TRIBAL HUB

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Project Report

Submitted in partial fulfilment of the Requirements for the award of the Degree of

BACHELOR OF ENGINEERING

IN

INFORMATION TECHNOLOGY

By

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DECLARATION BY THE CANDIDATES

We, V. SAI RISHITHA, G. SRAVANI, T. BHANUPRAKASH bearing hall ticket numbers, 1602-19-737-096, 1602-19-737-108, 1602-19-737-309 hereby declare that the project report entitled "TRIBAL HUB" under the guidance of KEZIA RANI, HASEEBA YASEEN Professor, Department of Information Technology, Vasavi College of Engineering, Hyderabad, is submitted in partial fulfilment of the requirement of MINI PROJECT of V semester of Bachelor of Engineering in Information Technology.

This is a record of bonafide work carried out by us and the results embodied in this project report have not been submitted to any other university or institute for the award of any other degree or diploma.

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BONAFIDE CERTIFICATE

This is to certify that the project entitled "TRIBAL HUB" being submitted by V. SAI RISHITHA, G. SRAVANI, T. BHANUPRAKASH bearing 1602-19-737-096, 1602-19-737-108, 1602-19-737-309 in partial fulfilment of the requirements for the completion of MINI PROJECT of Bachelor of Engineering in Information Technology is a record of bonafide work carried out by them under my guidance.

KEZIA RANI, HASEEBA YASEEN

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ACKNOWLEDGEMENT

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5. ABSTRACT

India is a country with a great cultural heritage and the cultural diversity of India provides plenty of remarkable art and craft products. Crafting uses conventional manual methods instead of advanced technologies to craft various items. It is an unorganized, decentralized and labour-intensive industry. Though tribal industry employs millions of artisans, it is still very tiny compared to the global industry. The idea of this website is to uplift the socio-economic standard of the rural artisans through e-commerce.

Tribal hub is a website which is aimed at promoting the tribal culture. The website includes the sale of tribal produce such as handicrafts, arts, paintings, minor forest products etc. This website fosters the tribal traditions by including blogs, videos and articles related to them. The tribals can promote, market and sell their goods. The website includes the provision of delivery and e-payments.

The sole idea of tribal hub is to bring technology and tribes together. It displays the lifestyle and technology of tribes through videos, which is out of sight to most of the population. It is a platform that preserves and promotes tribal culture.

6.INTRODUCTION

6.1 Introduction

6.1.1 Purpose

The internet and the subsequent e-commerce boom opened a whole new world for organisations and people to garner a wider reach. To expand the availability of tribal products across the entire country and the world and to get greater benefits for the tribal people. This new channel is being utilised in such a way that in just a single click, the handcrafted, tribal products find a larger audience - not just in India but also abroad.

A wide range of thoughtful and handcrafted products that carry an indelible mark of their rich ancient cultural heritage is procured, marketed and made available to buyers. To ensure a wider reach to genuine art lovers, millennial fashionistas and ethnic folk, we are making its presence felt through our E-commerce website. The purpose of our E-commerce arrangements is to facilitate artefacts lovers to ease their shopping experience by buying products made by various tribes of India while sitting at their homes. Besides, ensuring genuine and authentic tribal products for artefacts lovers at their doorsteps.

6.1.2 Scope

With the help of this website tribals will get a platform to sell their products. Customers would come to know about various handcrafts which are unknown to the world earlier. People will have an easy access to buy these handcrafts.

6.1.3 Motivation

In response to the COVID-19 pandemic, Indian Government has declared lockdown. This phase affected the livelihood of people across the country and

majority of them were tribal people. They had lot of produce, but no perfect platform to sell their products. Even though they have multiple products with various designs and natural ways of making the crafts, they were unable to publish their products to the external world. As they live in remote areas, it will be difficult to the customers to buy the product. To avoid that situation in future we want to come up with an idea of providing a platform for tribal people to sell their arts and crafts.

6.1.4 Overview

The specifications include product perspective and the functionalities that the system will provide. The user characteristics, any general constraints or assumptions and dependencies are discussed below.

Requirements are categorized as performance, non-functional requirements and design constraints. Non-functional requirements are scalability, maintainability and dependence.

6.2 General Description

6.2.1 Product perspective

Our website "Tribal Hub" provides customers with various artforms such as paintings, wooden made decorative items, clothing items etc., with reasonable pricing. Our website includes a feature where customers can pay bills online. We also provide with videos that depict the culture of tribes.

6.2.2 Product Functions

Tribal Hub provides users with the products which are available to buy and their prices along with the origin of the products. It also gives an information that which product is out of stock and which is in stock.

6.2.3 User Characteristics

User:

1. User has to register to our website in order to shop.

- 2. User will have only two attempts to login, if he/she fails they need to wait for 10minutes to get the login access.
- **3.** After logging in user can select the items and can add them into the cart to buy those items.

6.3 System Requirements

6.3.1 Hardware Requirements

- 1. 1GB RAM
- 2. 1GB CORE

6.3.2 Software Requirements INTERPRETER:

Visual Studio Code- It features a lightning-fast source code editor, perfect for day-to-day use. With support for hundreds of languages, VS Code helps you be instantly productive with syntax highlighting, bracket-matching, auto indentation, box-selection, snippets, and more.

JAVA SCRIPT:

JavaScript is a text-based programming language used both on the client-side and server-side that allows you to make web pages interactive. Where HTML and CSS are languages that give structure and style to web pages, JavaScript gives web pages interactive elements that engage a user. Common examples of JavaScript that you might use every day include the search box on Amazon, a news recap video embedded on The New York Times, or refreshing your Twitter feed.

Incorporating JavaScript improves the user experience of the web page by converting it from a static page into an interactive one. To recap, JavaScript adds behavior to web pages.

REACT JS:

It is a java script library to build user interfaces. React makes it painless to create interactive UIs. Design simple views for each state in your application, and REACT will efficiently update and render just the right components when the data changes.

Declarative views make the code more predictable and easier to debug.

FIREBASE:

Firebase is a Backend-as-a-Service (BaaS) app development platform that provides hosted backend services such as a real-time database, cloud storage, authentication, crash reporting, machine learning, remote configuration, and hosting for your static files.

6.4 Design Constraints

- 1. Software Constraints: Users can run this application in windows.
- 2. *Hardware Constraints:* The system will run on a core processor with minimum 400MB ram.
- 3. *Acceptance Criteria:* Before accepting, the developer must check whether the application is running properly or not and should also check whether the data is stored correctly.

7. RELATED WORK

Market Research:

TribesIndia is a shopping platform of handicraft products. We referred it in order to build our application and also, we collected some of the pictures and used them in building our web application.

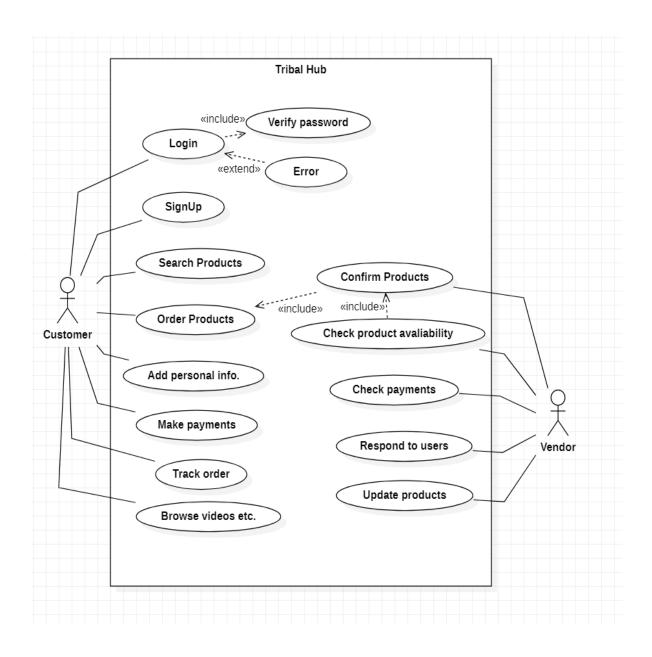
Areas our project can be improved in:

- a. Implementation of search bar with image recognition and voice recognition techniques.
- b. To make our application user friendly we would like to include other local languages of the country.
- c. We would like to provide other facilities where register buyer can give feedback to the products.
- d. Based on the customer interests we would update our application in future.

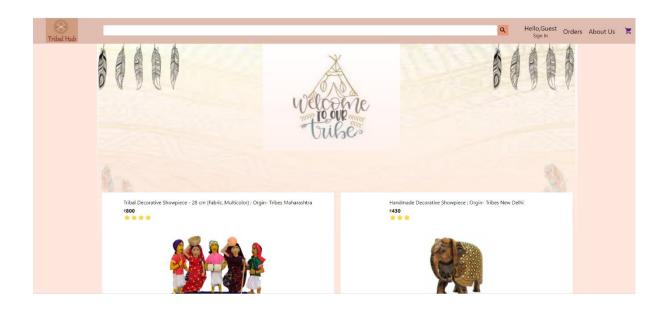
8. PROPOSED WORK

8.1 Use Case:

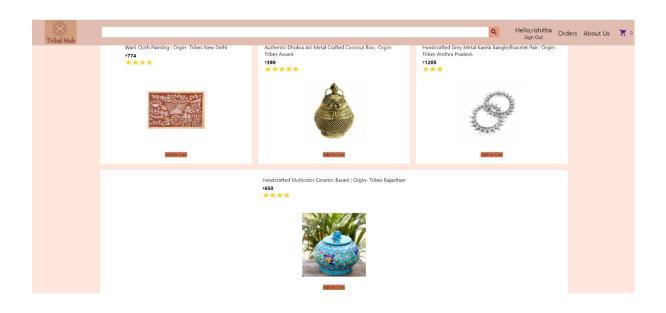
Use case diagrams are the diagrammatic representations depicting users' interactions with the system. This diagram shows different types of users and various ways in which these users interact with the system.

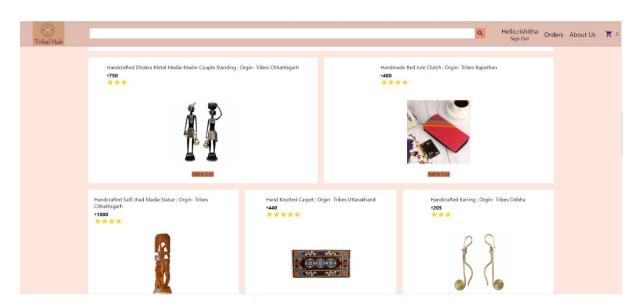


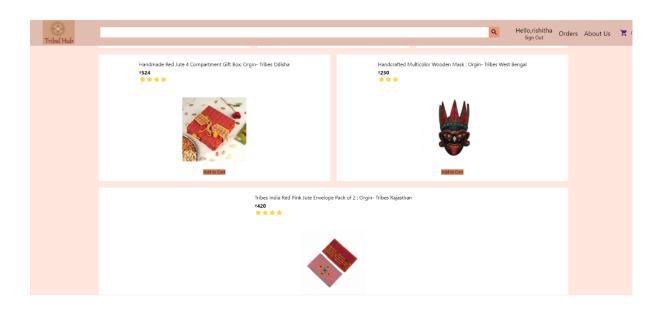
8.2 UI Prototypes or Screen shots

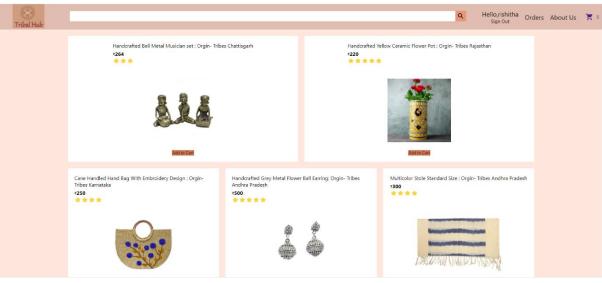


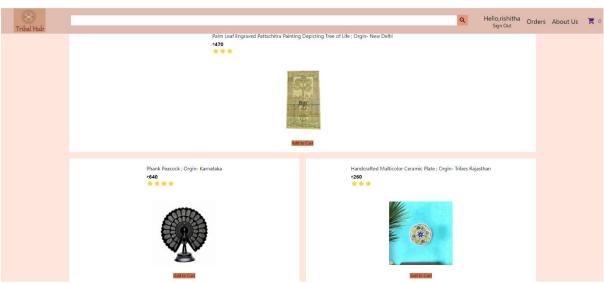






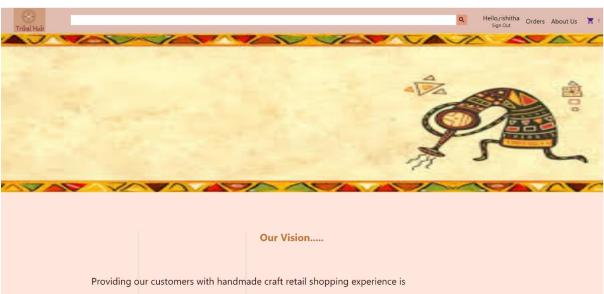














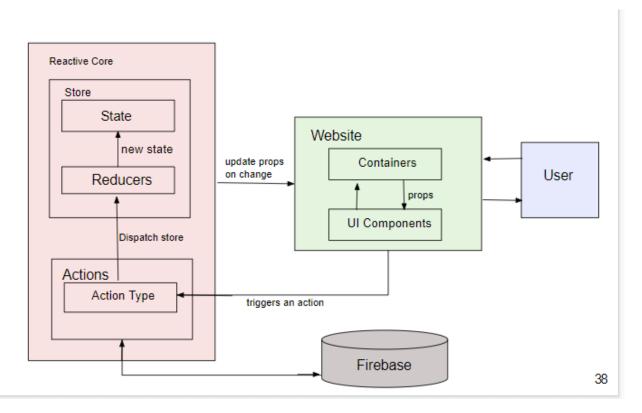
Providing our customers with handmade craft retail shopping experience is our primary idea. We work together to design,create and produce work that we are proud for tribes that we believe in. We deliver our customers with handmade natural products. Digitilization is the key here. Customers would be able to buy things on the go easily. We are providing multiple varities of handmade products. It is not just across India. We are expanding our tribal hub facilities to some other foreign countries.







8.3 Architecture and Technology Used



State: One of the core principles of React is that UI should be based on our state. So, one approach to designing an application is to first think of all the state needed to describe how the application works.

Actions: Actions are plain JavaScript objects that have a type field. Action is an event that describes something that happened in the application.

Reducers: Reducers are functions that take the current state and an action as arguments, and return a new state result.

Containers: Container is a window like component that can contain other components.

Components: A component is an object, like a button or a scroll bar.

Front-End:

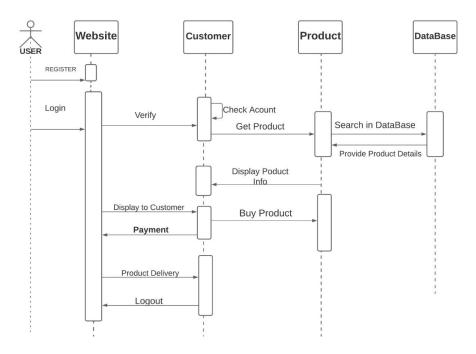
- 1. JAVA SCRIPT
- 2. REACT JS

Back-End:

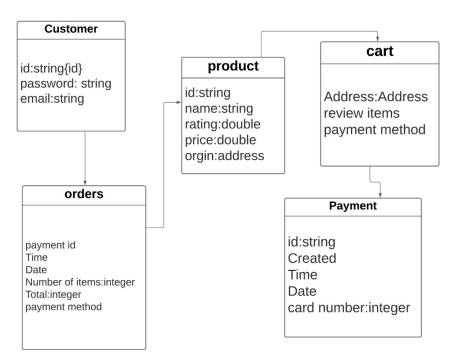
FIREBASE

8.4 Design

Sequence diagram



Class diagram



8.5 IMPLEMENTATION

8.5.1 Description of Main Modules

1. Login/Signup:

In this module, the user can log into their respective accounts and use the website for shopping. If the user is not an already existing user, he/she can create a new account by signing up.

2. Add to cart:

After logging in, user can view the products. If user want to buy the products user can add those items into the cart.

3. Checkout:

After adding an item into the cart, user can check the items in the cart by clicking on checkout option, which will be visible to the user immediately after user adds an item to the cart.

4. Remove from basket:

If the user doesn't want to buy an item which is in the cart. He/she can remove it from the basket by clicking on this option.

5. Payment:

This module is about how user can perform his payment actions. The user can do it through COD or through mobile banking or net banking.

8.5.1 Any specific logic/algorithm to be highlighted

```
useEffect(() => {
        // generate the special stripe secret which allows us to charge a
customer
       const getClientSecret = async () => {
            const response = await axios({
               method: 'post',
                // Stripe expects the total in a currencies subunits
                url: `/payments/create?total=${getBasketTotal(basket) * 100}`
            });
            setClientSecret(response.data.clientSecret)
       getClientSecret();
   }, [basket])
    console.log('THE SECRET IS >>>', clientSecret)
   const handleSubmit = async (event) => {
        // do all the fancy stripe stuff...
       event.preventDefault();
       setProcessing(true);
        const payload = await stripe.confirmCardPayment(clientSecret, {
            payment_method: {
                card: elements.getElement(CardElement)
        }).then(({ paymentIntent }) => {
            // paymentIntent = payment confirmation
           db
              .collection('users')
              .doc(user?.uid)
              .collection('orders')
              .doc(paymentIntent.id)
              .set({
                  basket: basket,
                  amount: paymentIntent.amount,
                  created: paymentIntent.created
              })
```

```
setSucceeded(true);
setError(null)
setProcessing(false)

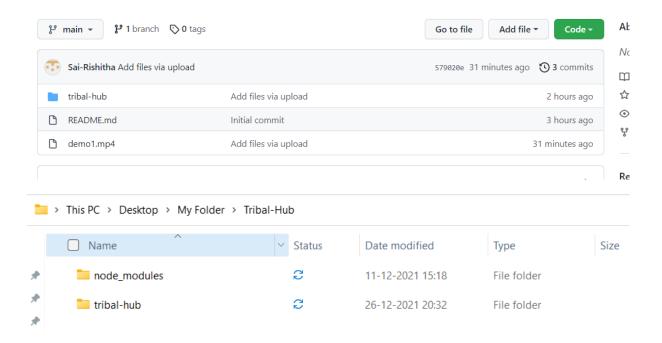
dispatch({
    type: 'EMPTY_BASKET'
})

history.replace('/orders')
})

const handleChange = event => {
    // Listen for changes in the CardElement
    // and display any errors as the customer types their card details
    setDisabled(event.empty);
    setError(event.error ? event.error.message : "");
}
```

8.5.3 GitHub Links and Folder Structure

https://github.com/Sai-Rishitha/Tribal-Hub



🗀 > This PC > Desktop > My Folder > Tribal-Hub > tribal-hub

	Name	Status	Date modified	Type	Size
*	ifirebase	C	11-12-2021 16:40	File folder	
*	build	S	13-12-2021 22:56	File folder	
*	functions	S	26-12-2021 11:42	File folder	
	node_modules	S	26-12-2021 14:28	File folder	
al	public	S	11-12-2021 14:09	File folder	
	src	S	26-12-2021 14:18	File folder	
	firebaserc	S	11-12-2021 20:41	FIREBASERC File	1 KB
	gitignore	S	26-10-1985 13:45	GITIGNORE File	1 KB
	firebase.json	S	11-12-2021 20:41	JSON File	1 KB
	package.json	S	26-12-2021 14:28	JSON File	2 KB
	package-lock.json	S	26-12-2021 14:28	JSON File	711 KB
	README.md	S	26-10-1985 13:45	MD File	4 KB

Name	Status	Date modified	Туре	Size
About	S	26-12-2021 14:59	Cascading Style Sh	2 KB
About	S	26-12-2021 14:52	JavaScript File	2 KB
	S	11-12-2021 14:25	Cascading Style Sh	0 KB
S App	S	25-12-2021 13:56	JavaScript File	2 KB
s axios	S	11-12-2021 22:02	JavaScript File	1 KB
banner	S	13-12-2021 22:52	PNG File	222 KB
■ bg	S	13-12-2021 21:43	PNG File	709 KB
checkout	S	11-12-2021 16:28	Cascading Style Sh	1 KB
S Checkout	S	11-12-2021 16:28	JavaScript File	2 KB
CheckoutProduct	S	25-12-2021 16:11	Cascading Style Sh	1 KB
CheckoutProduct	S	11-12-2021 16:28	JavaScript File	2 KB
firebase	S	12-12-2021 13:53	JavaScript File	1 KB
Header	S	25-12-2021 17:06	Cascading Style Sh	2 KB
S Header	S	13-12-2021 20:48	JavaScript File	3 KB
Home	S	13-12-2021 21:38	Cascading Style Sh	1 KB
S Home	S	26-12-2021 16:37	JavaScript File	7 KB
img img	S	26-12-2021 12:18	JPG File	66 KB
img1	S	25-12-2021 17:21	PNG File	61 KB
img2	ε	26-12-2021 12:16	PNG File	330 KB

🚞 > This PC > Desktop > My Folder > Tribal-Hub > tribal-hub > src

	Name nmgz	Status	Date modified 2b-12-2021 12:1b	Type PNG FIIE	Size
*	index	S	11-12-2021 15:53	Cascading Style Sh	1 KB
P	index	ε	11-12-2021 15:57	JavaScript File	1 KB
•	Login	S	26-12-2021 19:07	Cascading Style Sh	2 KB
	S Login	S	11-12-2021 16:23	JavaScript File	3 KB
	logo	S	11-12-2021 15:14	PNG File	111 KB
	Order	S	25-12-2021 16:22	Cascading Style Sh	1 KB
	Order	S	25-12-2021 15:43	JavaScript File	2 KB
	Orders	S	25-12-2021 16:03	Cascading Style Sh	1 KB
	Orders	S	25-12-2021 16:05	JavaScript File	2 KB
	Payment	S	25-12-2021 16:12	Cascading Style Sh	1 KB
	Payment	S	25-12-2021 15:32	JavaScript File	6 KB
	Product	S	13-12-2021 20:59	Cascading Style Sh	1 KB
	Product	S	11-12-2021 15:58	JavaScript File	2 KB
	s reducer	S	11-12-2021 22:47	JavaScript File	2 KB
	reportWebVitals	S	26-10-1985 13:45	JavaScript File	1 KB
	SocialFlow	S	26-12-2021 14:49	JavaScript File	1 KB
	StateProvider	S	11-12-2021 15:54	JavaScript File	1 KB
	Subtotal	S	11-12-2021 16:31	Cascading Style Sh	1 KB
	Subtotal	S	11-12-2021 16:29	JavaScript File	2 KB

8.6 TESTING

- 1. Password is validated using firebase built in password hashing mechanism.
- 2. Email is validated by checking '@' and '.'at the admin input using firebase mechanism.
- 3. Card numbers, expiration dates, cvc etc. are validated using stripe functionality.

9. RESULTS

With the help of this website tribals will get a platform to sell their products. Customers would come to know about various handcrafts which are unknown to the world earlier. People will have an easy access to buy these handcrafts. In the process of making this application, we learnt a lot about tribal culture, their artforms and their livelihood. We came to know about their customs and all. We got an idea how to start with for a product-based company. We improved our coding skills. We learnt how to build a web application.

Our website "Tribal Hub" provides customers with various artforms such as paintings, wooden made decorative items, clothing items etc., with reasonable pricing. Our website includes a feature where customers can pay bills online. We also provide with videos that depict the culture of tribes.

Finally, completion of E-commerce website for tribals is successfully done.

10. CONCLUSION AND FUTURE WORK

Conclusion:

Tribal artisans will soon be able to sell their products at the click of a mouse using our website. It will be similar to selling products on e-commerce giants Amazon or Flipkart that would ease the customers operating our site. The difference is just that it will be only for tribals. Best quality organic products will be delivered to buyers, who will have the option to return the item within 15 days if they are not satisfied with it. This will help people to purchase tribal products directly from the website without going through a lengthy process of floating a tender and receiving bids. With more and more people going online to

meet their various needs be it for business operations, shopping and communication, an important strategic push has been to adopt an all-encompassing digitization drive to map and link its village-based tribal producers

Future work:

To uplift the tribal people, Government of India is much focused and every single day it is coming up with new schemes for the welfare of tribals. One such scheme is providing an online platform for the tribal artisans to sell their handmade arts and crafts. The internet user base in India might still be mere 300 million which is much less as compared to the other developed countries but its surely expanding day by day. India has third largest internet population after US & China. Indian internet population was 205 millions in 2013 but projected to be second largest by 2016 with 330-370 million users. As per the last three years there is a rapid change in the scenario of ecommerce in India. More than 200 million users have been added during last three years. Growth of internet users is increasing very rapidly in India.

11. REFERENCES

- 1. https://sih.gov.in/sih2020ps
- 2. https://reactjs.org/tutorial/tutorial.html
- 3. https://firebase.google.com/codelabs/firebase-web#0