TE MINI-PROJECT REPORT ON

INDIAN FESTIVAL CATALOG

Submitted in partial fulfillment of the requirements of the degree of bachelor's in engineering

by

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2021-2022

Mahavir Education Trust's



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Certificate

This is to certify that the report of the mini project entitled

"INDIAN FESTIVAL CATALOG"

is a bonafide work of

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submitted to the

UNIVERSITY OF MUMBAI

during semester V in partial fulfilment of the requirement for the award of the degree of

BACHELOR OF ENGINEERING

in

INFORMATION TECHNOLOGY

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Approval for Mini Project Report for T. E. semester V

This project report entitled "**Indian Festival Catalog**" by Mihir Chheda, Nidhi Daulat, Mishkat Shaikh AND Sarvesh Sharma is approved for semester V in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering.

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2.

Date: 11th Nov 2021.

Place: Mumbai

DECLARATION

I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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Date: 11th Nov 2021.

Table of Contents

Description	Page No.
Abstract	i
List of Figures	ii
List of Tables	iii
Chapter 1 Introduction	7
Chapter 2 Review of Literature (Comparative Analysis)	8
Chapter 3 Proposed System	12
Chapter 4 Design Details	13
Chapter 5 DevOps Tools	36
Chapter 6 Summary	38
Chapter 7 References	40
Acknowledgement	41

ABSTRACT

Reaching a techno-world era in 2021, every transaction, shopping, booking, schooling, health tracking have turned their tables into going online. Traditional methods do exist and have their part of advantages in customer satisfaction. But in recent times those milestones have been reached through feedback mechanisms, reviews, recommendation systems and virtual viewing of products. Online shopping is an easy and a comfortable way of shopping from a wide range of products. Customers can save a lot of time which they normally need to physically go to the retail shop and buy products.

Festivals are a crucial part of the lives of Indians. People celebrate and shop with full enthusiasm at these times. A survey report suggests that 90% of people in India shop in accordance with the festivals. The paper aims at developing a fully functional website that avails users to shop items from festival catalogs. The prime objective lies in providing the facility of festival-oriented shopping at one website targeting a large range of customers. A proper stepwise model of a B2C E-commerce website is followed that includes customer login, product details, shopping cart, placing an order, delivery information and payment. The study depicts how effectively a festival-based website can be according to the way Indians shop. Hence being beneficial and easy to use for customers as well as companies for a large sale of their products.

INTRODUCTION

The world has officially entered the tech-inspired way of living life. Going digital is the only goal of every small business and startup in India. Right from money transactions to booking hotel rooms, restaurant tables, movie tickets, and tours online. The shopping industry has evolved into creating virtual stores than traditional ones. Life is moving fast and no one wants to waste even a little time on daily tasks. Shopping virtually has grabbed and changed the whole market statistics of India. Buying items anywhere, anytime, and choosing from a wide range of products without any physical tension and just by scrolling is the new cool. Websites are an easy-to-use tool and also saves time and energy.

Festivals are the most crucial time in the lives of Indians. The rich culture, enlightening traditions, rituals, meeting people, decorating, and getting ready for it is highly encouraged here. It is believed that most Indians go round the market to buy items during these festivals. There are many established websites providing products based on basic categories. This makes a customer jump onto many sites consuming a lot of time. Hence developing a website that makes customers shop according to festival catalogs is the prime objective. 'Festivity' is a website specially designed to focus on festival-oriented shopping. The basic e-commerce structure of ordering items and completing payment has been followed. The website offers a place to log in with minimum credentials. Exclusive products are added with their ratings and defined descriptions. Cart and wishlist are two favorable options for instant and future purchases respectively. Recent purchase history can also be viewed. Technologies like React js and mongo db have been used along with basic html and css scripting. Optimum and latest versions are utilized for compatible website experience. The payment system is taken care of with razorpay package on a test mode basis. This provides a real-time shopping experience.

REVIEW OF LITERATURE

A literature review is a scholarly paper that presents the current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic. Literature reviews are secondary sources and do not report new or original experimental work. Literature reviews are a basis for research in nearly every academic field. A narrow-scope literature review may be included as part of a peer-reviewed journal article presenting new research, serving to situate the current study within the body of the relevant literature and to provide context for the reader.

Comparative Analysis

Sr. No.	Title	Author	Publisher	Date	Technology Used	Advantages	O	Features to be Implemented
1.	An advanced intelligence system in customer online shopping behavior and satisfaction analysis	Nazmun Nessa Moon, Iftakhar Moham mad Talha, Imrus Salehin	Science Direct	1 st Aug 2021	HTML CSS NoSQL	Different kinds of algorithms are used to analyse the customer shopping behaviour and satisfaction of online shopping.	Lack of standardizing. There exists a scarcity of security.	The idea of developing a festival oriented e-commerce website was observed & examined according to customers' needs.

2.	Model and Implementat ion of E- commerce Recommend ation System Based on User Clustering	Jiaoli Zhou, Fang Wan, Ru Jing	IEEE	19 th Feb 2021	JavaScript Bootstrap PHP	Introducing the development of recommenda tion technologies , making theoretical analysis on the improvemen t of introducing user clustering.	Heavy customization required. Not that Secure.	Designing the catalogs in accordance with festivals of India to avail users' to shop everything at one place.
3.	Webapp Service for Booking Handyman Using Mongodb, Express JS, React JS, Node JS	Saundari ya K, Abirami M, Senthil Kumara n R	IEEE	15 th June 2021	React JS Node JS Mongo DB	User can be able to book well qualified professional workers through the websites on their doorstep in just one click anytime, anywhere.	ReactJS Covers only the UI Layers. Reduces performance.	The project uses technologies of react js, mongodb, node js along with basic html and css for the website development.
4.	Iot Based Smart Shopping Mall	Ashok Sutagun dar, Masuda Ettinama ni, Ameena begum Attar	IEEE	04 th July 2019	RFID Zigbee	Consumes less time, low cost. It does not require any training. The requirement of manpower will be reduced.	RFID readers can be more expensive than barcode readers. High maintenance	Including search bar option for easy finding of items for the user.

5.	Website and eshop Developmen t as an e business Teaching Programme Innovation in Managemen t Education	Kinga Krupcała , Arkadius z Janusze wski	Science Direct	1st Sept 2020	JavaScript PHP CMS	The results of the research made it possible to identify the current curricula of e-business related economics major courses.	Scarcity of Security. Dependence on plugins and widgets	To include summer, monsoon, winter catalogs for nonfestive times so the website continues to collect revenue and not lose a customer.
6.	Influence of Neighborho od on the Preference of an Item in eCommerce Search	Saratcha ndra Indrakan ti, Svetlana Strunjas, Shubhan gi Tandon	IEEE	24 th Feb 2020	Amazon Cloud	Added delta features compared items within a neighbourho od and learned a ranking model.	Security Limitations	Use of filter option so that catalogs can be arranged according to the nearest festival or by their name for user convenience.
7.	To buy or not buy? Analysis of consumers' purchase intention in the context of multiple shopping festival.	Weihong Zhao, Ting Zong	IEEE	1 st Sept 2021	Theory of stimulus response. Literature.	Proposes a research model of influencing factors of consumers' purchase intentions under multiple shopping festivals.	Often fails to provide accurate details of the overall research.	Collection of data for each festival and then adding items for maximum customer satisfaction.

8.	Designing an Expert System for Online Shopping Cart Managemen t	Deepshi kha Bhargav a, Pratiksh ya Mishra, Anjali Mishra	IEEE	29 th April 2019	Dynamic Programmin g Algorithm.	Provides an opportunity to the customers to see different cart on different criteria. Also ease of use to the customers for online shopping.	error.	Managing the items added to cart and printing the bill with total amount including voucher purchases.
9.	i-SHOP: A Model for Smart Shopping	Mr. Anal Kumar, A B M Shawkat	IEEE	8 th June 2017	CMS MySQL PHP	A consumer can go economic mode or brand mode to finalize order quickly. The system would generate all the available data about customers, products, daily transaction etc.	Transactions are not handled very efficiently. Few stability issues.	Designing a fully functional e-commerce model from the base of a shopping cart.
10.	Operational strategies for on- demand personal shopper services	Alp M. Arslan, Niels Agatz, Mathias A. Klapp	Science Direct	29th July 2021	Strategies, studies. Literature	Personal shoppers can save time and resources over customers shopping by themselves.	Time consuming. No guaranteed accuracy.	Customer services of payment to be fulfilled with correct bank account details.

PROPOSED SYSTEM

To develop an e-commerce website of Indian Festival Catalog named "Festivity".

For account creation the user needs to submit details of name, e-mail and setting up a password. Login will be possible by submitting the correct email and password.

The home page has a navigation bar to navigate through cart, catalogs, wish-list and account-info.

The website will display festival catalogs in a queue.

Customers can shop items for a particular festival from its catalog.

After confirming the items added to Cart and submitting valid bank account details, payment will be completed.

Wish-list will store the products in its account for future purchase.

Account Info holds the details of the user and the history of recently purchased items.

Technologies Used:

1. Front End

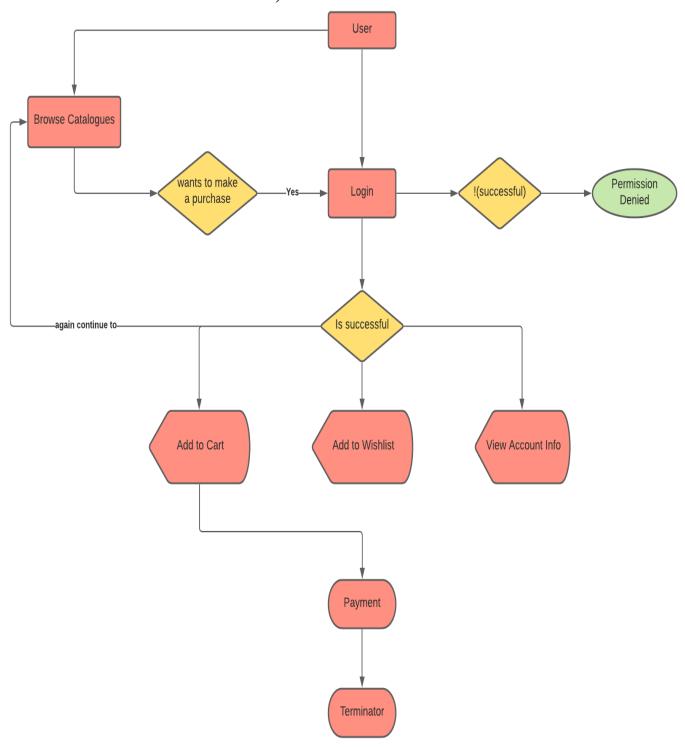
- React JS
- HTML
- CSS
- Bootstrap

2. Backend

- Node JS
- Mongo DB
- Express

DESIGN DETAILS

Part-1) WORKFLOW



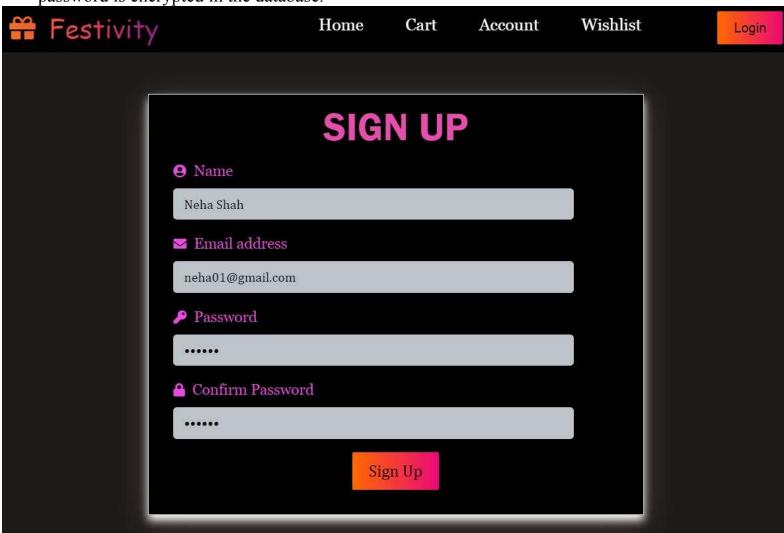
Part-2) IMPLEMENTATION

A) FRONT END:

This section describes the implementation of our project, and gives an overview of the user interface and the functionality of the project. Home page, festival catalogs and its items can be viewed by any unregistered user. But for utilising the cart features and purchase will require registration. Hence the user is greeted with the login page and other functionalities followed by it as depicted below.

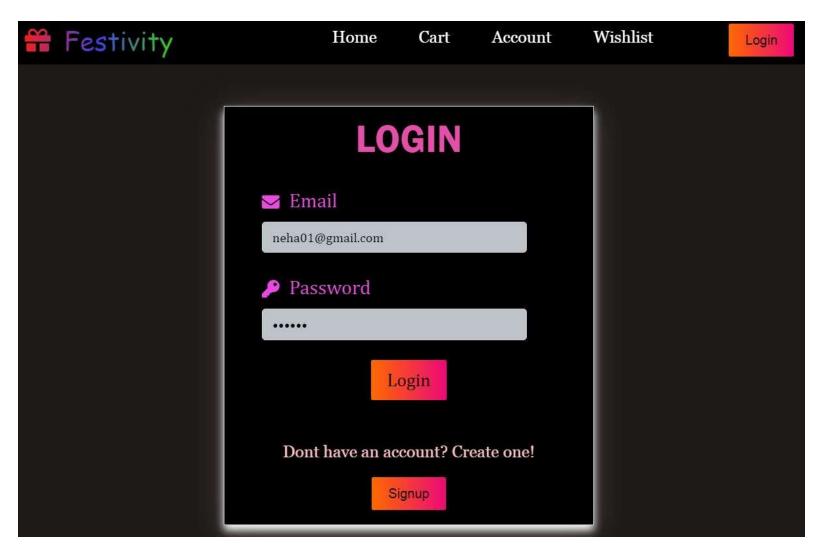
1. Signup:

User is welcomed in the 'Festivity' family and can register itself by submitting details of name, email address and setting up a new password. For user safety purposes the password is encrypted in the database.



2. Login:

The customer can now anytime login into its 'Festivity' account by providing correct credentials of email address and password. Also exercising of all functionalities like viewing product, cart, wish-list, product history is now possible.

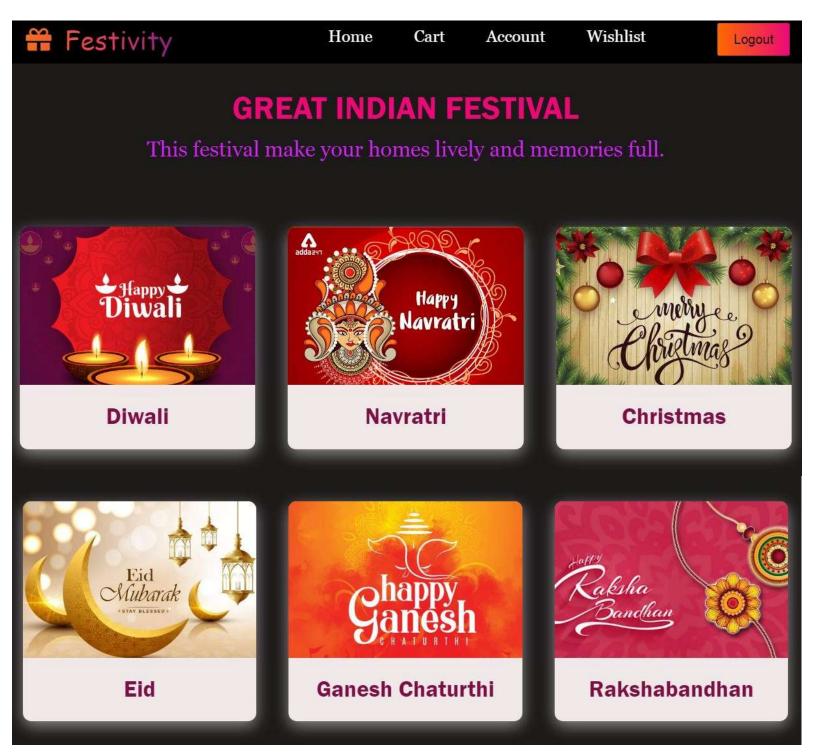


3. Home Page:

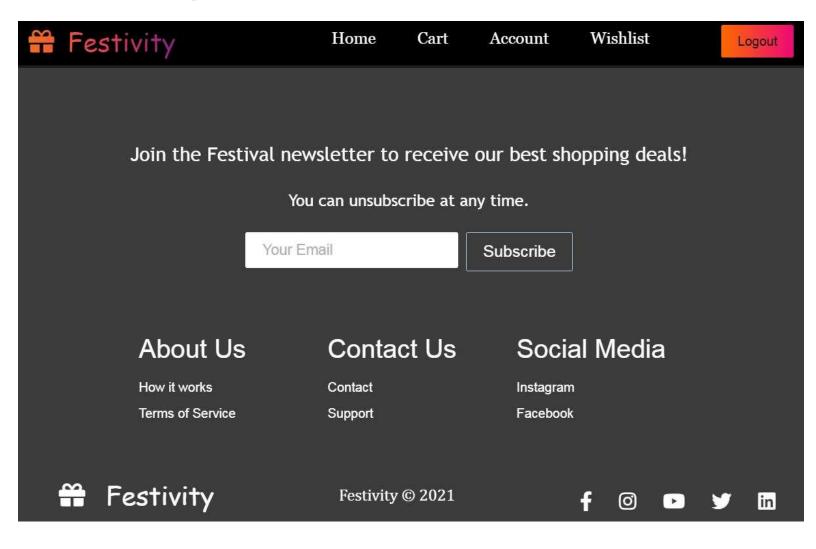
a) Hero Section - This section provides the navigation bar with brand name, home, cart, account, wishlist and logout functions. The background image displays the website name 'Festivity' along with its tagline.



b) Catalogs – The festival catalogs are displayed in a queue. The most prominently celebrated festivals in India are chosen like Diwali, Navratri, Christmas, Eid, Ganesh Chaturthi and Rakshabandhan. Clicking on any of these catalogs will lead to their particular page.



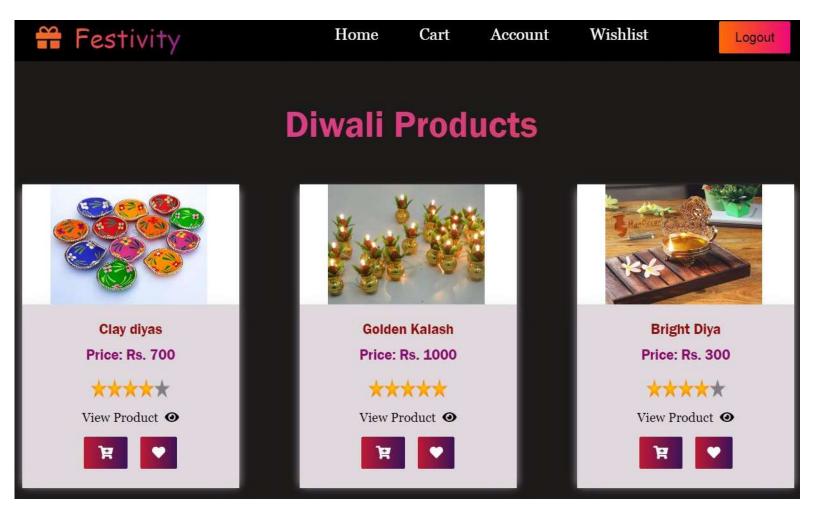
c) Footer – The footer section depicts various social media handles and video links provided for customer care and support purpose. Also the copyright issued tagline is mentioned to prove the authorization of the website.



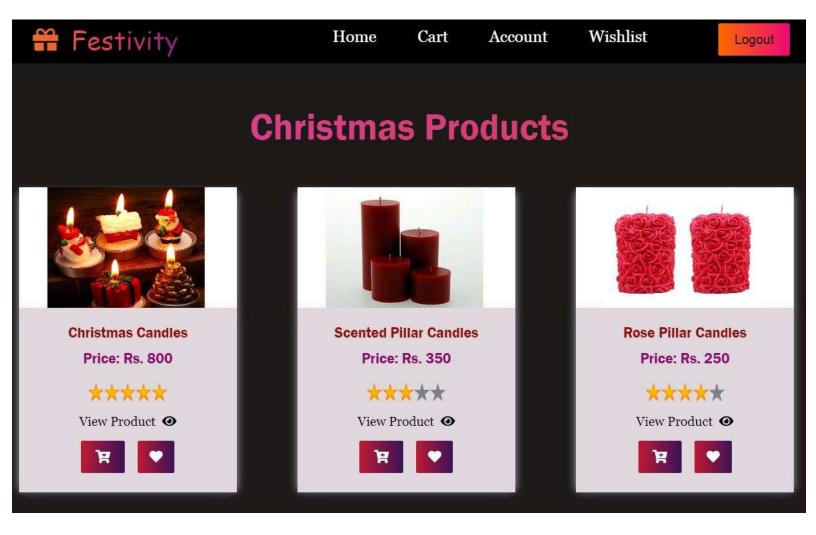
4. Products:

The items of a particular festival catalog are displayed. The customer gets to know of the product name, image, price, ratings, view product option. Add to cart and wishlist buttons are also provided to make the purchase service easy.

Example - 1) Diwali Product Page

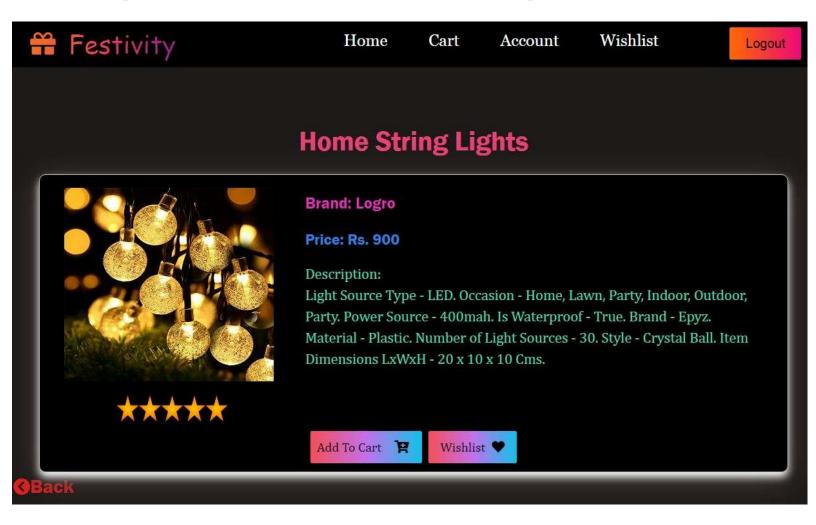


Example - 2) Christmas Product Page



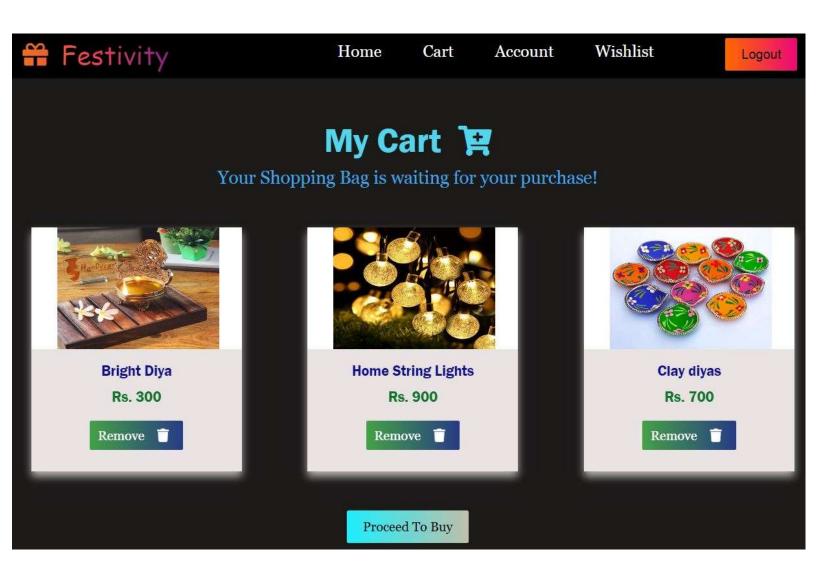
5. View Product:

Each product can be viewed in a detailed manner using 'view product' link. This page contains the brand name along with the product name. Ratings, image and price tags are displayed with an addition of description section to know more about the quality of the product. The user can also add to cart and wishlist for purchase from here.



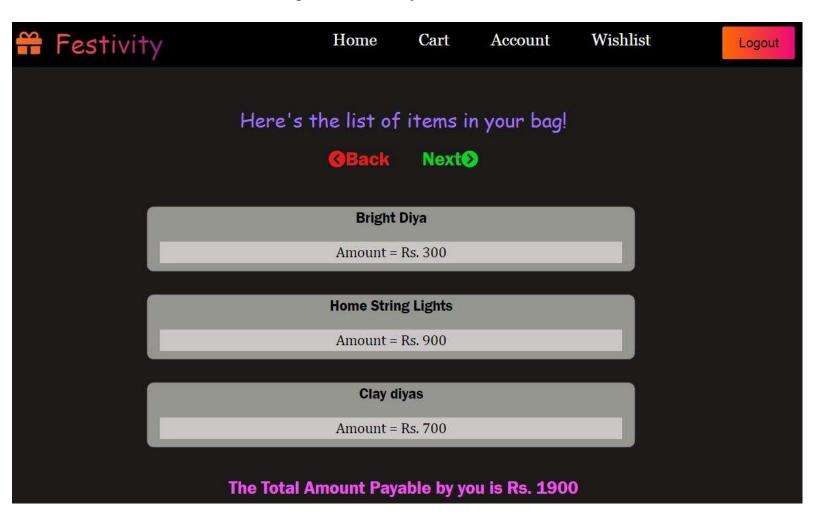
6. Cart:

The cart section depicts all the items user wants to purchase. The product name, image and price tag are shown. Remove option facilitates to easily discard the items not required to buy. The proceed to payment option will lead to the 'bill' section.



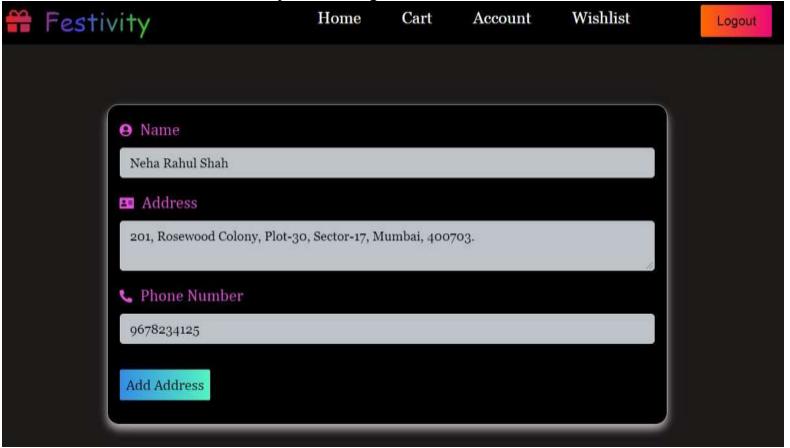
7. Bill:

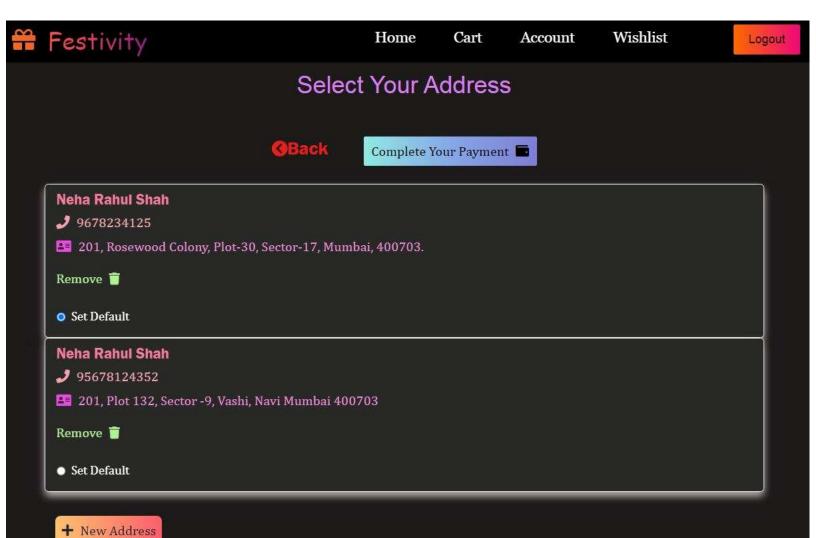
This section provides a list of items in the shopping bag. The product name and price tag is displayed along with the total amount. The user can now click on 'Next' to visit the user details section for product delivery.



8. User Details:

Basic user details like name, address and phone number are asked to ensure a flawless delivery service. Any amount of addresses can be added and any one can be selected as the default address for delivery purpose. After submitting these details, the user can now move on to the final purchase stage.





9. Payment:

A razorpay window is displayed where the user can provide its phone number and email address. The user can now proceed after viewing keeping in mind the total amount displayed. Various payment methods are provided which user can use according to their convenience. After the completion of payment a success-failure window will appear as it is on a test mode for trials.

Fig (a)



Fig (b)

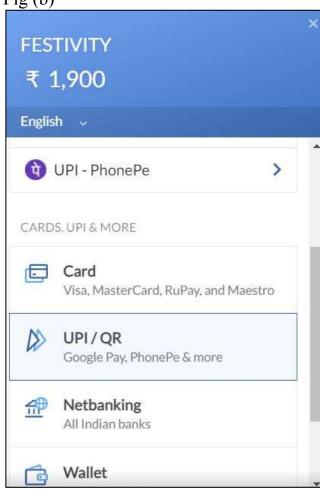


Fig (c)

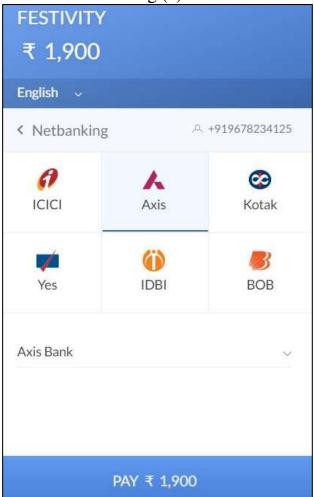
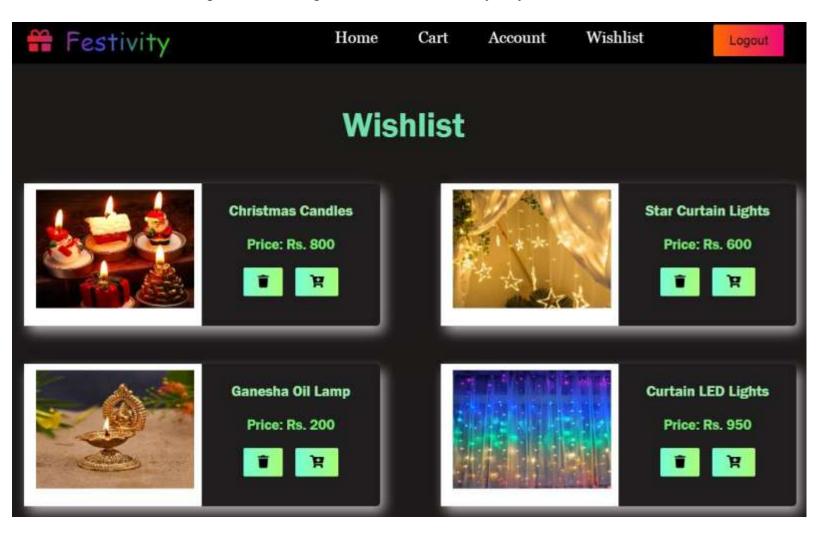


Fig (d)



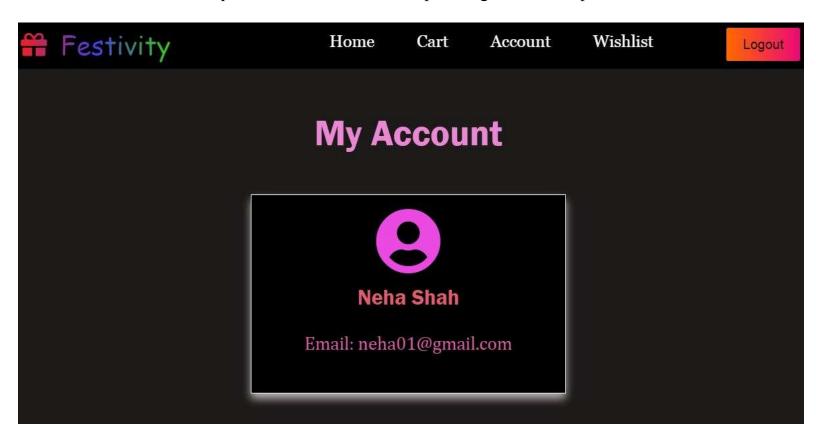
10. Wishlist:

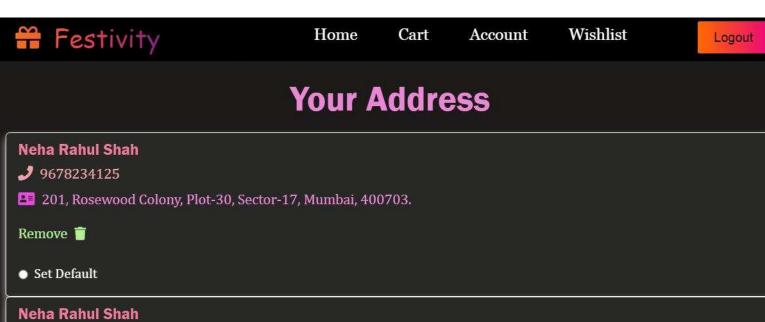
Wishlist stores the items for future purchase. It has options of adding it to cart or removing the item. The product name, price tag and image is displayed. An exclusive feature that helps in collecting the items so can easily buy it later whenever needed.



11. Account:

The account displays basic user details. Address section stores the address provided during purchase. New address can also be added and used. The recently purchased items are also depicted with their name and price tag so as to keep a track.





J 95678124352

201, Plot 132, Sector -9, Vashi, Navi Mumbai 400703

Remove 📋

Set Default

+ New Address

History

Here are your recently purchased items!

Home String Lights
900
Bright Diya
300
Clay diyas
700

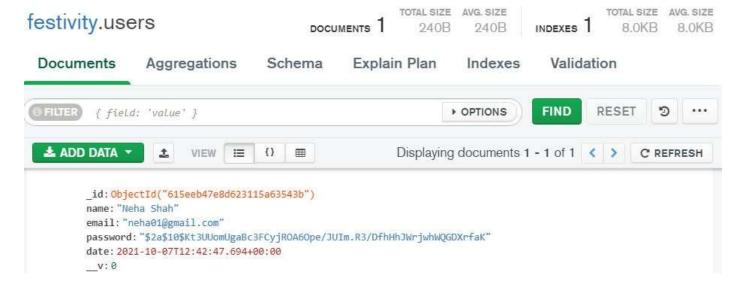
B) BACK END:

The backend uses the technology of Mongo db. The database is named as 'festivity'. It consists of various collections like users, histories, info, products, wishlists and notes. All the items stored in the database are as shown below:

Collection Name *	Documents	Avg. Document Size	Total Document Size	Num. Indexes	Total Index Size	Properties	
histories	3	154.7 B	464.0 B	1	8.0 KB		ı
infos	1	240.0 B	240.0 B	1	8.0 KB		î
notes	3	496.0 B	1.5 KB	1	8.0 KB		
products	96	512.0 B	48.0 KB	1	8.0 KB		M
users	1	240.0 B	240.0 B	1	8.0 KB		ī
wishlists	4	496.0 B	1.9 KB	1	8.0 KB		ı

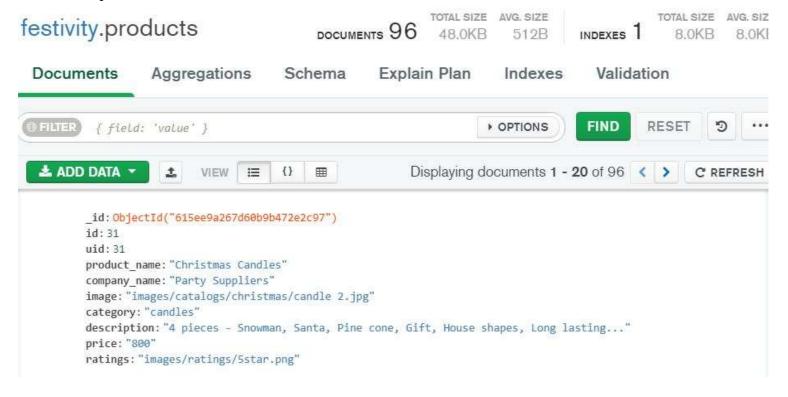
1. users:

The registered users' details are stored here with fields of id, name, email, password and date. The encryption of password is done for safety purposes.

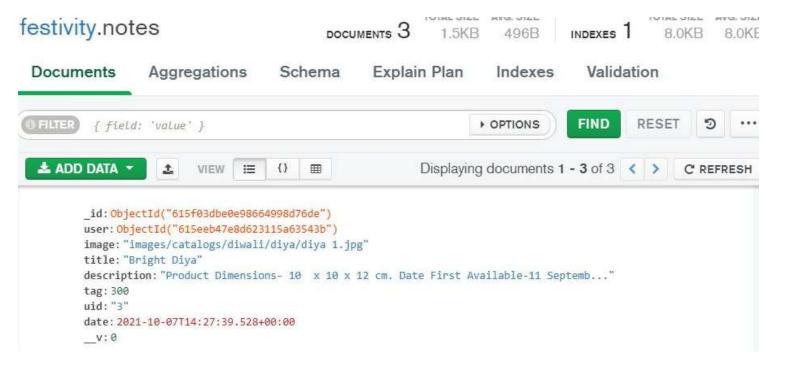


2. products:

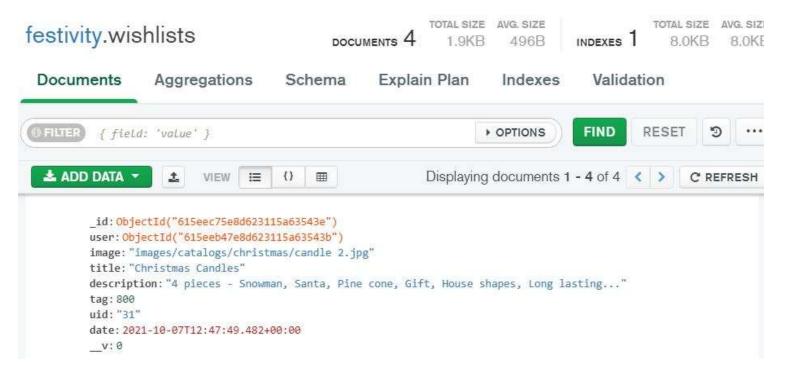
Json files of all festivals are imported here to have the database storage of products. Fileds of id, uid, product_name, company_name, image, category, description, price and ratings are provided.



3. notes: This collection stores the items that are added to cart for that particular user.

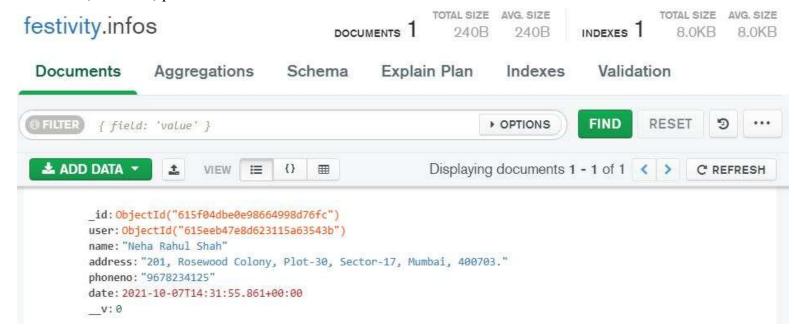


4. wishlists: This collection stores the items that are added to wishlist.



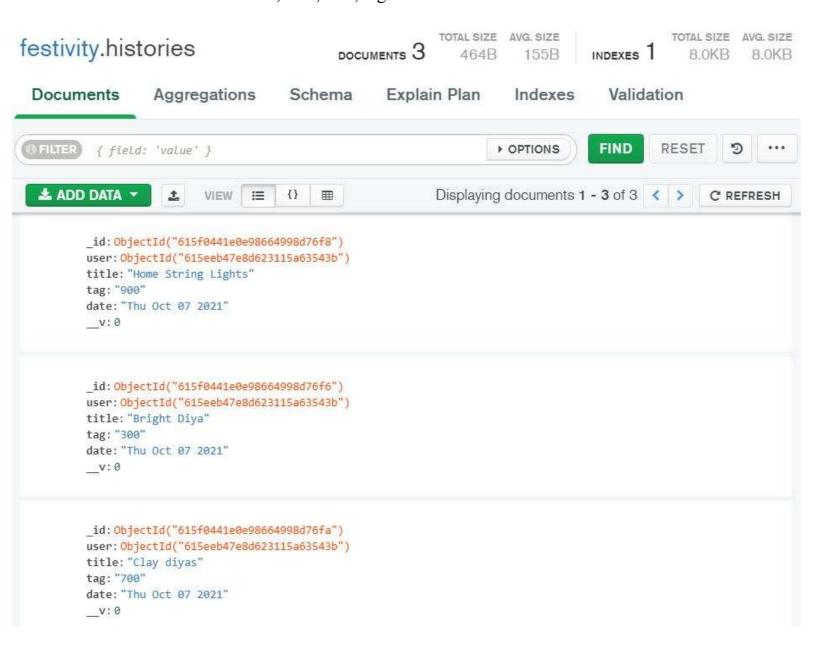
5. infos:

The user details taken for product delivery purpose are displayed here. Fields are id, user, name, address, phoneno and date.



6. histories:

This collection stores the items purchased by user and displays it in the history section of front-end. Field values are id, user, title, tag and date.



DEVOPS TOOLS

DevOps is a new way of connecting developers with a team to work closely with the people, processes and technologies of automated software delivery that are faster, less expensive and less expensive. We have used GIT as a source control tool, Jenkins as a configuration tool and SonarQube as a code analysis tool. With these tools we have built a pipeline for continuous integration and continuous delivery of the website.

GitHub:

The github repository link of "https://github.com/nidhidaulat16/Festivity.git" is used where our website code is stored on remote server.

Jenkins:

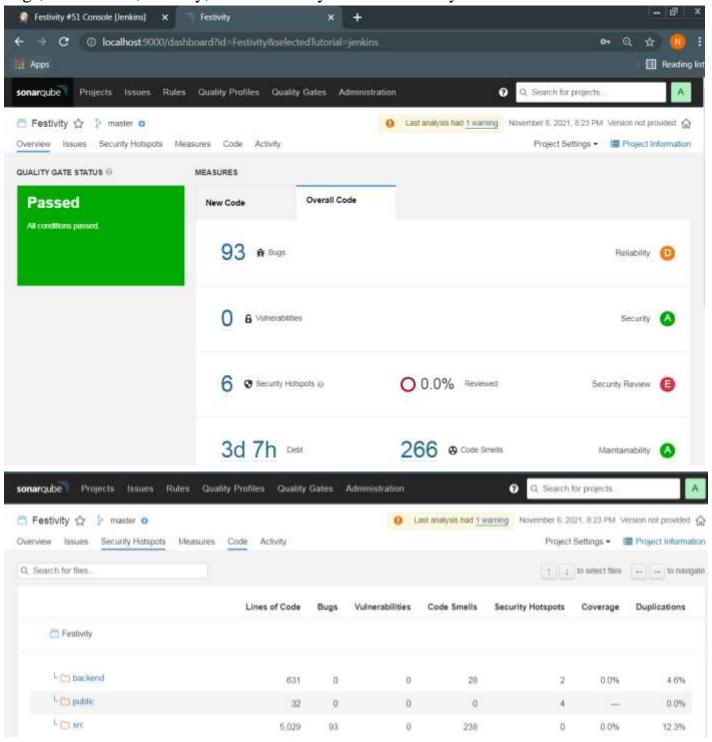
A pipeline job is created in Jenkins. Sonarqube integration with Jenkins is done before hand by installing its plugins. A pipeline script is written in accordance with two stages:

- a) Fetching data from github
- b) Performing Sonarqube Analysis

On performing the built now function, the pipeline has been successfully executed. Festivity [Jenkins] C @ localhost 8080/job/Festivity/ Apps Reading Dashboard Festivity Back to Dashboard **Pipeline Festivity** add description Status **Disable Project** Changes Recent Changes **Build Now** Configure Stage View O Delete Pipeline SonarQube SCM Checkout Full Stage View analysis GitHub 15 Tmin 35s Average stage times: (Average full run time: ~1min 37s) SonarQube Nov-08 1min 35s Rename

SonarQube:

SonarQube is a Code Quality Assurance tool that collects and analyses source code, and provides reports for the code quality of your project. Created a project named 'Festivity' and integrated it with Jenkins. Obtained the analysis report depicting the bugs, code smells, security, maintainability and vulnerability of the code.



SUMMARY

Part-1) CONCLUSION

A fully functional E-Commerce website named 'Festivity' has been developed. India is known for its glorious festivals, rich culture, and healthy traditions. So it becomes a priority to create business models keeping in mind the purchasing statistics of people here. The topic 'Indian Festival Catalog' focuses on the prime objective of rooting a shopping experience with festival zones. Customers are exclusively provided with Festival Catalogs for buying items according to a particular festival. An advantage of this scheme is to discard the idea of buying products for an event on different websites. Instead, all the products required to celebrate a festival are available in one place. This makes the shopping experience easy, quick, comfortable and worth the time.

The website design is kept simple with a proper staging of B2C model layers. A variety of products are displayed with a detailed description, brand name, affordable prices, and ratings. Cart section has a proper purchase structure with secure payment methods. Wishlist avails in saving products for future purchases. The Account section maintains the personal details of the user and recent purchase history to keep track. The major highlight of the project is the technologies used for it. Recent and most secure web development technologies have made the website more fascinating. Front End technologies like React js, html, css and bootstrap have proved to be more responsive and used easy event handling mechanisms. The data storage part has been backed with mongo db and node js. This has made the user details stay more secure and flexible.

Part-2) FUTURE PROSPECTS

The website is quite effective for a smaller range of customers. But for targeting a wide range of customers, making it flexible and user-friendly from all possible angles, the following future prospects need to be implemented and resolved.

1) Database Storage –

The use of Mongo DB as the backend database proves to be worthy. Though a small amount of data was stored and tested, a larger database too can be modified and used in real-time. A variety of products can be easily added and changed.

2) Filtering of Products –

Less amount of products were utilized for a smaller testing zone. Increasing the number of products can cause a tedious task to search for the needed item. Hence filtering of products based on categories can be improvised.

3) Shopping App –

The new age is of mobile phones. Every transaction, shopping, social media is carried on apps. Hence launching a website will have a shorter range of customers. For making an impact on a wider area, app can be a best idea to develop on.

4) Responsive Design –

The website is built to be responsive on desktops. Keeping in mind the daily emerging world of all sized devices, the website could be created in a much more responsive manner. Hence the design looks subtle and clear in all frames.

5) Recommendation System –

It is difficult to filter out the products that users need. Hence a personalized recommendation system is necessary. The user activity, likes, dislikes, most viewed products can be analysed and based a total score recommendations can be provided.

6) Product Comparison -

An effective way of customer satisfactory services will be providing affordable but quality products. Thus an option of comparison must be included where the user can compare 3 to 4 products and buy the best suitable one.

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- 4] Iot Based Smart Shopping Mall of IEEE written by Ashok Sutagundar, Masuda Ettinamani, Ameenabegum Attar on 04th July 2019.
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- 10] Operational strategies for on-demand personal shopper services of Science direct written by Alp M. Arslan, Niels Agatz, Mathias A. Klapp on 29th July 2021.

ACKNOWLEDGEMENT

I would like to express my special thanks of gratitude to my guide Mrs. Pranali Wagh, co-guide Mr. Santosh Rathod, our principal Mr. Bhavesh Patel and the faculty of Shah And Anchor Kutchhi Engineering College for this wonderful project on the topic 'Indian Festival Catalog' which also helped me in doing a lot of Research. It had been a great journey in analysing, understanding and realizing the implementation of a real time project in frontend areas of React, html, css, bootstrap and backend areas of node js and mongo db. It helped me grow a lot not only academically but also in a broader and knowledgeable aspect.

I would like to express my very great appreciation to my group members for their valuable and constructive execution and suggestions during the planning and development of this research work and in making of the project. The team building, managing and co-operative skills were also been imparted in us. Hence making us more professional and patient in work.