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at
Sathyabama Institute of Science and Technology
(Deemed to be University)

Submitted in partial fulfillment of the requirements
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Information Technology

By

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DEPARTMENT OF INFORMATION TECHNOLOGY

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **ANGU KAUSHIK.S (Reg. No: 39120009)** who carried out the project entitled “**Online Bakery Shop**” under my supervision from March 2022 to April 2022.

Internal Guide

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Submitted for Viva voce Examination held on _____

InternalExaminer

ExternalExaminer

DECLARATION

I, **ANGU KAUSHIK.S** hereby declare that the project report entitled **Online Bakery Shop** done by me under the guidance of **Dr. MARY GLADENCE.L** is submitted in partial fulfillment of the requirements for the award of Bachelor of Technology degree in Information Technology.

DATE:

PLACE:

SIGNATURE OF THE CANDIDATE

ACKNOWLEDGEMENT

I am pleased to acknowledge my sincere thanks to **Board of Management** of **SATHYABAMA** for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

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TRAINING CERTIFICATE



ABSTRACT

This proposes an e-commerce bakery shop system that allows both bakery owners and customers to manage their daily activities of online buying and selling product by incorporating data mining technique.

This system develops an application for customer to purchase the online product of their choice from different bakeries, get suggestions based on their choices and also to get notification /bill through email once the product delivered and a website is built for bakery owners to predict some of the features such as Fast, Slow moving products based on each day, area, are predicted and the system calculates which products are sold more, depending on their respective season/period products sold more in (monthly, yearly)are tabulated.

I

TABLE OF CONTENTS

CHAPTER No.	TITLE	PAGE No
	ABSTRACT	6
	LIST OF FIGURES	9
	LIST OF ABBREVIATIONS	10
1	INTRODUCTION	11
	1.1 Overview Of project	12
	1.2 Project Implementation	13
	1.3 Literature review	14
2.	AIM AND SCOPE OF THE PRESENT INVESTIGATION	15
	2.1 Aim	15
	2.2 Scope of present Investigation	16
3.	EXPERIMENTAL OR MATERIALS AND METHODS USED	
	3.1 Modules	17
	3.2 System Requirements	18
	3.3 Input and Output Design	20
	3.4 System Tools	22
4.	RESULTS AND DISCUSSION,	25

	4.1 Data Flow Diagrams	25
	4.2 ER Diagrams	27
	4.3 Results	28
	4.4 Discussions	29
5	SUMMARY AND CONCLUSIONS	31
	APPENDIX	31
	CONCLUSION	33
	REFERENCES	34

LIST OF FIGURES

FIGURE NUMBER	FIGURE NAME
1	ADMIN DFD
2	LOGIN DETAILS
3	USER DETAILS
4	PROJECT DETAILS
5	HOME PAGE
6	ABOUT PAGE
7	USER LOGIN PAGE
8	ADMIN LOGIN PAGE

LIST OF ABBREVIATION

ABBREVIATION	EXPANSION
HTML	HYTERTEXT MARKUP LANGUAGE
CSS	CASSADING STYLE SHEET
JS	JAVASCRIPT

CHAPTER 1

INTRODUCTION:

Nowadays most of the people are purchasing the product online rather than going to the shop to save time and to purchase the product of their choice in cheap rate anywhere and at any time but they are so many different websites that offer the same product in cheap price and the customer have to search in each website about the product and compare the product price which is time consuming. The examples of online business are food ordering, bus booking, flight ticket booking, hotel booking and others. Electronic or e-commerce food ordering systems are one of the popular online businesses.. Various items of food can now shop through the internet such as fast food, bakery and others. Customers can view and select the product from bakery shop, add to cart, choose the delivery types, make payment, give rating and the order is complete.

However, most of the existing online bakery items ordering system was done only for single bakery shop and user have to download another app to compare the items, till now they have not included data mining technique in bakery shop system that helps both the bakery owner and customer to increase their efficiency and reduce the cost and time and also they do not have proper notification/bill services through email. To solve the above problem of existing system the e-bakery shop system is been developed. The aim of this proposed system is to build a website for bakery shop that include n-number of bakeries and help them to increase their sales and improve efficiency by predicting some features such as Fast, Slow moving product based on each day, depending on area which product have sold more and based on respective season/period which product have sold more (monthly, yearly)by incorporating data mining technique.

Nowadays most of the people are purchasing the product online rather than going to the shop to save time and to purchase the product of their choice in cheap rate anywhere and at any time but they are so many different websites that offer the same product in cheap price and the customer have to search in each website about the product and compare the product price which is time consuming. The examples of online business are food ordering, bus booking, flight ticket booking, hotel booking and others. Electronic or e-commerce food ordering systems are one of the popular online businesses.. Various items of food can now shop through the internet such as fast food, bakery and others. Customers can view and select the product from bakery shop, add to cart, choose the delivery types, make payment, give rating and the order is complete.

PROJECT OBJECTIVES

The objective of the project is to make an application in web platform to purchase items in an existing shop. In order to build such an application complete web support need to be provided. A complete and efficient web application which can provide the online shopping experience is the basic objective of the project.

The main objective of the online stores is to deliver high-quality cakes at a reduced cost. Further, the taste and requirements of the people can differ from one another and so the stores keep on introducing various kinds of delicious flavors in the online market. Whether you are going to celebrate the wedding anniversary, birthday, or some other occasions, buying a mouth-watering cake is mandatory.

The cost of online cake delivery is one of the essential key factors to be considered by the customers while placing their orders. However, the online shops provide the best offers and discounts for saving a considerable amount of money in your wallet when buying a cake for all the occasions. The cost of the cake is quite affordable compared with the local retailers.

The primary goal of e-commerce is to reach maximum customers at the right time to increase sales and profitability of the business. Functions of e-commerce include buying and selling goods, transmitting funds or data over the internet.

1.1 PROJECT IMPLEMENTATION

- Let's first install the React (Node.js). It's a neat tool that automates many development tasks. To install it, open a terminal and type the following command:
- `Npx create-react-app bonik-emarket`
- Once installed, create a new project with the following command:
`ng new BONIK -React`
- A prompt will appear asking you if you want to enable strict mode. Select yes. This will enable a few other settings that will help to catch bugs ahead of time.
- In your directory, you now see your project repo. Type the following commands to go in it:
- `npm start`
- `ng serve` will build the app, while the `--open` option will open up a browser to `http://localhost:3000/`. You should now see REACT generic template page.
- Divide the components into header , cart , product , product-info and login
- And finally for the backend to get the product details using Django

Literature Review

Venkata Rajeev P et al.[1]proposed a web base system for recommending and comparing products which is sold online, and use natural language processing that automatically read reviews and to determine the polarity of reviews and used Naive Bayesian classification. Rana Alaa El-Deen Ahmeda et al.[2] included eleven data mining classification techniques to find the best classifier for consumer online shopping attitudes and also to build a recommender system using decision table classifier to find the products that user is searching for in some websites. Noorfa H. Mustaffa et al.[3]: build a system using rational unified process for bakery shop that provide the Short Message Service to notify customer when the order is ready for delivered and give flexibility in delivery options to the customer. Dr. Bharti Joshi et al.[4] user to buy the books build a recommender system for online book shopping that helps the as per the user needs and interest and this system helps to solve data Page 2 Philos Multi- Disciplinary Journal ISSN 2456-9828 e-Journal April 2018 Sparsity problem and combined two algorithms that is the collaborative-based filtering and association rule mining to get better performance . Ming-Hsiung Ying et al.[5] proposed an online shopping website to search the commodity using ontology, and web mining technique to track consumer demand like when the commodity price of any website is lower than the consumer price conditions, then the system will notify to consumers

CHAPTER 2

AIM AND SCOPE OF THE PRESENT INVESTIGATION

2.1 PROJECT AIM

The main aim of the Online System is to manage the details of Shopping, Internet, Customer. It manages all the information about Shopping, Products, Customer, Shopping

2.2 PROJECT OVERVIEW

Online shopping is a form of electronic commerce which allows consumers to buy directly from the website using web browser. consumers find a products of interest by visiting the website of the retailer directly or by searching among alternative vendor using a topic search engine. The online store usually enable shopper to use “search” features to find specific model, brand or models etc. online customers must have access internet to visit the website.

It provides requirements specific to the products , such as the requirement for the external interface , functional and behavioural requirements.

Professors can go through the entire document while reviewing it to get the general overview of the product and to check the requirements of the application whereas clients may skip viewing

the specific requirements and concentrate on reading the quality assurances and the performance and safety requirements.

2.3 PROJECT SCOPE

This system can be implemented to any shop in the locality or to multinational branded shops having retail outlet chains. The system recommends a facility to accept the orders 24*7 and a home delivery system which can make customers happy. If shops are providing an online portal where their customers can providing an online portal where their customers can enjoy easy shopping from anywhere, the shops won't be losing anymore Since the application is available in the Smartphone it is easily accessible and always available.

Bakery shop can offer electronic ordering both through their own online web or mobile site and through sites that serve various restaurants, and all restaurants also accept orders via text message more over the credit point and discount coupon out that many restaurants increased sales level as a result of accepting electronic orders. The restaurant now day a interactive and up-to-date menu with all available options in an easy to use manner. Most of Younger consumers were more likely to have used online food ordering is essentially adoption on selfservice approaches.

In most cases, an increased level of control has been shown to lead to higher level of customer satisfaction and greater intent to use or recommend suggested the service.

A customer will search for a favorite restaurant base on customer location, choose from available items. Payment can be amongst others either cash

CHAPTER 3

EXPERIMENTAL OR MATERIALS AND METHODS, ALGORITHMS USED

3.1MODULES

The system after careful analysis has been identified to be presented with the following modules and roles.

The modules involved are:

- Administrator
- Users

- **ADMINISTRATOR :**

The administrator is the super user of this application. Only admin have access into this admin page. Admin may be the owner of the shop. The administrator has all the information about all the users and about all products. This module is divided into different sub-modules.

1. Manage Moderators
2. Manage Products
3. Manage Users

3.2 EXISTING SYSTEM

The current system for shopping is to visit the shop manually and from the available product choose the item customer want and buying the item by payment of the price of the item .

1. It is less user-friendly.

2. User must go to shop and select products.
3. It is difficult to identify the required product.
4. Description of the product limited.
5. It is a time consuming process
6. Not in reach of distant users.

3.3 PROPOSED SYSTEM

In the proposed system customer need not go to the shop for buying the products. He can order the product he wish to buy through the application in his Smartphone. The shop owner will be admin of the system. Shop owner can appoint moderators who will help owner in managing the customers and product orders. The system also recommends a home delivery system for the purchased products.

3.4 SYSTEM REQUIREMENT SPECIFICATION

3.4.1 GENERAL DESCRIPTION

Product Description: The system consists of two parts .A web application which can provide the online shopping service and an android application for the customer to access the web service from his Smartphone. Web application should be able to help the customer for selecting his item and to help the owner in managing the orders from the customers.

3.4.2 SYSTEM OBJECTIVES

- To provide an android application for online shopping of products

in an existing shop.

- To provide an online shopping web site for the same shop.

4.SYSTEM REQUIREMENTS

3.4.2.1 NON FUNCTIONAL REQUIREMENTS

- i. **EFFICIENCY REQUIREMENT** When an online shopping cart android application implemented customer can purchase product in an efficient manner.
- ii. **RELIABILITY REQUIREMENT** The system should provide a reliable environment to both customers and owner. All orders should be reaching at the admin without any errors.
- iii. **USABILITY REQUIREMENT** The android application is designed for user friendly environment and ease of use.
- iv. **IMPLEMENTATION REQUIREMENT** Implementation of the system using CSS and HTML in front end with JSP as back end and it will be used for database connectivity. And the database part is developed by MySQL. Responsive web designing is used for making the website compatible for any type of screen.
- v. **DELIVERY REQUIREMENT** The whole system is expected to be delivered in four months of time with a weekly evaluation by the project guide.

3.4.2.2 FUNCTIONAL REQUIREMENTS USER

- **USER LOGIN** Description of feature This feature is used by the user to login into system. A user must login with his user name and password to the system after registration. If they are invalid, the user is not allowed to enter the system.
- **Functional requirement**

Username and password will be provided after user registration is confirmed.

- Password should be hidden from others while typing it in the field

LOGIN NEW USER

Description of feature

A new user will have to login in the system by providing essential details in order to view the product details.

Functional requirement

- System must ensure that, only a registered customer can purchase items

Description of feature : The user can add the desired product into his cart by clicking add to cart option on the product. He can view his cart by clicking on the cart button. All products added by cart can be viewed in the cart. User can remove an item from the cart by clicking remove. On successful submitting the cart will become empty.

- Admin account should be secured so that only owner of the shop can access that account

3.5 INPUT AND OUTPUT DESIGN

3.5.1 INPUT DESIGN

Input design is the link that ties the information system into the world of its users. The input design involves determining the inputs, validating the data, minimizing the data entry and provides a multi-user facility. Inaccurate inputs are the most common cause of errors in data processing. Errors entered by the data entry operators can be controlled by input design. The user-originated inputs are converted to a computer based format in the input design. Input data are collected and organized into groups of similar data. Once identified, the appropriate input media are selected for processing. All the input data are validated and if any data violates any conditions, the user is warned by a message.

3.5.2 OUTPUT DESIGN

Computer output is the most important and direct source of information to the user. Output design is a very important phase since the output needs to be in an efficient manner. Efficient and intelligible output design improves the system relationship with the user and helps in decision making. Allowing the user to view the sample screen is important because the user is the ultimate judge of the quality of output. The output module of this system is the selected notifications.

3.6 DJANGO

Django is a high-level Python web framework that enables rapid development of secure and maintainable websites. Built by experienced developers, Django takes care of much of the hassle of web development, so you can focus on writing your app without needing to reinvent the wheel. It is free and open source, has a thriving and active community, great documentation, and many options for free and paid-for support

3.7 SYSTEM TOOLS

- The various system tools that have been used in developing both the frontend and the back end of the project are being discussed in this chapter.

3.7.1. FRONT END:

HTML, CSS, JAVA SCRIPT are utilized to implement the frontend.

- [Java Server Pages \(JSP\)](#)

Different pages in the applications are designed using jsp. A Java Server Pages component is a type of Java servlet that is designed to fulfil the role of a user interface for a Java web application. Web developers write JSPs as text files that combine HTML or XHTML code, XML elements, and embedded JSP actions and commands. Using JSP, one can collect input from users through web page.

- [HTML \(Hyper Text Markup Language\)](#)

HTML is a syntax used to format a text document on the web.

[HTML Pages](#) are the building blocks of HTML pages.

With HTML constructs, [images](#) and other objects such as [interactive forms](#) may be embedded into the rendered page.

- **CSS (Cascading Style Sheets)**

CSS is a style sheet language used for describing the look and formatting of a document written in a markup language. CSS stands for Cascading Style Sheets.

CSS describes how HTML elements are to be displayed on screen, paper, or in other media. CSS saves a lot of work. It can control the layout of multiple web pages all at once. External stylesheets are stored in CSS files.

- **Java Script**

JavaScript (js) is a light-weight object-oriented programming language which is used by several websites for scripting the webpages.

It is an interpreted, full-fledged programming language that enables dynamic interactivity on websites when applied to an HTML document.

It was introduced in the year 1995 for adding programs to the webpages in the Netscape Navigator browser.

Since then, it has been adopted by all other graphical web browsers.

3.7.2 BACK END

The back end is implemented using JSON & NODE JS which is used to design the databases.

- **DJANGO**

There isn't any readily-available and definitive measurement of popularity of server-side frameworks (although you can estimate popularity using mechanisms like counting the number of GitHub projects and StackOverflow questions for each platform). A better question is whether Django is "popular enough" to avoid the problems of unpopular platforms.

Unopinionated frameworks, by contrast, have far fewer restrictions on the best way to glue components together to achieve a goal, or even what components should be used. They make it easier for developers to use the most suitable tools to complete a particular task, albeit at the cost that you need to find those components yourself.

- **NODE JS**

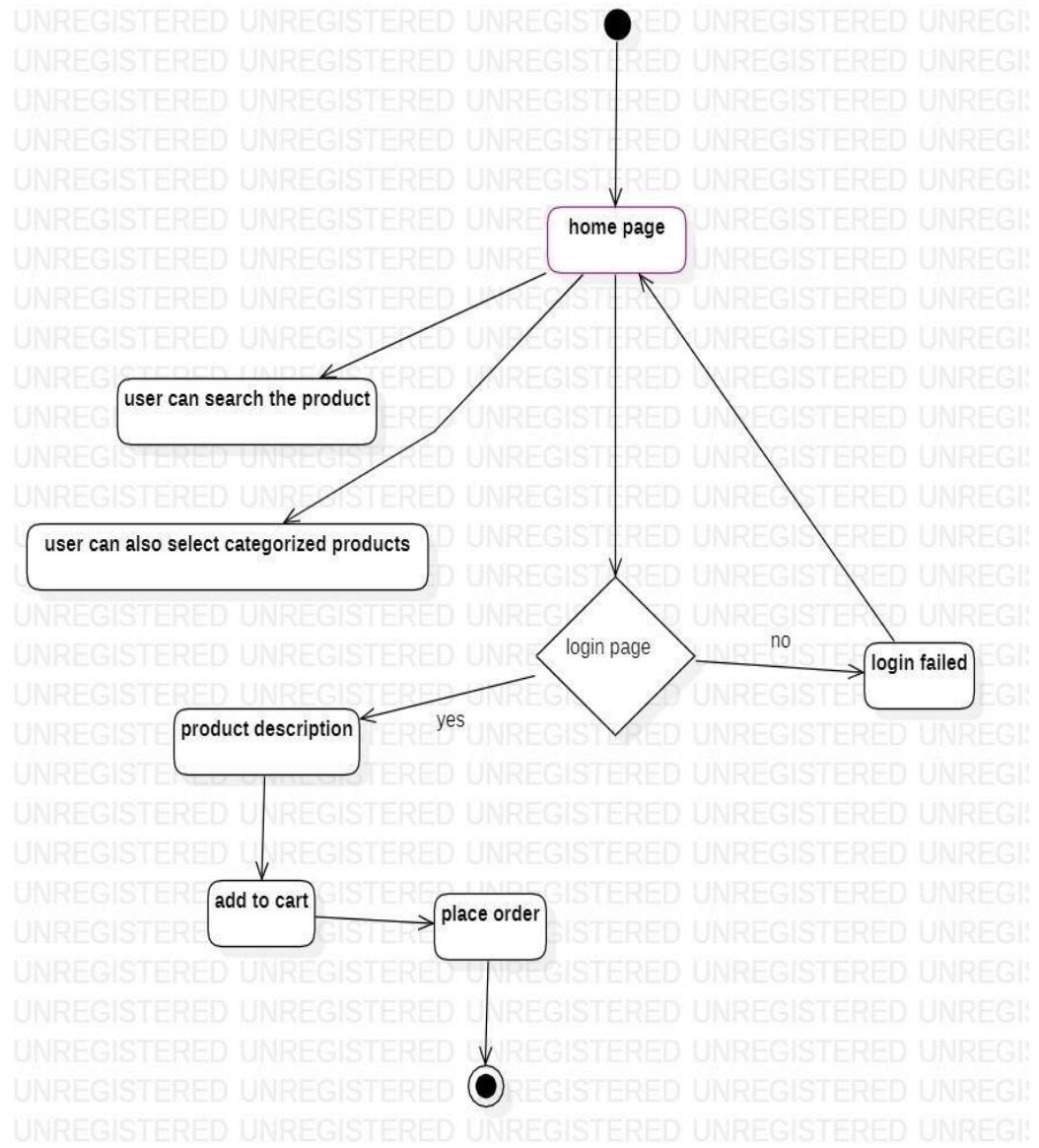
Node.js is a server-side platform built on Google Chrome's JavaScript Engine.

Node.js is an open source, cross-platform runtime environment for developing server-side and networking applications. Node.js applications are written in JavaScript, and can be run within the Node.js runtime on OS X, Microsoft Windows, and Linux.

Node.js also provides a rich library of various JavaScript modules which simplifies the development of web applications using Node.js to a great extent.

Node.js = Runtime Environment + JavaScript Library

4.1 DATA CONTROL FLOW

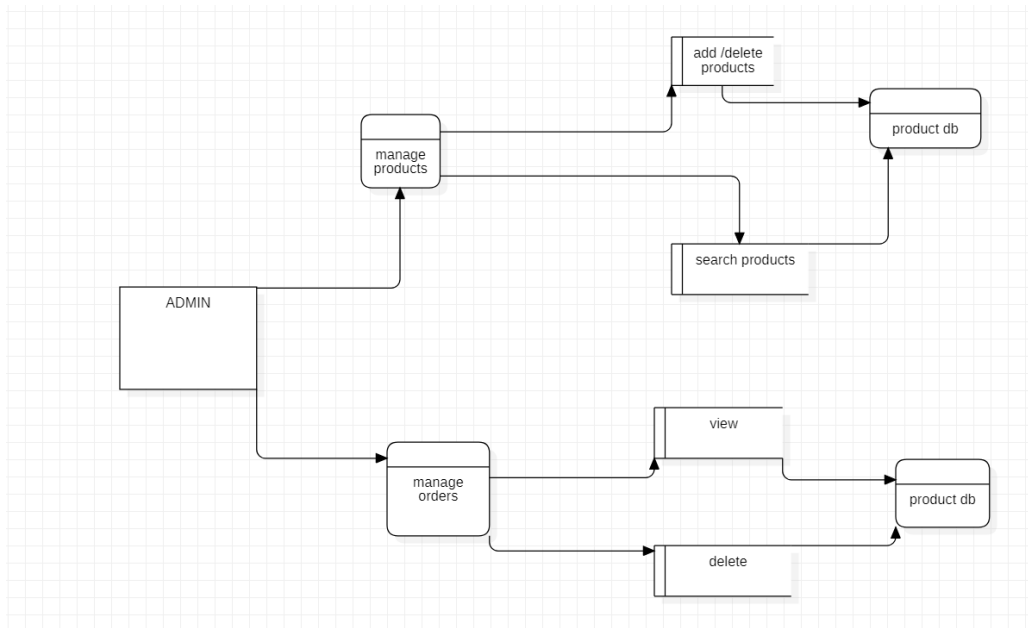


- A Data Flow Diagram (DFD) is a structured analysis and design tool that can be used for flowcharting. A DFD is a network that describes the flow of data and the processes that change or transform the data throughout a system.

This network is constructed by using a set of symbols that do not imply any physical implementation. It has the purpose of clarifying system requirements and identifying major transformations.

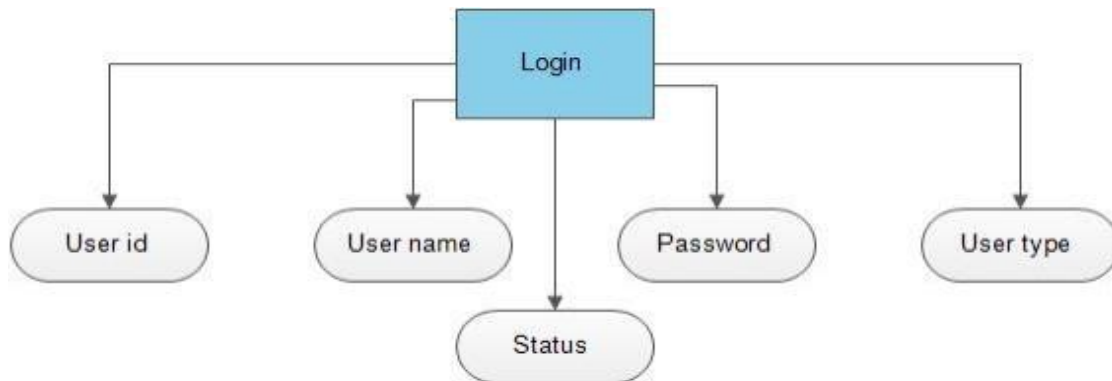
So it is the starting point of the design phase that functionally decomposes the requirements specifications down to the lowest level of detail. DFD can be considered to an abstraction of the logic of an information-oriented or a process-oriented system flow-chart. For these reasons DFD's are often referred to as logical data flow diagrams.

- **ADMIN DFD**

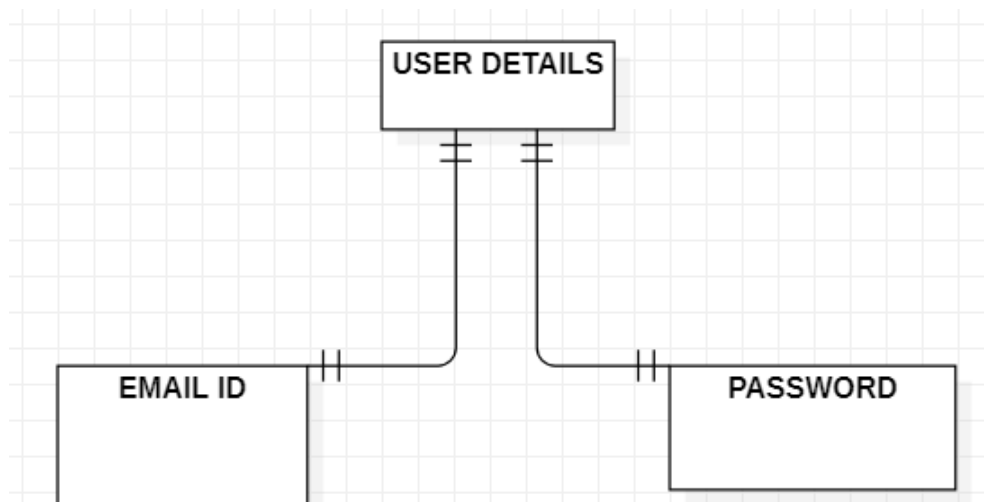


4.2 E-R DIAGRAMS

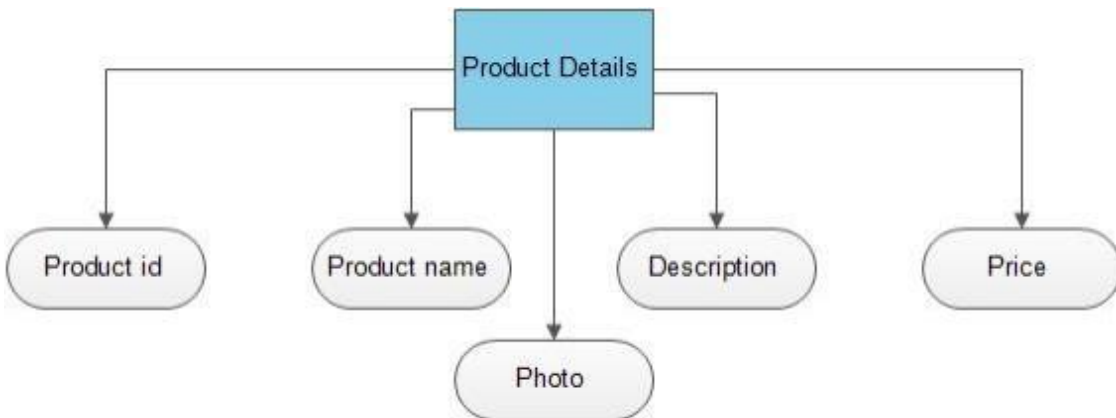
- LOGIN



- USER DETAILS



- **PRODUCT DETAILS**



RESULTS AND DISCUSSIONS

HOME PAGE

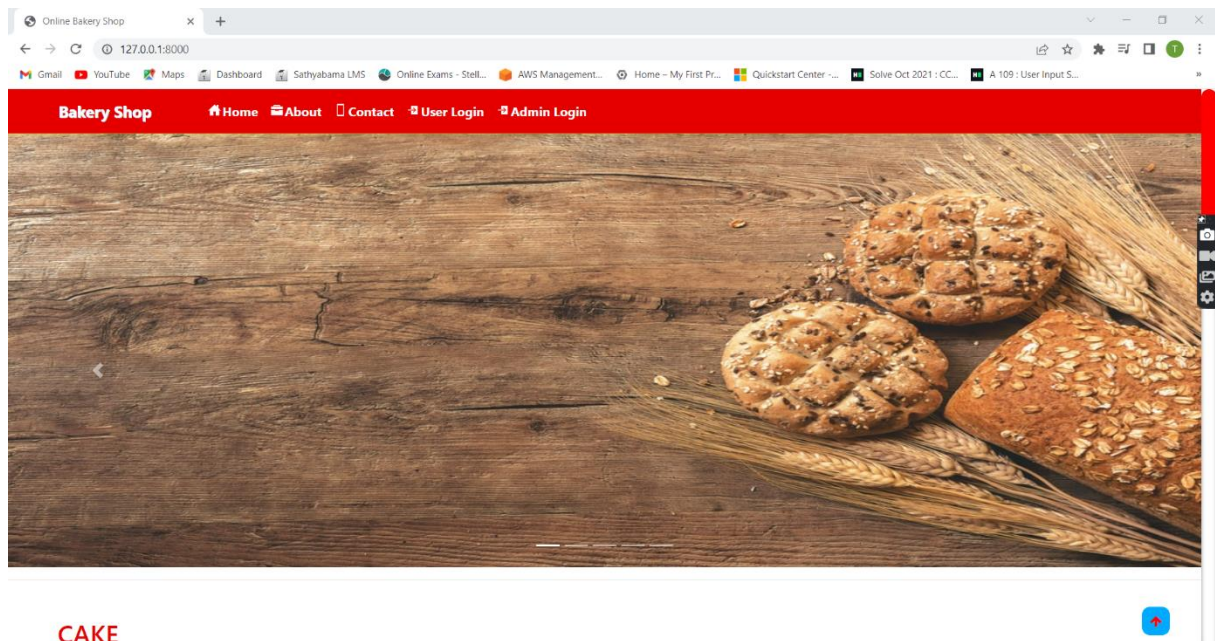
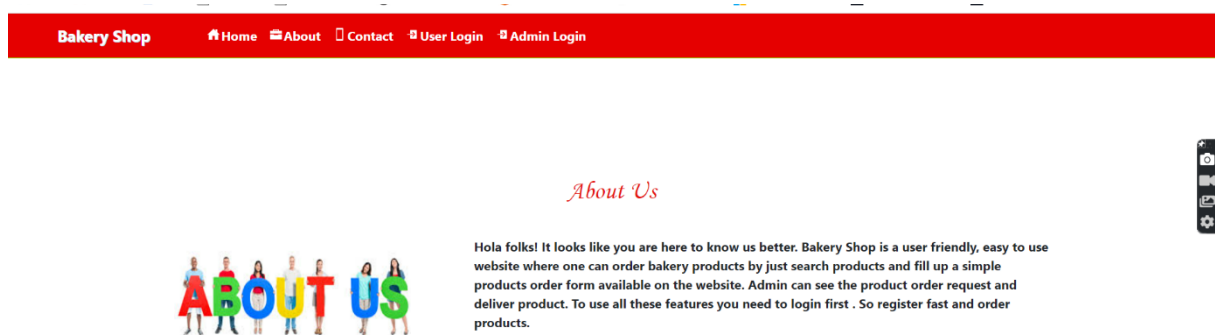


FIGURE NO1

ABOUT PAGE



USER LOGIN

User Login Form

Username

Password

Login

Signup



ADMIN LOGIN

Bakery Shop [Home](#) [About](#) [Contact](#) [User Login](#) [Admin Login](#)

Admin Login Form

Username

Password

Submit



DISCUSSIONS

- Data mining techniques can be applied in any online business to increase their sales because it helps in extracting and identifying useful information from large amount of data that is why retailing companies operate purchase databases in a long way, such that all transactions are stored in arranged order.
- A classification technique called decision tree classifier is used to predict some of the features which help the bakeries to increase their efficiency and

helps them to reduce time and cost such as fast , slow moving products sold

based on each day, based on area which product have sold more, depending on respective

season which product have sold more in month and year, and customer can search items based on availability and overall rating of product and also get suggestion of products as per user needs and interest .

CHAPTER 5

APPENDIX

-When we visit the website first we can able to see the home page which consists of all product ,searchbar and the cart symbol with the functionality.

-From the backend we can able to get the product details which are divided into the categories . the search bar will be provided the user can able to select the specific categories such as laptops,mobile, etc....And also the cart functionality will be provided such as emptycart,shopmore and place order.

-When we click on add to cart then it will to shown as below figure

- **CART PAGE**

-The functionality such as the empty cart,shop more and the check out- But when we can able to see according to the json data we are written in the code such as the sno,item,item image,item description and the item

price will be provide according to it.

LOGIN PAGE

When we click on any item then the page will be redirected to the login page according to specific item or the product we had selected because it is the statement given by the problem. In the login page we can able to see the email id, password and the login button. In this no need to reg we can directly login in the page and see the product description of the product we had selected. We can also able to follow our website on the twitter and the facebook

- **PRODUCT DESCRIPTION**

If we selected a product and we had logged successfully then we can able to see the specific product description. In Online bakery shop system, there are 3 modules. Admin will login through the website and he add/view the bakeries. Once the bakery register, the admin can add the bakeries through the website. Once the bakery is accepted from admin the bakeries can add product, update the product, give discount, and also they can predict products such as fast moving, slow moving product based on each day, depending on area which product sold more, based on respective season/period which product have sold more in month and year using data mining technique. User will login through android application and they can search the item, view n number of bakeries and order different product of their choice, they can get suggestions of product based their interest and also they can rate the product.

CONCLUSION

Based on the implementation of the research that has been done, can be concluded that this research produces e-commerce on the BONIK. The project entitled “Bonik” Online shopping system was completed successfully. The system has been developed with much care and free of errors and at the same time it is efficient and less time consuming. The purpose of this project was to develop a web application for purchasing items from a shop. This project helped us in gaining valuable information and practical knowledge on several topics like designing web pages using html & css, usage of responsive templates, designing of web applications, and management of database using Django. The entire system is secured. Also the project helped us understanding about the development phases of a project and software development life cycle. We learned how to test different features of a project. This project has given us great satisfaction in having designed an application which can be implemented to any nearby shops or branded shops selling various kinds of products by simple modifications. There is a scope for further development in our project to a great extend. A number of features can be added to this system in future like providing moderator more control over products so that each moderator can maintain their own products. Another feature we wished to implement was providing classes for customers so that different offers can be given to each class. System may keep track of history of purchases of each customer and provide suggestions based on history.

REFERENCES

- [1] K. C. Laudon and C. G. Traver, E-commerce: business, technology, society, 10th ed., Upper Saddle River: Pearson, 2014.
- [2] A. Q. Haviv, MEAN Web Development, Birmingham: Packt Publishing, 2014.
- [3] V. Waghade and B. V. Chaudhari, "Study Of REACT JS with Other Frameworks", International Journal of Research in Computer & Information, vol. 1, no. 2, pp. 151154, 2016.