

A
Minor Project Report
On
The Lunch Box

In partial fulfillment of the requirement for the award of the degree of



SUBMITTED BY

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(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)
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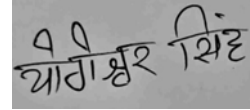
CERTIFICATE

This is to certify that Praveen Tiwari (0901IT203D02) and Ravi Baghel (0901IT203D04) minor project, " The Lunch Box " is a genuine record of a project completed under our supervision and guidance in partial fulfilment of the requirements for the award of a Bachelor of Technology in Information Technology in the Department of Information Technology, Madhav Institute of Technology and Science, Gwalior.



(Prof. Vikas Sejwar)

Mentor



(Prof. YOGESHWAR SINGH)

Mentor

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CANDIDATE'S DECLARATION

I hereby declare that the Project entitled “**The Lunch Box**” which is being submitted in the partial fulfilment of the requirement for the award of **Bachelor of Technology in Information Technology**.

All information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I have fully cited and referenced all material and results that are not original to this work.

To the best of my knowledge the material presented in this Project has not been submitted elsewhere for the award of any other degree/diploma.

Date:

Place:

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ABSTRACT:

Now a days people don't have much time spend in canteen by just there and waiting for the food. Sometimes they will not get food because of insufficient food. The project online canteen food ordering system helps the users to book their food earlier. As soon as they book their food the order will be sent to the chef for preparing it. The present system consists of the manual system that involves the paper work of the billing system and maintaining the files too. In the proposed system the payment is online and the e-menu will be available for the user. The users will have the username and the password through which they can book. This project will help in demonstrating the route from adapting materials to developing an online environment. This brings all necessities in one place that benefits both the user and the canteen owner smartly.

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1.0 INTRODUCTION

The online canteen food ordering system contains the e-menu cards that contain the details of the food. The user initially has to create an account for the utilization of the service. It will provide the list of different canteens and their various items menu list. The customer can select the desired item and can pay the amount through online payment gateway system. Immediately after booking the order, the canteen people will get the information of the order and they prepare the order. In the existing system there will be queues and the manual work load will be there. In the proposed system there is no need for the paper-work. The data can be stored in the database. The food will be ready in advance and the customers need not to wait near the delivery place. The digitalization of the canteen system will be helpful in providing the better service to the users and the time consumption will be reduced. The user can select can select particular item like in the four slots where there are admins for all the four slots. The updating and deletion of any item can be done. At last the user's feedback will be taken to improve the service and to make it available to everyone. The online system will help be helpful for the food makers to prepare the food as early as possible. As a result there will be quick serving to the customers. No queues can be formed for waiting of the food. The updating of the data to the database will be monitored by the admin. The user's data like recognizing the regular users to the canteen will be done and sent to the database. The security of data is done by the encrypted format and server databases of the institution.



Top Categories



SOFT DRINK



ICE CREAM



COFFEE & TEA



CAKE & PASTRY

MOST POPULAR CATEGORIES

Soft Drink

Ice Cream

Coffee & Tea

Cake & Pastry

CUSTOMER SERVICES

Terms & Condition

FAQ

Contact Us

Visit

Home

Blog

Offers

Contact Us

Call Us : xxxxxxxxxx

Email : xxxxxx@gmail.com

The Lunch Box is a Online Ordering System .

Download APP



1.2 AIM

Our proposed system is an online food ordering system that enables ease for the customers. It overcomes the disadvantages of the traditional queuing system. Our proposed system is a medium to order online food hassle free from restaurants as well as mess service. This system improves the method of taking the order from customer. The online food ordering system sets up a food menu online and customers can easily place the order as per their wish. Also with a food menu, customers can easily track the orders. This system also provides a feedback system in which user can rate the food items. Also, the proposed system can recommend hotels, food, based on the ratings given by the user, the hotel staff will be informed for the improvements along with the quality. The payment can be made online or pay-on-delivery system.

1.3 OBEJECTIVE OF PROJECT

The main objective of the Project on Canteen Food ordering System is to manage the details of Canteen, Meal, It's Type, and Canteen Staff. It manages all the information about Canteen, Bill Payment, Canteen Staff, and Canteen. The project is totally built at administrative end and thus only the administrator has authority to the access. The purpose of the project is to build an application program to reduce the manual work for managing the Canteen, Student Information, Bill Payment, and Student Meal. It tracks all the details about the Canteen Meal, It's Type, and Canteen Staff.

Functionalities provided by Canteen Management System are as follows:

- It tracks all the information of Student, Bill Payment, Meal Type, etc.
- Provides the sorting and searching facilities based on various factors. Such as Company Canteen, Student Meal, Meal Type.
- Manage the information of Canteen Editing, adding and updating of Records is improved which results in proper resource management of Company Canteen data.
- Manage the information of Meal Type.
- Integration of all records of Canteen Staff.

2.0 REQUIREMENTS

2.1 Hardware Requirements

Number	Description
1	PC with 250 GB or more Hard disk.
2	PC with 2 GB RAM.
3	PC with Pentium 1 and Above.

2.2 Software Requirements

Number	Description	Type
1	Operating System	Windows 10
2	Language	React Js And Node Js
3	Database	Mysql Workbench
4	IDE	Visual Code
5	Browser	Google Chrome (Default)

3.1 GENERAL OVERVIEW

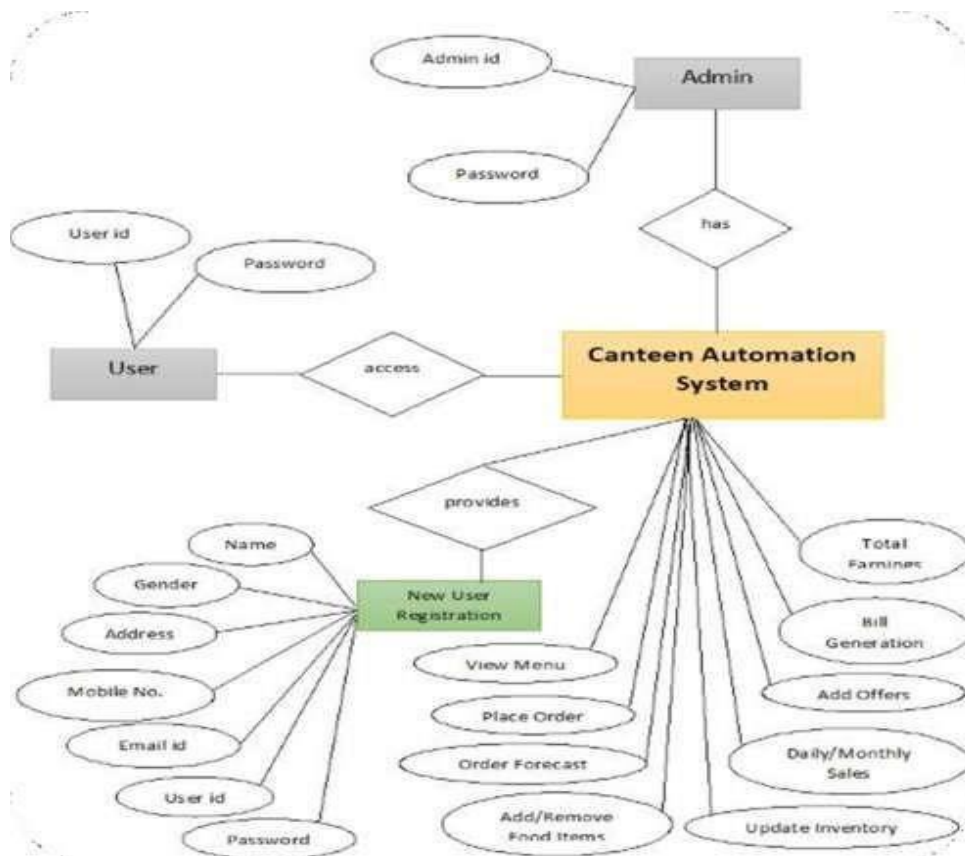
The Online food Ordering System can be defined as a simple and convenient way for customers to purchase food online, without having to go to the canteen.

This system is enabled by the internet – it is the internet that connects the canteen on one hand, and the customer/students on other hand. Therefore, as per this system, the customer visits website, browses through the various food items, combos and cuisines available there and goes ahead and selects and purchases the items he or she needs.

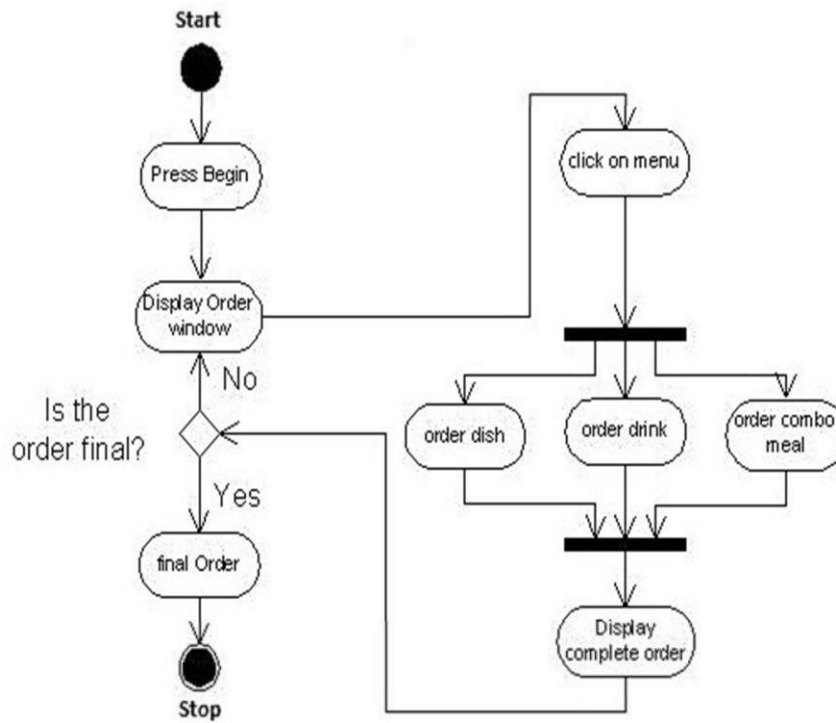
Payments for such online orders can be made through debit cards, credit cards, cash or card on delivery, or even through digital wallets.

This system for online food delivery is completely safe, secure and is a very popular method that is revolutionizing the way in which the food industry operates.

3.2 E-R DIAGRAM OF SYSTEM



3.2 ACTIVITY DAIGRAM FOR SYSTEM:



4.0 IMPLEMENTATION DETAIL

4.1 FRANTEND (React js)

React JS tutorial provides basic and advanced concepts of React JS. Currently, React JS is one of the most popular JavaScript front-end libraries which has a strong foundation and a large community. React JS is a declarative, efficient, and flexible JavaScript library for building reusable UI components. It is an open-source, component-based front end library which is responsible only for the view layer of the application. It was initially developed and maintained by Facebook and later used in its products like Whatsapp & Instagram.

Our ReactJS tutorial includes all the topics which help to learn ReactJS. These are ReactJS Introduction, ReactJS Features, ReactJS Installation, Pros and Cons of ReactJS, ReactJS JSX, ReactJS Components, ReactJS State, ReactJS Props, ReactJS Forms, ReactJS Events, ReactJS Animation and many more.

Why we use ReactJS?

The main objective of ReactJS is to develop User Interfaces (UI) that improves the speed of the apps. It uses virtual DOM (JavaScript object), which improves the performance of the app. The JavaScript virtual DOM is faster than the regular DOM. We can use ReactJS on the client and server-side as well as with other frameworks. It uses component and data patterns that improve readability and helps to maintain larger apps.

Pre-requisite for ReactJS

1. Node JS
2. React js
3. Webpack
4. Babel

Ways to install ReactJS

There are two ways to set up an environment for successful ReactJS application. They are given below.

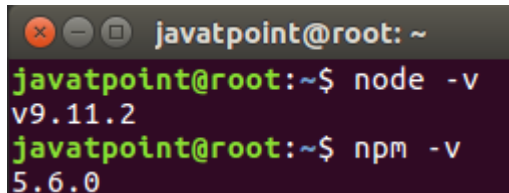
1. Using the npm command
2. Using the create-react-app command

1. Using the npm command

Install NodeJS and NPM

NodeJS and NPM are the platforms need to develop any ReactJS application. You can install NodeJS and NPM package manager by the link given below.

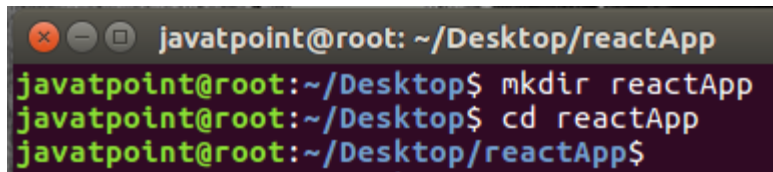
To verify NodeJS and NPM, use the command shown in the below image.



```
javatpoint@root: ~  
javatpoint@root:~$ node -v  
v9.11.2  
javatpoint@root:~$ npm -v  
5.6.0
```

Install React and React DOM

Create a **root** folder with the name **reactApp** on the desktop or where you want. Here, we create it on the desktop. You can create the folder directly or using the command given below.



```
javatpoint@root: ~/Desktop/reactApp  
javatpoint@root:~/Desktop$ mkdir reactApp  
javatpoint@root:~/Desktop$ cd reactApp  
javatpoint@root:~/Desktop/reactApp$
```

4.2 BACKEND (Node js)

What is Node.js?

Node.js is a server-side platform built on Google Chrome's JavaScript Engine (V8 Engine). Node.js was developed by Ryan Dahl in 2009 and its latest version is v0.10.36. The definition of Node.js as supplied by its [official documentation](#) is as follows –

Node.js is a platform built on [Chrome's JavaScript runtime](#) for easily building fast and scalable network applications. Node.js uses an event-driven, non-blocking I/O model that makes it lightweight and efficient, perfect for data-intensive real-time applications that run across distributed devices.

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

Features of Node.js

Following are some of the important features that make Node.js the first choice of software architects.

- **Asynchronous and Event Driven** – All APIs of Node.js library are asynchronous, that is, non-blocking. It essentially means a Node.js based server never waits for an API to return data. The server moves to the next API after calling it and a notification mechanism of Events of Node.js helps the server to get a response from the previous API call.
- **Very Fast** – Being built on Google Chrome's V8 JavaScript Engine, Node.js library is very fast in code execution.
- **Single Threaded but Highly Scalable** – Node.js uses a single threaded model with event looping. Event mechanism helps the server to respond in a non-blocking way and makes the server highly scalable as opposed to traditional servers which create limited threads to handle requests. Node.js uses a single threaded program and the same program can provide service to a much larger number of requests than traditional servers like Apache HTTP Server.
- **No Buffering** – Node.js applications never buffer any data. These applications simply output the data in chunks.
- **License** – Node.js is released under the MIT license.

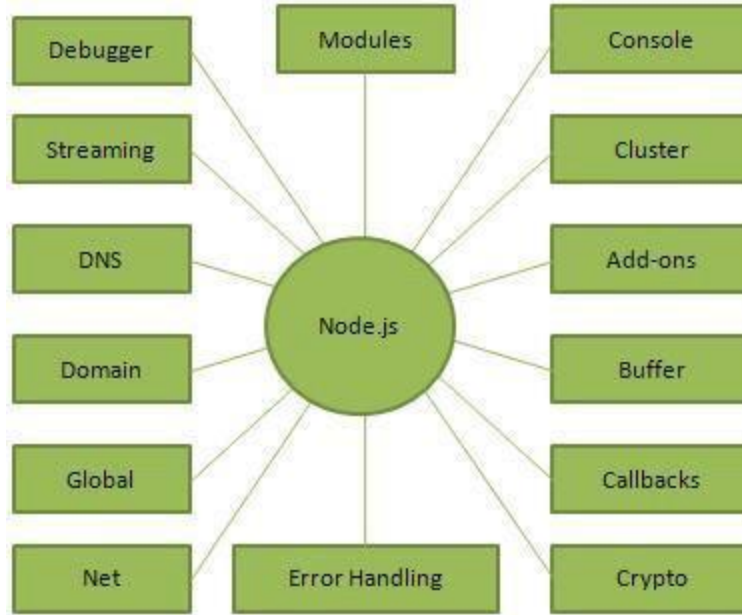
Who Uses Node.js?

Following is the link on github wiki containing an exhaustive list of projects, application and companies which are using Node.js. This list includes eBay, General Electric, GoDaddy, Microsoft, PayPal, Uber, Wikipins, Yahoo!, and Yammer to name a few.

- [Projects, Applications, and Companies Using Node](#)
-

Concepts

The following diagram depicts some important parts of Node.js which we will discuss in detail in the subsequent chapters.



Where to Use Node.js?

Following are the areas where Node.js is proving itself as a perfect technology partner.

- I/O bound Applications
- Data Streaming Applications
- Data Intensive Real-time Applications (DIRT)
- JSON APIs based Applications
- Single Page Applications

Node.js Useful Resources

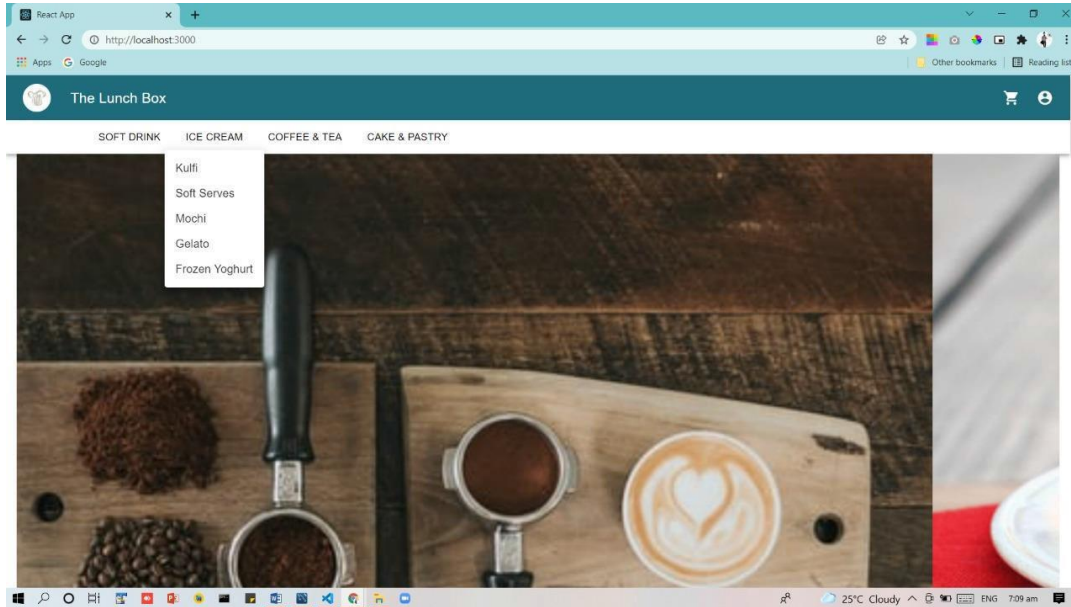
Node.js is a very powerful JavaScript-based framework/platform built on Google Chrome's JavaScript V8 Engine. It is used to develop I/O intensive web applications like video streaming sites, single-page applications, and other web applications. Node.js is open source, completely free, and used by thousands of developers around the world.

SNAPSHOTS:

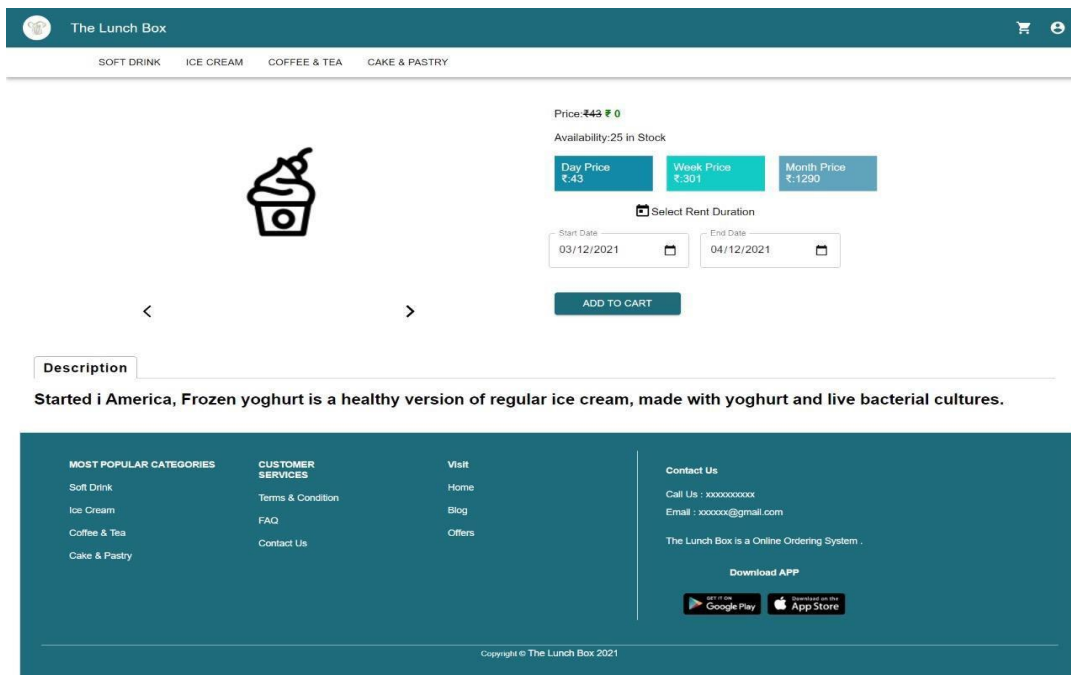
DASHBOARD SCREEN :

The screenshot displays the dashboard for 'The Lunch Box'. At the top, there is a teal header with the logo and name 'The Lunch Box' on the left, and a shopping cart icon and a user profile icon on the right. Below the header is a horizontal navigation bar with four categories: 'SOFT DRINK', 'ICE CREAM', 'COFFEE & TEA', and 'CAKE & PASTRY'. The main content area features a large, high-quality photograph of coffee-making ingredients and tools on a wooden surface, including coffee beans, a portafilter, and a latte with heart-shaped art. Below the image is the text 'Top Categories'. Underneath, there are four white boxes, each containing an icon and a category name: 'SOFT DRINK' (with a soft drink icon), 'ICE CREAM' (with an ice cream cone icon), 'COFFEE & TEA' (with a coffee cup icon), and 'CAKE & PASTRY' (with a hand holding a cake icon). The footer is a teal bar divided into three sections. The left section, 'MOST POPULAR CATEGORIES', lists 'Soft Drink', 'Ice Cream', 'Coffee & Tea', and 'Cake & Pastry'. The middle section, 'CUSTOMER SERVICES', lists 'Visit', 'Home', 'Blog', 'Offers', 'Terms & Condition', 'FAQ', and 'Contact Us'. The right section, 'Contact Us', includes 'Call Us : xxxxxxxxxx', 'Email : xxxxxx@gmail.com', 'The Lunch Box is a Online Ordering System .', and 'Download APP' with 'Google Play' and 'App Store' logos.

LIST OF ITEMS :



ADD TO CART SCREEN:



PAYMENT DETAILS :

The screenshot displays a mobile application interface for 'The Lunch Box'. The top navigation bar includes categories: SOFT DRINK, ICE CREAM, COFFEE & TEA, and CAKE & PASTRY. The main content area features a large image of a frozen yogurt cup. To the right of the image, the price is listed as ₹43.00, with an availability of 25 in stock. Below the price, there are three buttons for 'Day Price ₹.43', 'Week Price ₹.301', and 'Month Price ₹.1290'. A 'Select Rent Duration' section shows a start date of 03/12/2021 and an end date of 04/12/2021. A quantity selector shows '1' with minus and plus buttons. A 'Description' section is partially visible, starting with 'Started i America, Frozen yoghurt is a healthy version of regular ice cream, made with yoghurt and li'. On the right side, a shopping cart icon shows '1 items' and a 'Total Amount: ₹43'. Below this, a 'Payment Details' section lists: Total Amount: ₹43, Total Saving: ₹43, Delivery Charges: ₹0, and Amount Pay: ₹43. A 'PROCEED' button is located at the bottom right of the payment details.

SIGN IN :

The screenshot shows a mobile application interface for 'The Lunch Box'. The top navigation bar includes categories: SOFT DRINK, ICE CREAM, COFFEE & TEA, and CAKE & PASTRY. The main content area is split into two sections. On the left, there is a large image of various ice cream scoops and cones on a dark surface. On the right, there is a 'Sign In' form. The form has the title 'Sign In' and the subtitle 'Sign In to access your Orders, Offers, Wishlist.'. Below the subtitle, there is a text input field labeled 'Enter Your Mobile Number*' with a placeholder '+91 |'. A pink arrow button is positioned below the input field.

SIGN UP:

The Lunch Box

SOFT DRINK ICE CREAM COFFEE & TEA CAKE & PASTRY

Sign Up

Please Enter Your Details

First Name * Last Name *

Email Address *

Enter Your Mobile Number *
+91 | 98788789878

Password * Re Enter Password *

OTP sent on +9198788789878

Waiting for OTP
00:00:00:14

VERIFY

ORDER SUMMARY:

The Lunch Box

SOFT DRINK ICE CREAM COFFEE & TEA CAKE & PASTRY

Order Summary (1)

(1) Items	₹ 43
FROZEN YOGHURT Day Price ₹43 ₹ 0 You save ₹ 43 1 x ₹	₹ NaN

Hey, Radhe Mohan

Payment Details

M.R.P	₹ 43
Product Discount	₹ 43
Delivery Charges	₹ 0
Total Amount	₹ 43

MAKE PAYMENT

TYPE OF USERS:

1. Admin

- TakeOrder
- Add/ Remove FoodItems
- Add offers
- Update Inventory
- Order Forecasting (Predict Items Most Frequently During SpecificHours)
- Sales for each day and month
- Sales of individual item for theday
- Total Earnings

2. Staff

- Order placed byCustomer
- Offer
- Order Forecasting

3. User

- Place anOrder
- Menu Items
- Bill Payment

RESULTS

Following are the results that one can draw from this system:

- i. People can successfully order the food using the proposed system.
- ii. There will be a lesser requirement of staff at the back counter.
- iii. The system will help in reduction of labor cost involved and also reduces the space required to set up cafeterias in the restricted area.
- iv. As it is an automated system it is less probable to make any mistakes.
- v. The customers can avoid the long queues at the counter, with a reasonable speed of execution and maximum throughput.

1. ADVANTAGES:

1. Security of data.
2. Ensure data accuracy's.
3. Proper control of the higher officials.
4. Minimize manual data entry.
5. Minimum time needed for the various processing.
6. Greater efficiency and Better service.
7. User friendliness and interactive.
8. Minimum time required.

FUTURE SCOPE:

The present system depends on the online management. This can be improvised by the automation of the software's. The data storing will takes time and it requires the manual observation. With the help of the automation it would store the data instantly. This will reduce the effort time by the manual observation. The updated data will be finalized and alerts time to time to the admin. The machine learning algorithms can also be used for the prediction of the most preferred item by the customers. The customers will give the feedback and this will be sent to the database. Using the machine learning algorithms these feedbacks will be analyzed and preferred food item will be displayed to the regular users on the online system. The menu list can also be updated according to the admin's choice by the shortcut methods used in the learning algorithms.

CONCLUSION:

The development of Canteen food ordering system involved many phases. The approach used is a top-down one concentrating on what first and steps for moving to successive levels of details. In primary phase, the system is designed at block level. The blocks are created on the basis of analysis done during the problem identification phase. Different blocks are created for different functions emphasis is put on minimizing the information flow between blocks. Thus, the activities which require more interaction are kept in one block.

During this phase, strict adherence was made to prove software engineering principles and practices. To implement this design, a computer program was written and tested on Net Beans IDE.

It is hoped that effective implementation of this software product would eliminate many problems discovered during systems investigation.

11. REFERENCES:

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- [2] <https://netbeans.org/kb/docs/java/quickstart.html>
- [3] <https://www.javacodegeeks.com/2018/04/netbeans-ide-tutorial.html>
- [4] <http://www.mysqltutorial.org/php-connecting-to-mysql-database/>
- [5] https://www.tutorialspoint.com/android/android_studio.htm
- [6] <https://www.androidauthority.com/android-studio-tutorial-beginners-637572/>
- [7] <https://www.w3schools.com/REACT/DEFAULT.ASP>

