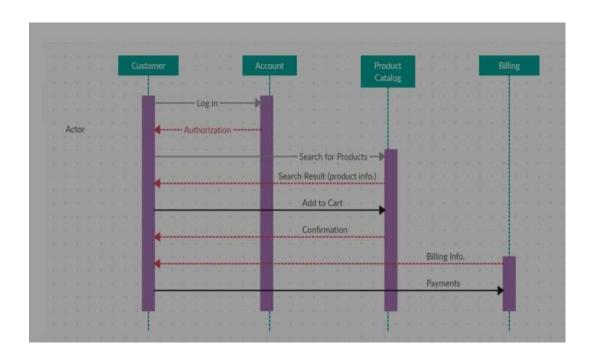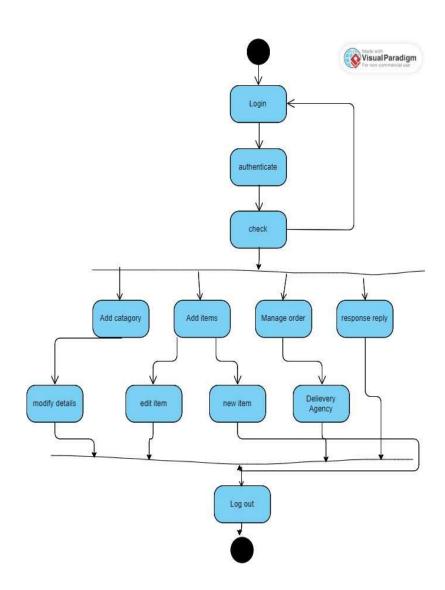
5. SYSTEM DESIGN

USECASE DIAGRAM

CLASS DIAGRAM

customer

- name: string
- username :string
- password :string
- address : string
- email : string

+ AddItems(void): void
+ ViewItems(void): void
+ buyItems(void): void
+ makePayment(void): void

Item

- name: string
- BP :int
- mcv :int
item_id : int

+ EditItems(void): void
+ ADDItems(void): void
+ buyItems(void): void

Relation 1 0..n 0..n 0..n

1 Relation 0..n

Order

orderid: int
- order_no :int
- customer_name :string
- dateorder : string
- orderstatus : string
- amount:int

+billing(void):void

1 Relation 1

1 Relation 1

payment

- customerid: int
- username :string
- paymentmethod :string
- cardType : string
- cardNo. : int

+ verified(void): void
# ref_no:string
+ discount(void): void

shipping_info

shippingid: int
- shipping_type :string
- shipping_name :string
- dateorder : string
- orderstatus : string
- amount:int

+trackship(void):void
+update_shipping(void):void

SEQUENCE DIAGRAM

Activity Diagram

2. IMPLEMENTATION PLANNING

IMPLEMENTATION ENVIRONMENT:

During the complete implementation we have worked on VS Code .VS Code is a free source-code GUI (Graphical User Interface) editor for Windows, Linux and macOS.

Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, compiling , deploying and embedded Git.

Users can change the theme, keyboard shortcuts, preferences, and install extensions that add additional functionality. It also provides extension to work in a team with a multi user experience. It supports all the technologies we used for our project.

Also connection with database and backend through this platform is very easy to use.

PROGRAM / MODULES SPECIFICATION:

- MYSQL Database
- VS Code
- OS: Windows, MacOS

3. TESTING

TESTING PLAN

The method of testing used in this project is White Box testing as in White Box testing; the tester has the complete knowledge and understanding of the code.

TESTING STRATEGY

The development process repeats this testing sub-process a number of times for the following phases.

    a) Unit Testing.
    b) Integration Testing

Unit Testing tests a unit of code (module or program) after coding of that unit is completed. Integration Testing tests whether the various programs that make up a system, interface with each other as desired, fit together and whether the interfaces between the programs are correct.

TESTING METHOD

There are two kinds of testing mainly Black box and White box testing:

- In black-box testing a software item is viewed as a black box, without knowledge of its internal structure or behavior. Possible input conditions based on the specifications (and possible sequences of input conditions) are presented as test cases.

- In white-box testing, knowledge of internal structure and logic is explored. Test cases are presented such that possible paths of control flow through the software item are traced. Hence more defects than black-box testing are likely to be found.
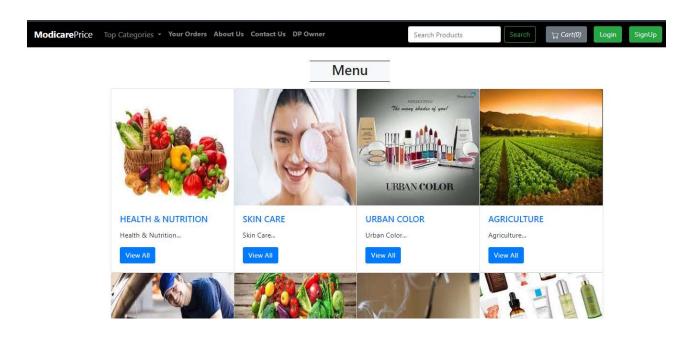
TEST CASES

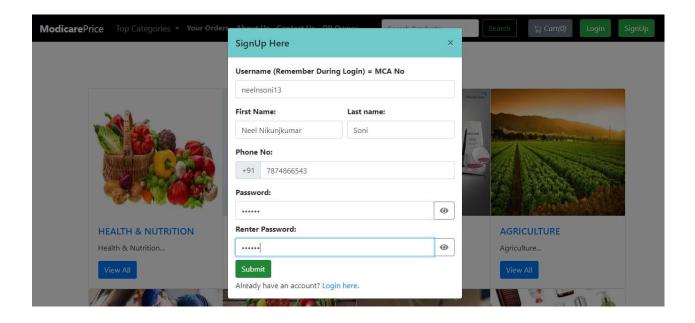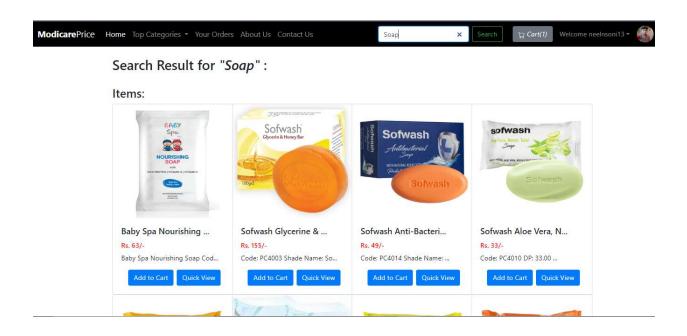| ENITITY	TEST CASE	EXPECTED OUTPUT	ACTUAL OUTPUT	STATUS
Register new Customer	Validation	Successfully register and redirect to login page	Successfully register and redirected to login page	Pass
Log in	Validation	Successfully logged in and home page	Successfully logged in and redirected to home page	Pass
Order Tracking. Payment Status	Update Track Details	All new information is saved into the database & update in web-app	All new information is saved in the database to the respective users and display.	Pass
Purchase Product	Select Products and add details	Successfully bills generate & make orders.	Successfully Bill generates & Successfully receives at owners end.	Pass
Month Wise Report with payment and order details of users	Select Different Month	Display records according month wise with zero tolerance	Successfully with 100% accuracy.	Pass
Update profile Of Users & Distributors Update/Add/Delete Products	New details	All the changes should be saved in database	Received one successful message	Pass

SCREENSHOTS
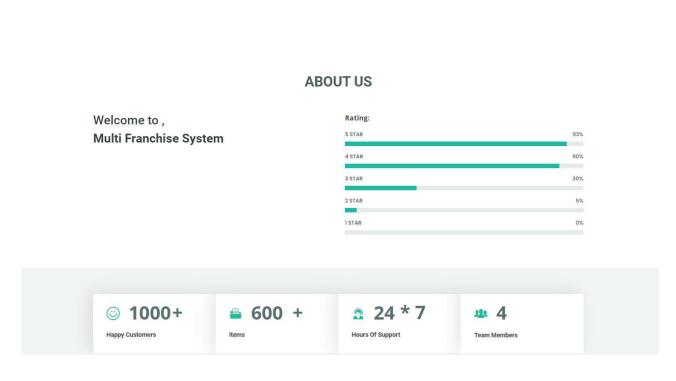
Web Application:

- ### Home Page

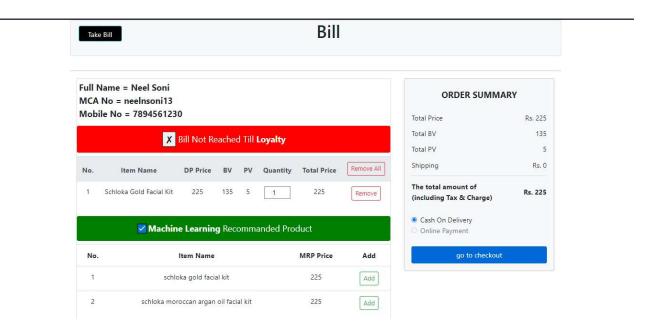- ### User Signup/Login Page

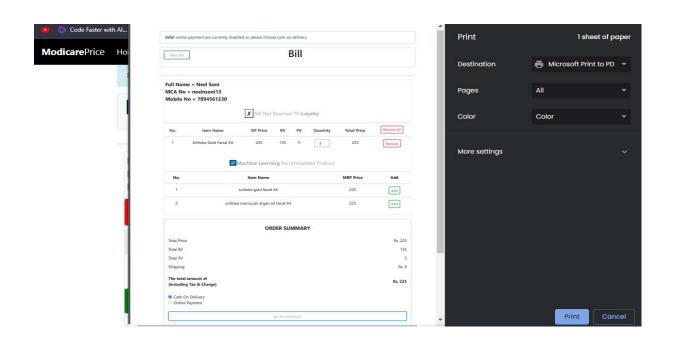- ## **Search For Products**

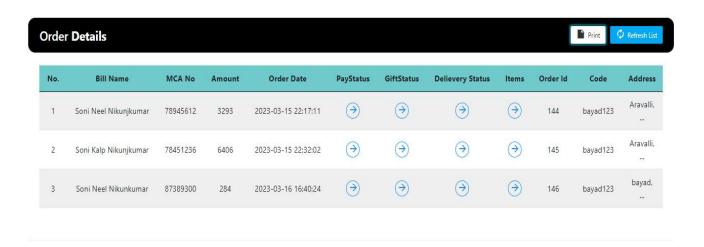- ## **About Page**

Add To Cart (With Recommends Product)

Bill Page

- ## **All Distributors**

ModicarePrice	Home	Top Categories ▾	Your Orders	About Us	Contact Us	Search Products Search 🛒 Cart(2) Welcome neelnsoni13 ▾

DP Owner   🔄 Refresh List   🖨 Print

Show 10 ˅ entries   Search: [ ]

No.	DP Code	MCA	Name	Email	Address	Phone No	Availability
1	bayad123	87389300	Dr Dimple Nikunjkumar Soni	nikunjsoni13@gmail.com	59,SHREEJICHARAN SOCIETY,OPP RELIANCE PETROL PUMP / BAYAD / ARAVALLI / GUJARAT	9427080543	7 Days = 7 Am to 10 Pm & Sunday =10 Am to 2 Pm
2	rajkot123	87389301	Purvi Popat	purvi@gmail.com	Rajkot Raiya Road	7060504030	7 Days = 7 Am to 10 Pm & Sunday =10 Am to 2 Pm

Showing 1 to 2 of 2 entries   Previous   1   Next

- ## **Order Details**

Order Details   🖨 Print   🔄 Refresh List

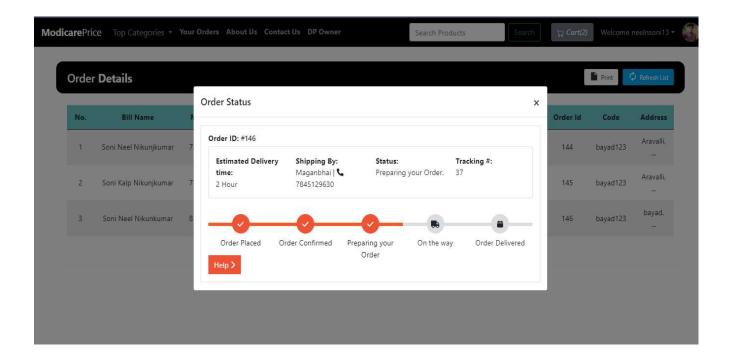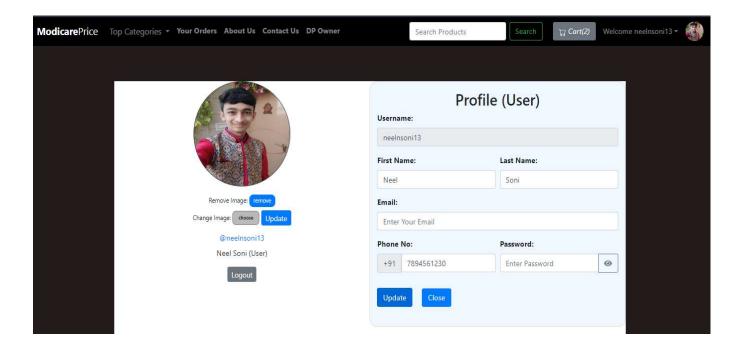| No.	Bill Name	MCA No	Amount	Order Date	PayStatus	GiftStatus	Delievery Status	Items	Order Id	Code	Address
1	Soni Neel Nikunjkumar	78945612	3293	2023-03-15 22:17:11	→	→	→	→	144	bayad123	Aravalli, …
2	Soni Kalp Nikunjkumar	78451236	6406	2023-03-15 22:32:02	→	→	→	→	145	bayad123	Aravalli, …
3	Soni Neel Nikunkumar	87389300	284	2023-03-16 16:40:24	→	→	→	→	146	bayad123	bayad, …

• Payment Status (User)

• Tracking Order Status (User)

- **Profile Page**

DISTRIBUTORS (SECTION)

- **Admin Login**
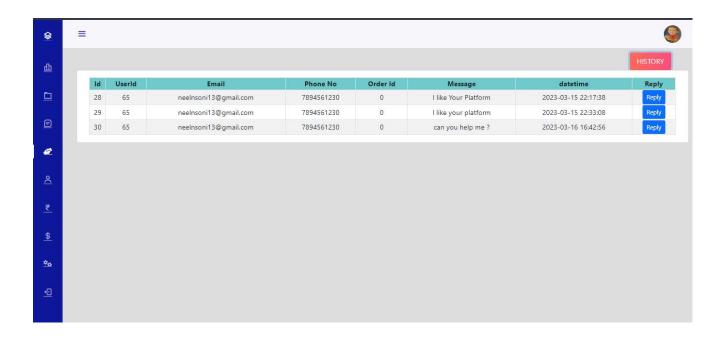

- **Month Wise Order Details**

Update Products Details (Distributors)

Cat. Id	Img	Item Detail	Action
22		Name : **Well Amla** Description : **Code: HL2025 Shade Name: DP: 205.00 BV: 122.00 PV: 4.56 Weight(gm): 55.00** DP Price : **205** BV : **122** PV : **4.56**	Edit Delete
22		Name : **Well Turmeric** Description : **Code: HL2053 Shade Name: DP: 925.00 BV: 555.00 PV: 20.56 Weight(gm): 55.00** DP Price : **925** BV : **555** PV : **20.56**	Edit Delete
22		Name : **Well Brahmi**	Edit

Create New Item

Name:

Description:

DP Price

BV

PV

Category:

None

User Query Handling (Distributors)

HISTORY

Id	UserId	Email	Phone No	Order Id	Message	datetime	Reply
28	65	neelnsoni13@gmail.com	7894561230	0	I like Your Platform	2023-03-15 22:17:38	Reply
29	65	neelnsoni13@gmail.com	7894561230	0	I like your platform	2023-03-15 22:33:08	Reply
30	65	neelnsoni13@gmail.com	7894561230	0	can you help me ?	2023-03-16 16:42:56	Reply

4. LIMITATIONS AND FUTURE ENHANCEMENTS

LIMITATIONS:

- We have not added Products API from Direct Network Marketing Company. This means Distributors need to manually enter the products into the list.

- The Internet must be on the whole time while using the web application.
- Online Payment Currently Not Available.

FUTURE ENHANCEMENTS:

- Improving more faster response of speed in Recommendation product which is implemented using Machine Learning.

- Improving the efficiency of the website.

- Keep on changing the UI-Design to make the website look more attractive.

- Implementing the dark mode feature for the users who are interested to show our website in dark mode.
- Providing Online Payment Features.

5. CONCLUSION AND DISCUSSION

CONCLUSION

We provide platform for Users of Network Marketing Company and their distributors.

We have tried to keep the UI alluring and easy enough for our users to feel comfortable. We made our web site user friendly so that even for the users who areusing it for the first-time won't get any inconvenience.

Our system had tried to make this platform easy for Distributors to maintain Month wise Records of Users Bill Record, Payment Records & Users to Purchase Various Products online.

DISCUSSION

Self-Analysis of Project Viabilities:

In our opinion, this project has served the goal that we set when we started.

It provides a platform for the All Distributors over all over world in one platform for Network Marketing Company and users to purchase Products online from home.

We provided all the functionalities which we provided in our SRS. We provided an interactive platform to the users to make their life better.

Problems encountered

There were few challenging problems encountered during this project: -

1. Problem to maintain database and to fetch data with complex queries.
2. Learning python from scratch & implementing machine learning model for recommendation products purchase by users shown to user on add to cart page.

3. For making UI interactive and fully Responsive.
4. Provide High Secure authentication and Generating month wise report for each Distributors in backend and database part.

Summary of Project Work:

We have completed our project work using software engineering and system analysis and design approach.

We have done our work with planned scheduling pertaining to time constraints and result oriented progress in project development.

We have been given an industrial exposure which is very beneficial for our field.

We learned lots of new things and time management.

Overall, we achieved out target and goal which we decided in requirement specifications.

11. BIBLIOGRAPHY

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Python   https://www.python.org/