

A

Project Report

on

Rest-O-Fast

In partial fulfillment of Post Graduate course

in

Master of Science (Computer Applications) – II

(Semester -III)

CSA5312 Computer Applications Project - II

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(2020 – 2021)



**Deccan Education Society's
Fergusson College (Autonomous), Pune
Department Of Computer Science**

CERTIFICATE

This is to certify that the project entitled '**Rest-O-Fast**' submitted by:

1. Anish Milind Marathe.
2. Muskan Kailash Pohani.
3. Sneha Dinesh Punekar

in partial fulfillment for the requirement of the completion of M.Sc. (Computer Applications) [Semester-III] CSA4212 Computer Applications Project – II, has been carried out by them satisfactorily during the academic year 2020-2021.

Place: Pune

Date: 02 / 05 /2021

**Name of the Project Guide,
Mrs. Sreelalitha Talluri**

**Co-ordinator
Department Of Computer Science
Fergusson College (Autonomous), Pune**

Examiners Name

Signature

1.

2.

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1. Introduction

With the introduction of Novel Coronavirus, People have started becoming more and more aware, about the hygiene, living style and what not. Considering the worst thing which we all have seen the last year i.e. LOCKDOWN, which affected everyone in a highly adverse manner, there is one little thing which people are missing badly. Going to hotels for having lunch, dinner and chitchats! As the Govt. is taking a call for UNLOCKING THE NATION, we the students of Fergusson College MSc. CA have come up with an idea. REST-O-FAST, as the name suggests, it is a restaurant app built with the intention of:

1. Bringing people together but keeping them safe with ATMOST POSSIBLE MINIMUM CONTACT of the stuff!
2. Not to keep them wait when they are already hungry!
3. To make delicious food available at their fingertips, without any second thought.

1.1 Existing System:

As far there is no such kind of website where the customer can order the food online while sitting in the restaurant itself. So we are proposing this new idea in this pandemic so that one can order the food without getting infected covid-19.

1.2 Need of the System:

With the introduction of Novel Coronavirus, People have started becoming more and more aware, about the hygiene, living style and what not.

Considering the worst thing which we all have seen the last year i.e., LOCKDOWN, which affected everyone in a highly adverse manner, there is one little thing which people are missing badly. Going to hotels for having lunch, dinner and chitchats! As the Govt. is taking a call for UNLOCKING THE NATION, we the students of Fergusson College MSc. CA have come up with an idea!

REST-O-FAST, as the name suggests, its a restaurant app built with the intention of:

1. Bringing people together but keeping them safe with ATMOST POSSIBLE MINIMUM CONTACT of the stuff!
2. Not to keep them wait when they are already hungry!
3. To make delicious food available at their fingertips, without any second thought!

1.3 Overview of the Project:

REST-O-FAST is very useful in every hotel, because of the current situation on-going. So the time when everything will get back to normal, at that time the system will sustain a SELF SERVICE kind of thing for the customers and for the Hotels that does not have a SELF SERVICE can begin with REST-O-FAST. So keeping in the current situation on-going in the world we are proposed with the new system i.e. rest-o-fast which concludes an online website where the customer/user can order its food online sitting in a restaurant. Our system consists of total 10 modules which will begin right from the QR code recognition module to the logout module.

1. User has to scan the QR code available at the table itself and it will take the user to landing page (Home page).
2. When the user scans the QR code then it will get on the page which consists of some information and displays the food items included by the system and it will also have a navbar.
 - i) Item-wise menu navigation.
 - ii) Full Menu Navigation.
- iii) A logout Button (If user has logged in)
3. Then there will be a button full navigation menu when clicked then it will display all the categories which restaurant has, for ex: south indian, north indian. Selecting on category it will redirect to that category.
4. This module will display all the items along with price and description
It will also allow to review the cart and can add too.
5. The user must be logged in to process their order further. Username and Password field will be there and if the details entered by the user are not found in the database it will automatically redirected to the registration page.
6. If the user is not registered it will allow user to get registered and it will also lead to email address verification with an OTP and thus verified and registered it will be redirected to the login page to start selecting the food items and placing order.
7. Once the food items being selected the user can review the cart and also modify it review it and can proceed with the checkout page for the order completion.
8. The module will accept the card details and validate them if the details entered are correct and the user is shown overview which includes item name, cost, quantity of the ordered items. The amount to be paid it and all the details will be encrypted.
9. The user must log in to process their order further. Username and Password field will be there and if the details entered by the user are not found in the database it will automatically redirected to the registration page.
10. The user must log in to process their order further. Username and Password fields will be there and if the details entered by the user are not found in the database it will automatically redirected to the registration page.

2. Analysis

2.1 Feasibility Study:

Feasibility study is an assessment of practically of the proposed system. It helps in clarifying the resources and financial investment required by the system.

2.1.1 Technical Feasibility

The project feasible within the limits of current technology. The technology used here can be easily applied to current problems.

System Specifications:

- Windows 10 Professional
- Hardware Memory: 1.00 GB Minimum
- Front End
 - React Js
- Back End
 - Server
 - NodeJs
 - Database Server
 - MySQL

2.1.2 Economic Feasibility

The website is economically feasible for the developer. The computer H/W needed to implement this project is readily available. The Other costs required are:

1. Software licenses.
2. User training.
3. Maintenance and hosting cost.
4. Technical Implementation work.
5. Concept design and specification.
6. Content production.

2.1.3 Operational feasibility

A person who can operate a PC (Personal computer) can easily through this website and order the food items as the user interface is very easy to navigate and friendly.

2.1.4 Hardware and Software requirements

We were provided with all the software as well as hardware facilities by the college as we did this project on our own Personal Computer and we were allowed to complete it at home.

As our client and server machines are same,

Following are some hardware requirements:

OS type: 64 bit.

Memory: 4.00 GB.

Processor: Intel Core 2 Duo clocked @1.83GHz.

Hard Disk: 1 TB.

Following are some software requirements:

Operating System: Windows

Release: 10 Professional

Applications:

- VI Code Editor.

Languages:

1. JavaScript
2. Mozilla Firefox Browser

3. Design

3.1 Database Table Design

Table Name: category

Field Name	Field Type	Description
id	int	Primary Key
name	Varchar(400)	
description	Varchar(100)	
image	Varchar(200)	

Table Name: orderid

Field Name	Field Type	Description
oid	int	Primary Key

Table Name: item

Field Name	Field Type	Description
id	int	Primary Key
name	Varchar(400)	
price	float	
category_id	int	Foreign Key
Count	int	
Image	Varchar(200)	
Description	Varchar(200)	

Table Name: card

Field Name	Field Type	Description
Number	Decimal(16,0)	Primary Key
Name	Varchar(200)	
expiry_date	Varchar(50)	
Cvv	int	

Table Name: ordertable

Field Name	Filed Type	Description
oid	int	Foreign Key
Itemid	int	Foreign Key
Qty	int	Foreign Key
Tableid	int	Foreign Key
Viewed	Varchar(200)	
special_note	Varchar(200)	

Table Name: tableuser

Field Name	Field Type	Description
t_id	int	Primary Key
user_id	int	Foreign Key

Table Name: invoice

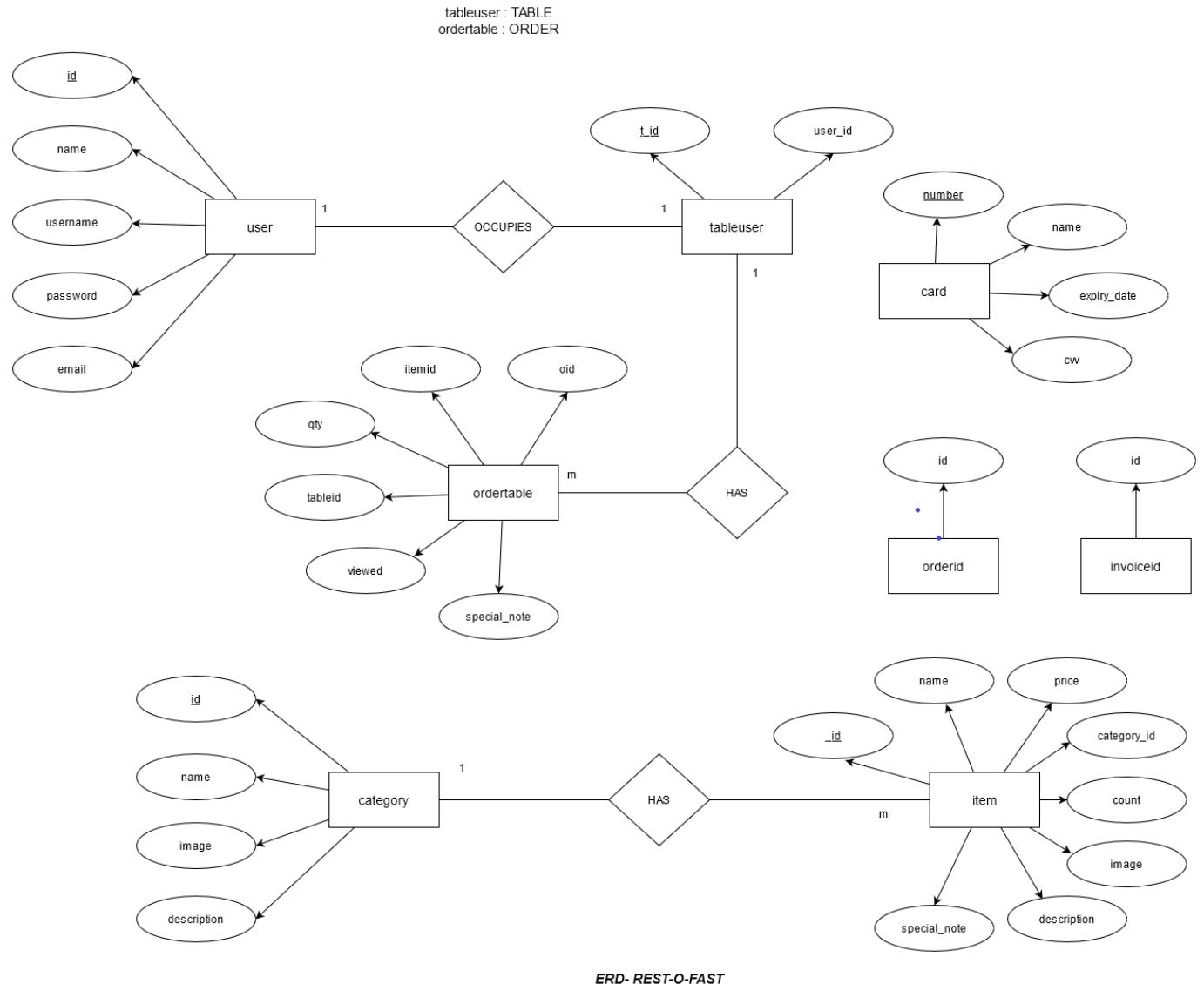
Field Name	Field Type	Description
id	int	Primary Key

Table Name : user

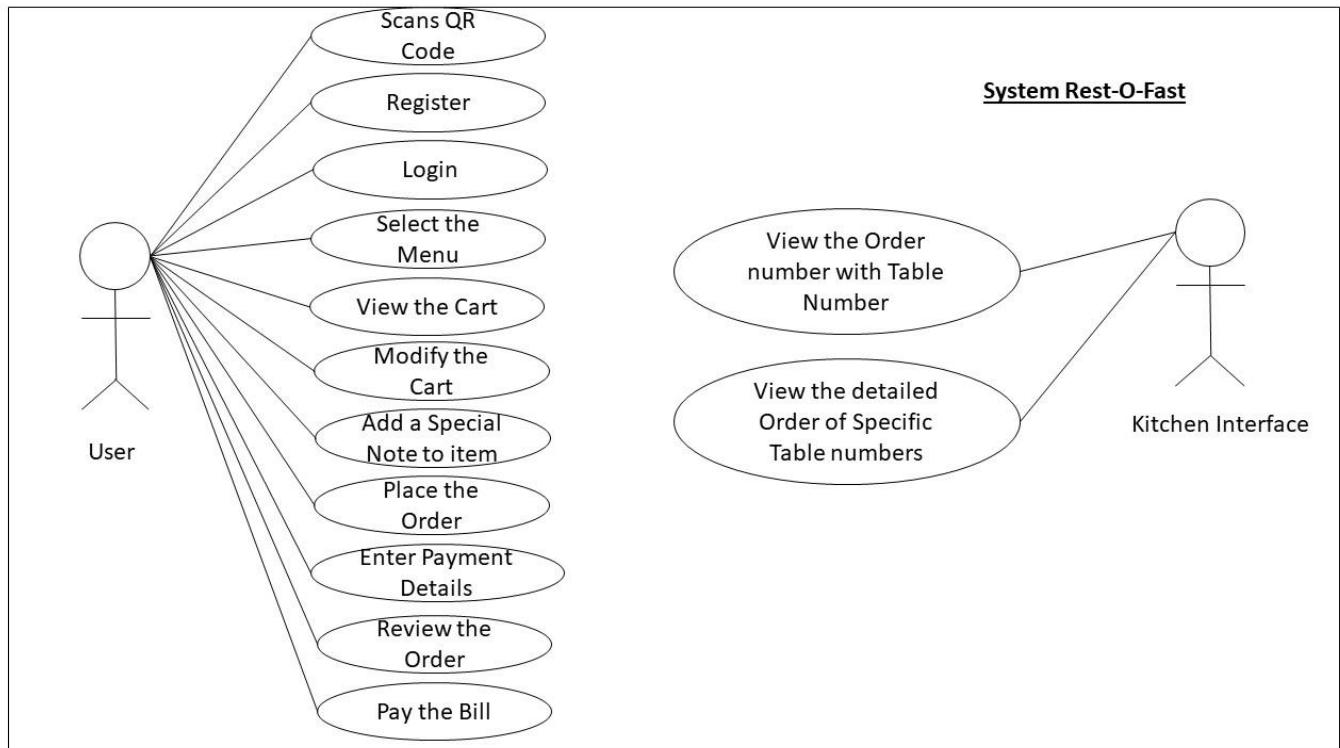
Field Name	Field Type	Description
id	int	Primary Key
Name	Varchar(50)	
username	Varchar(100)	
email	Varchar(100)	
password	Varchar(100)	

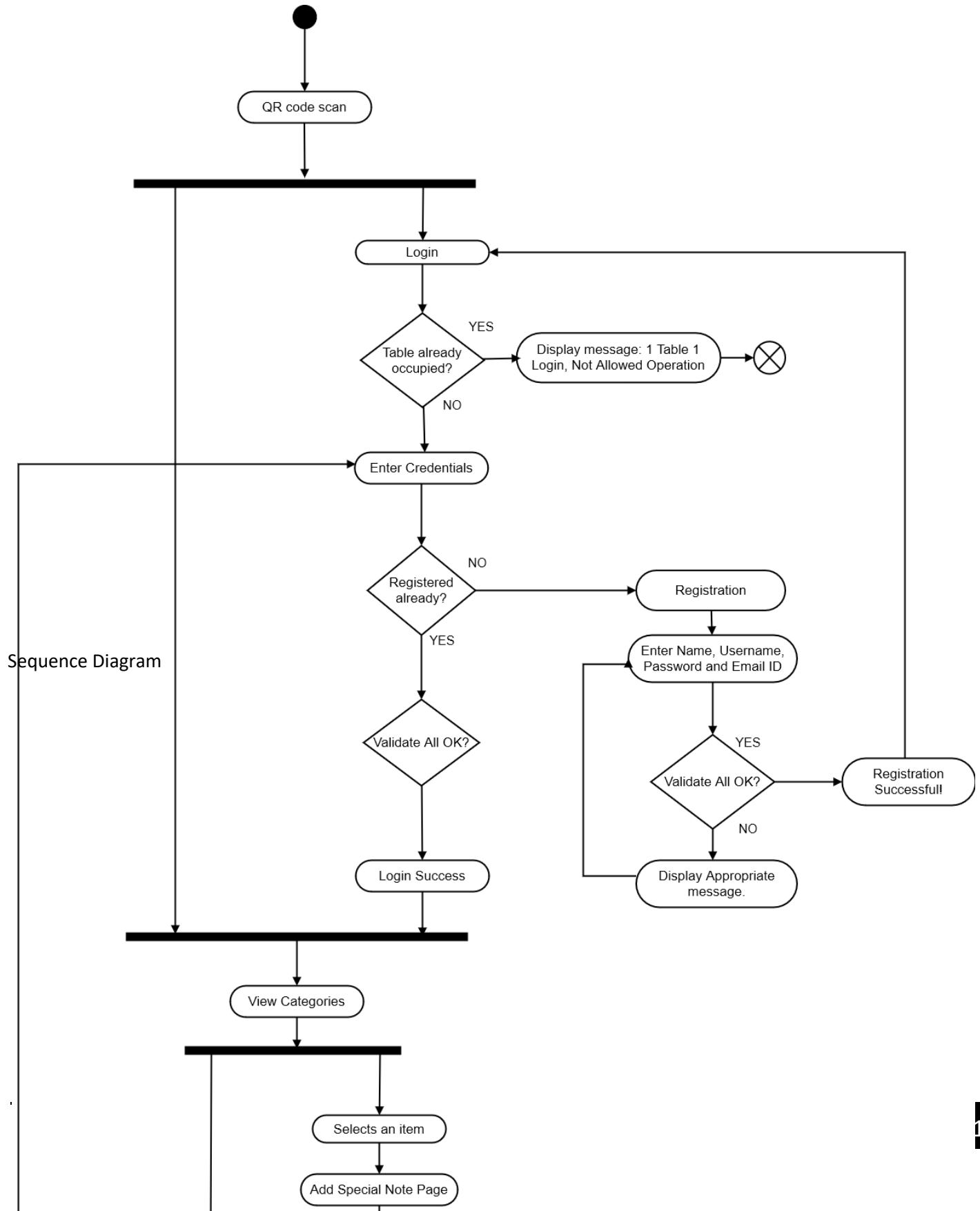
3.2 Software Engineering Diagrams

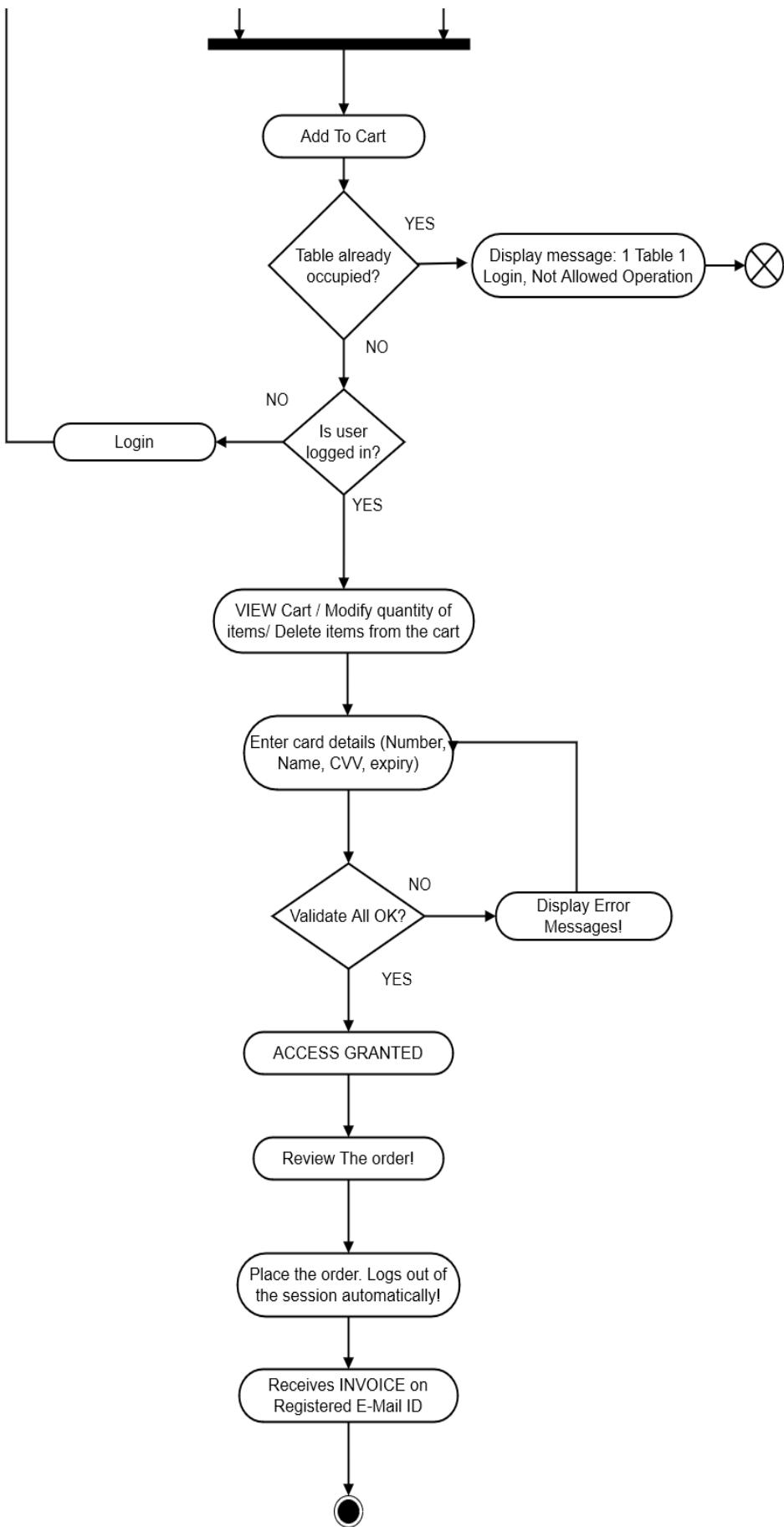
1. ERD Diagram



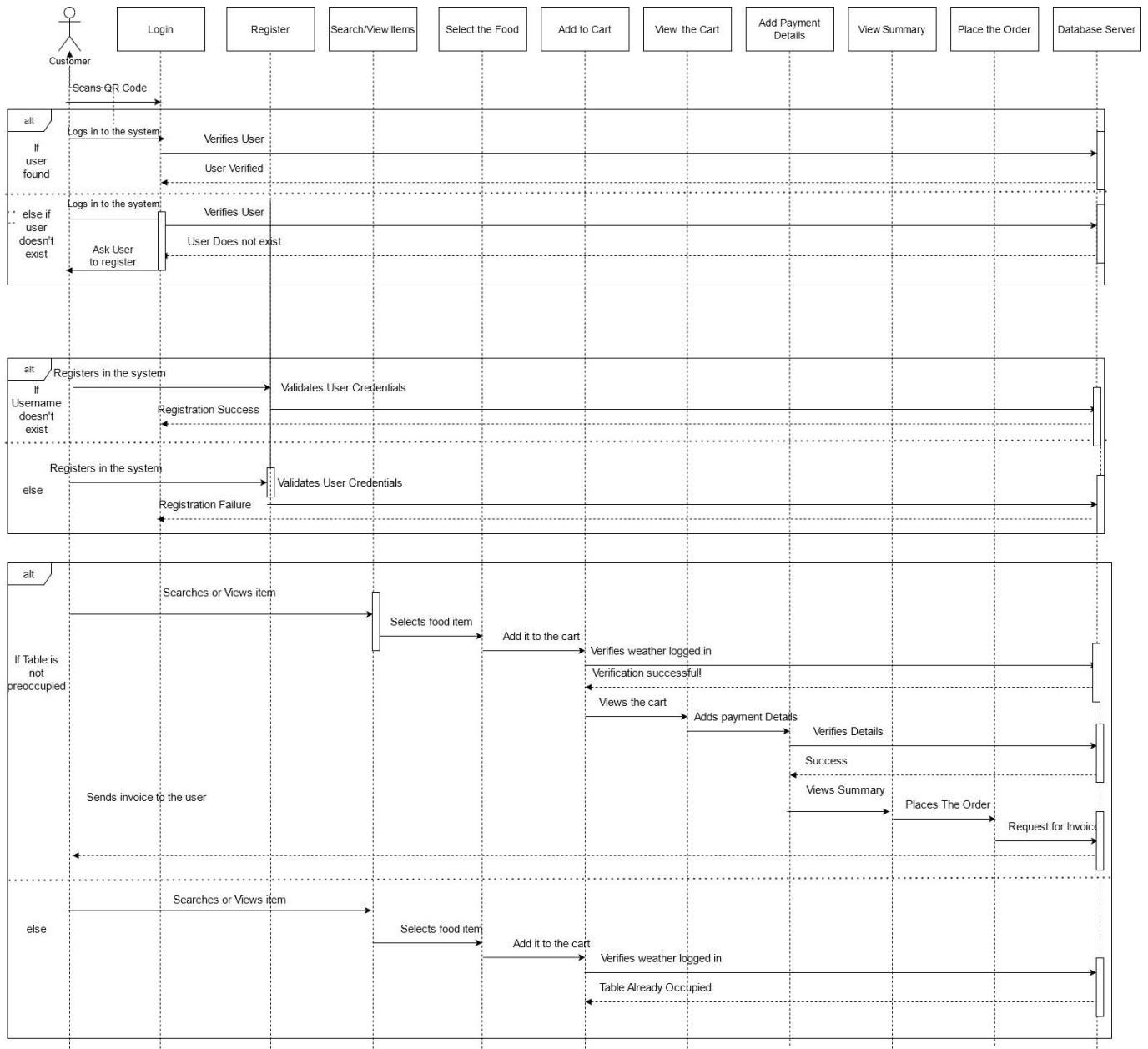
2. Use Case Diagram

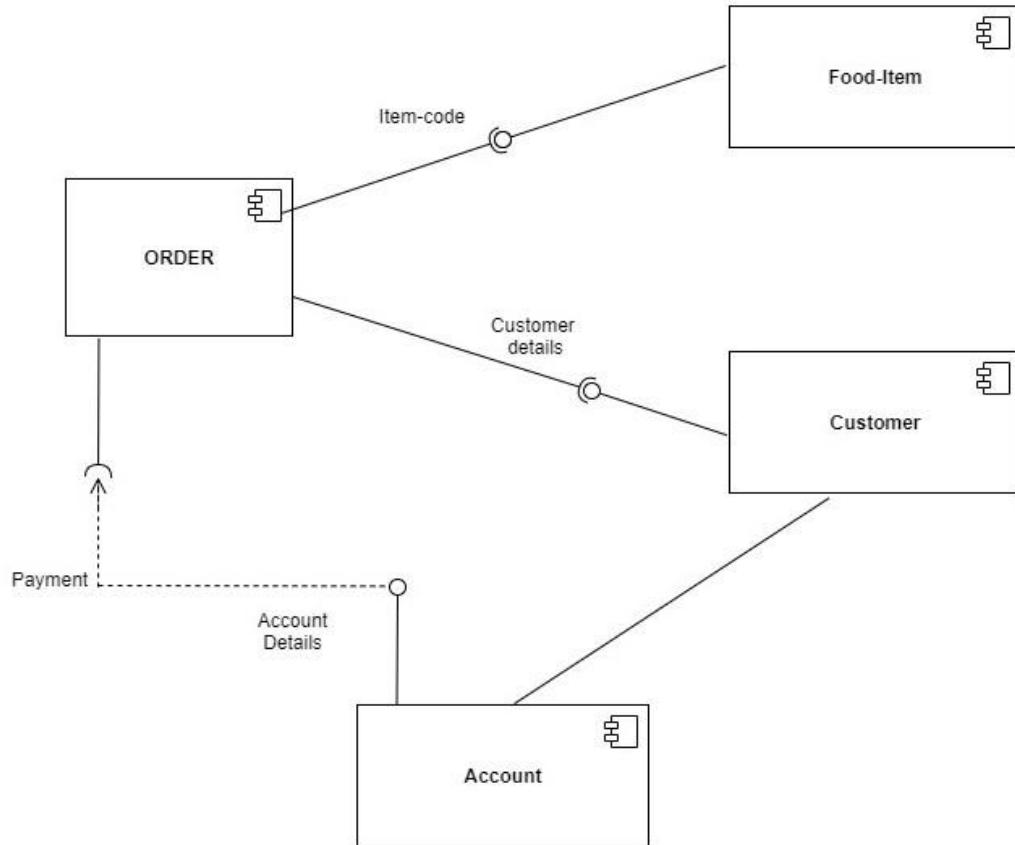


Activity Diagram

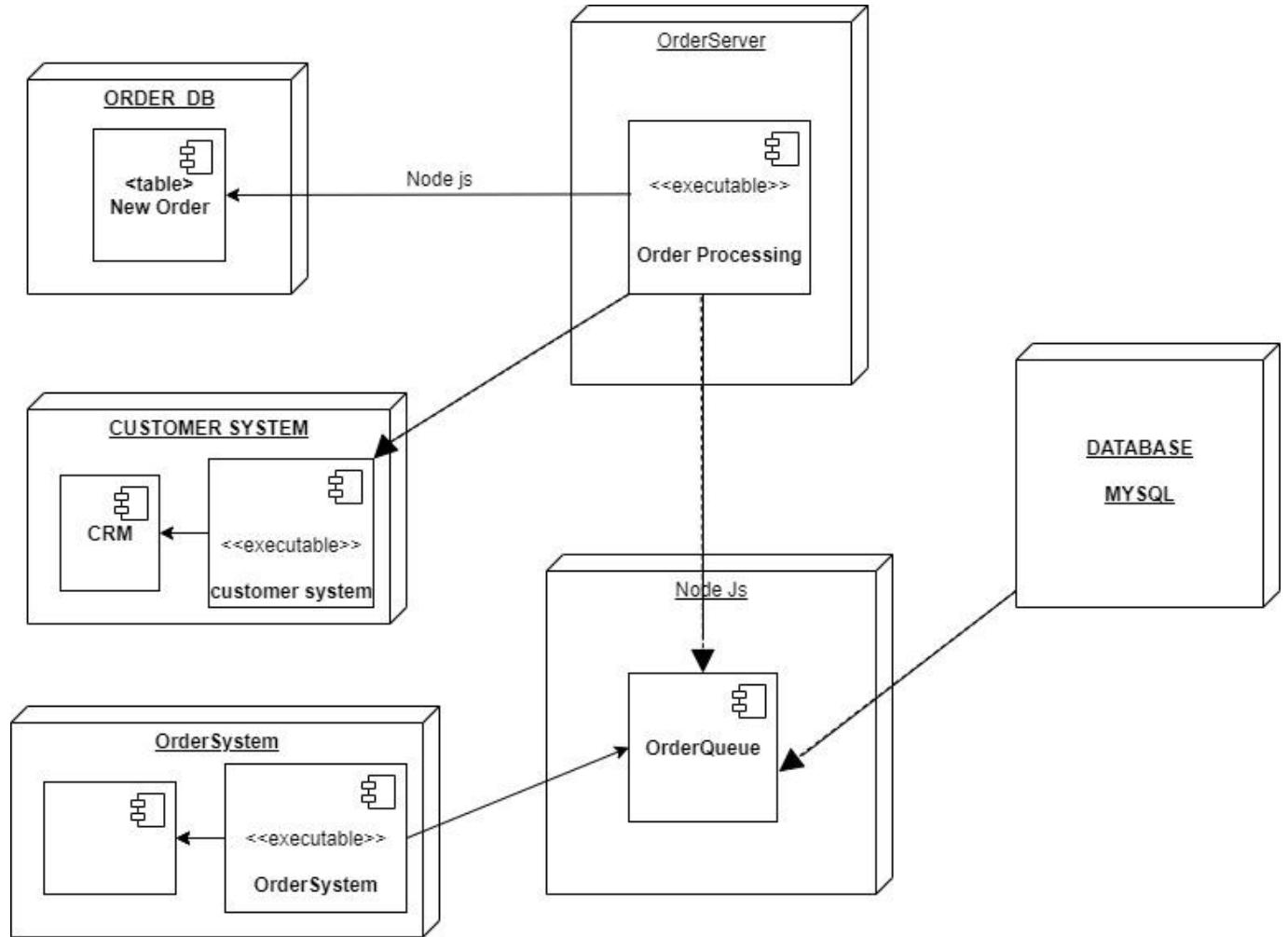


Sequence Diagram

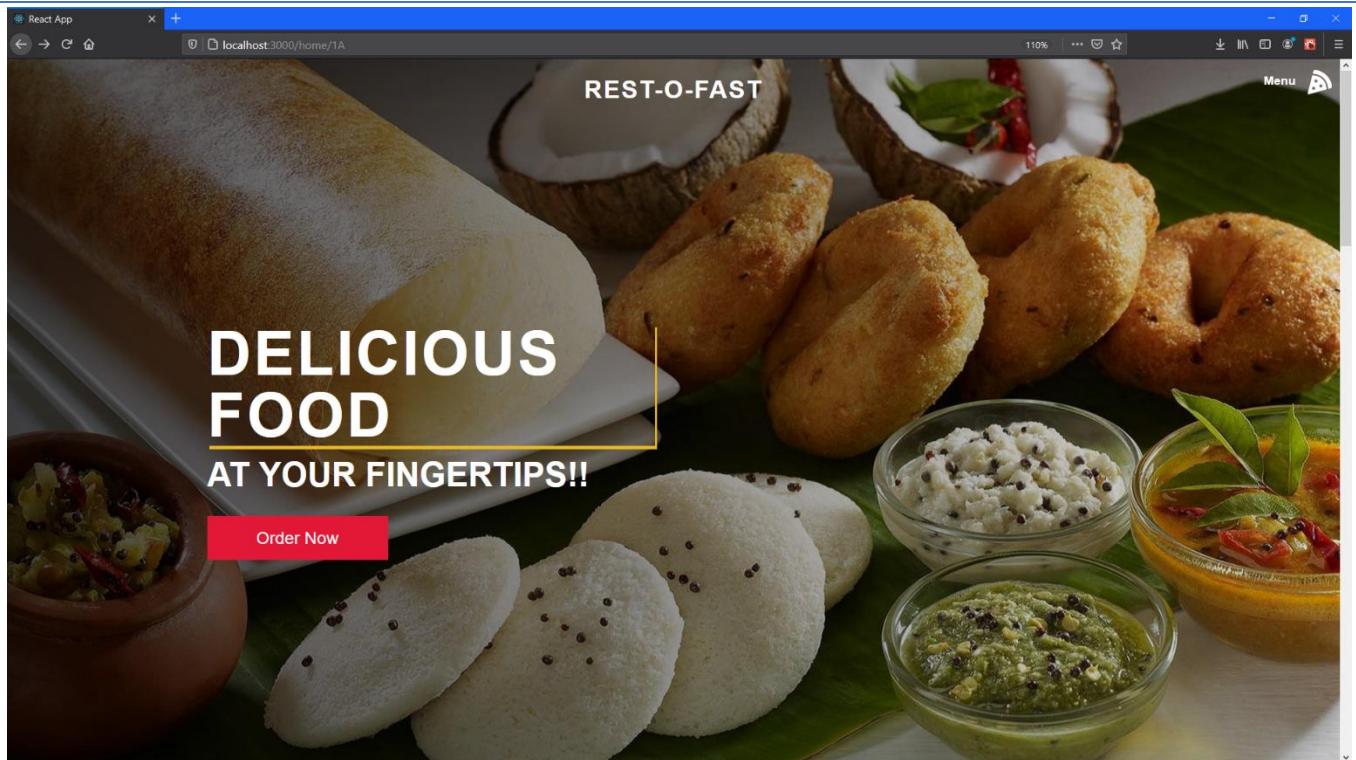


Component Diagram

Deployment Diagram



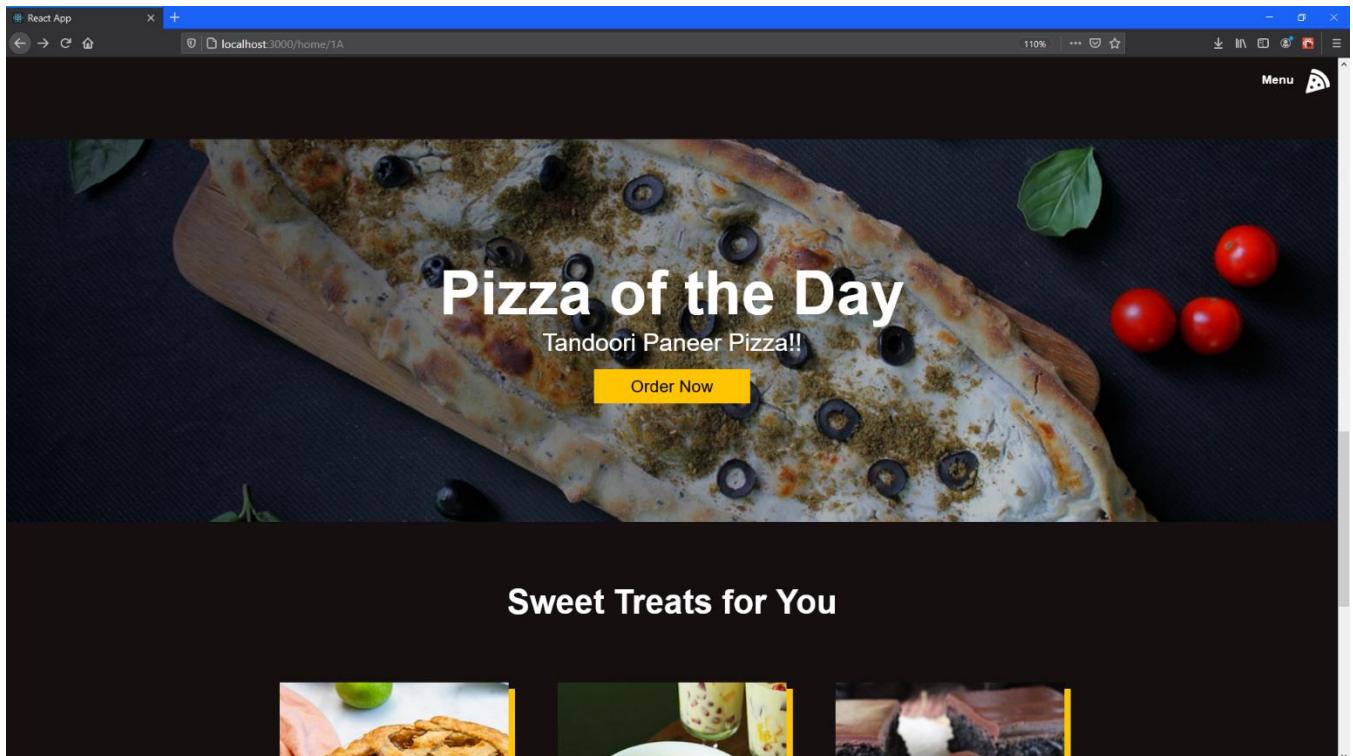
3.3 Input Output Screens



Home Page (Landing Page Notice the table number in URL field i.e., 1A.)

A screenshot of a web browser displaying a product feature section of the website. The background is black, and the text is white. The heading "Choose your favorite" is centered at the top. Below it are three grid items, each featuring a food image, the item name, a description, and the price. Each grid item also has an "Add to Cart" button at the bottom.

Home page product feature 1

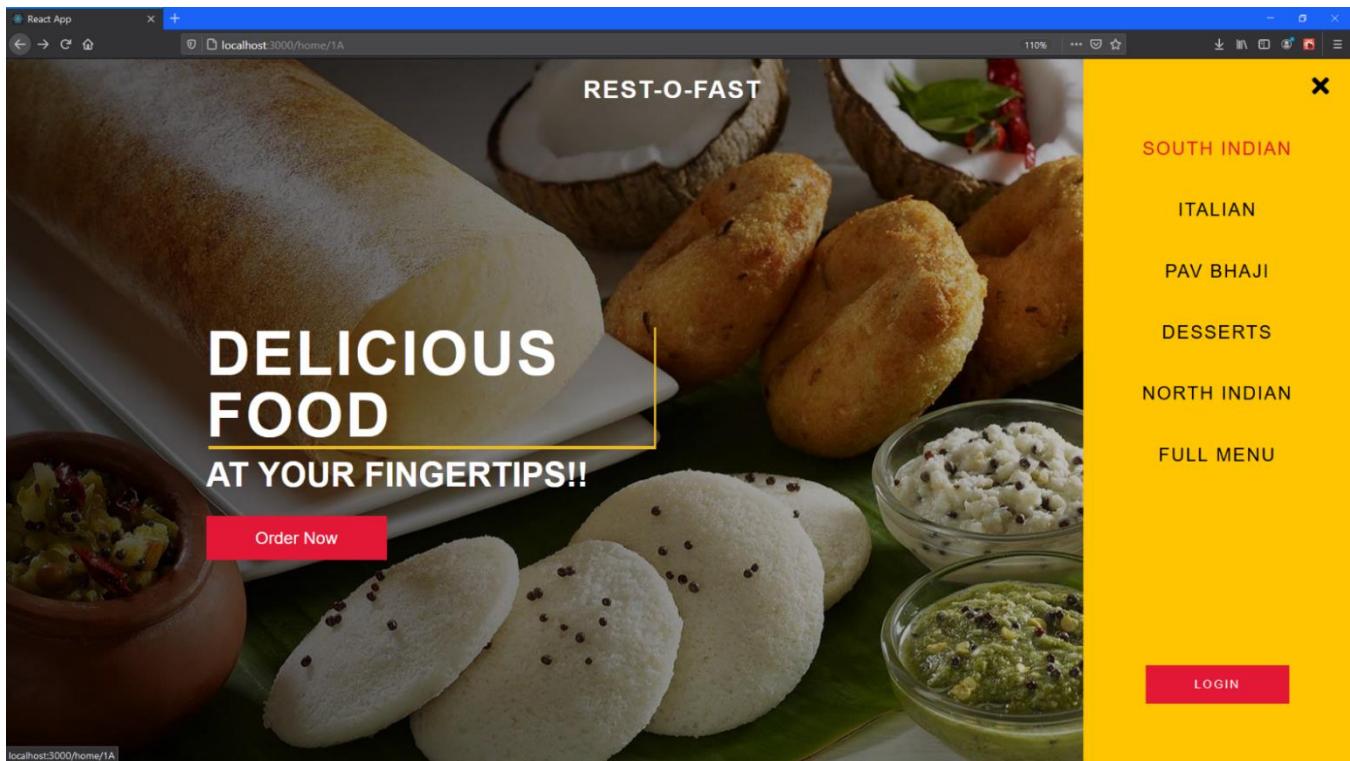


Home page product feature 2

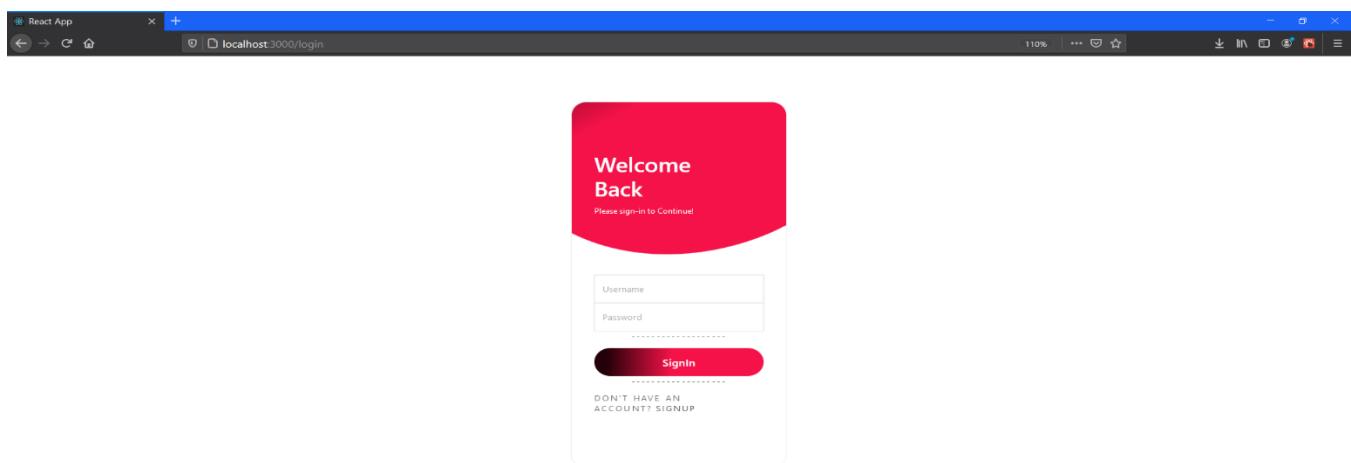
The screenshot shows a grid of dessert items under the heading 'Sweet Treats for You'. Each item has an image, a name, a brief description, and a price. There are also 'Add to Cart' buttons for each item.

Item	Description	Price
Apple Pie	Cake outside Apple taste in the inside!	₹ 125
Fruit Salad	Custard based white creamed fresh fruit mix	₹ 110
Chocolate Brownie	Chocolate dressing on the top of fresh & hot cake	₹ 140

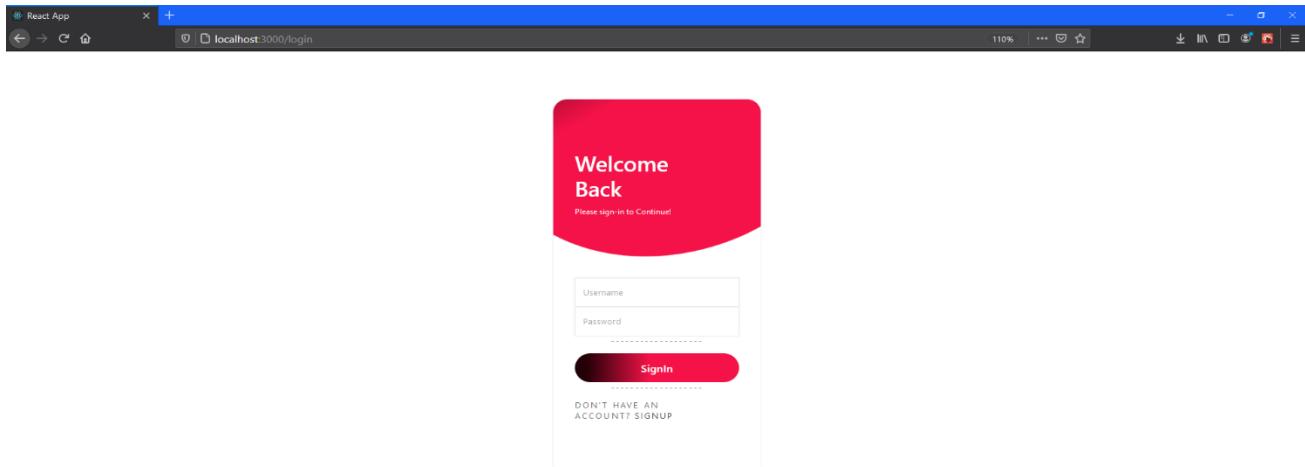
Home page product feature 3 + footer



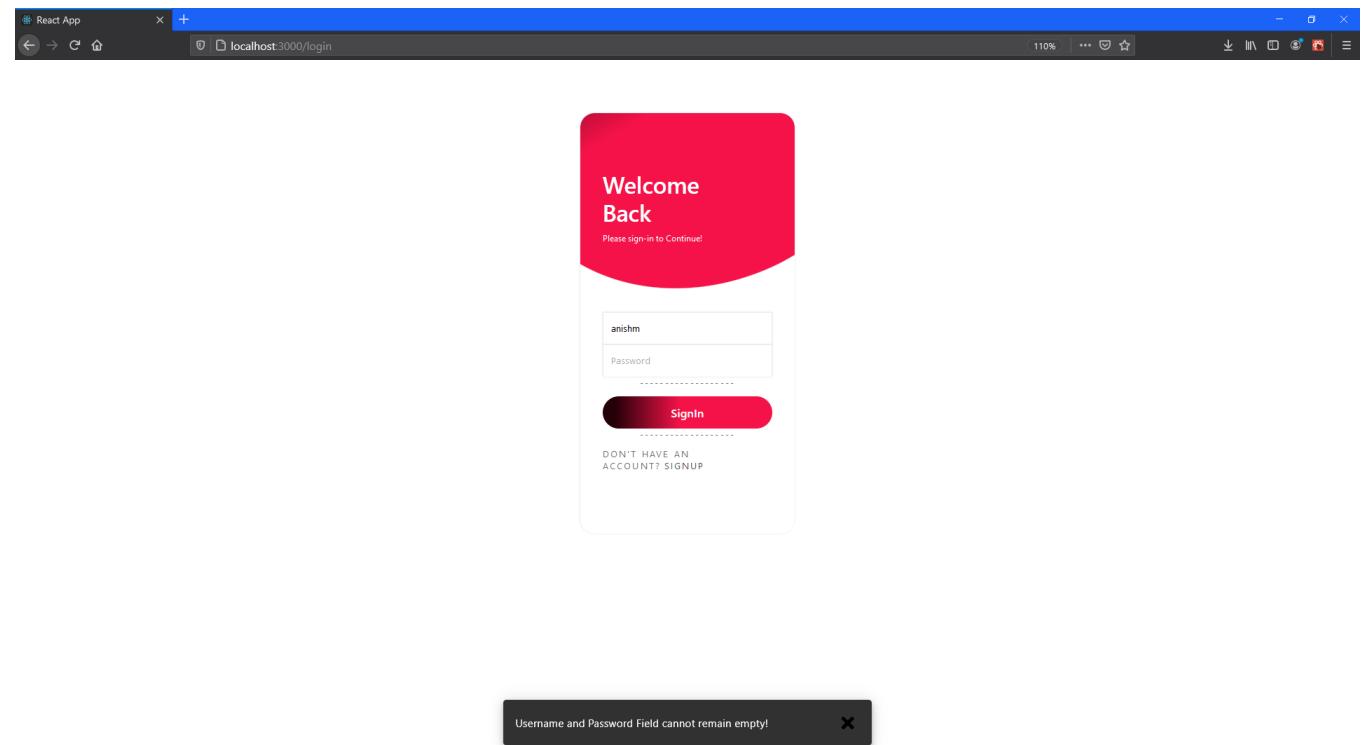
Menu Field (All categories, full menu Notice user has not yet logged in that's why LOGIN button is displayed.)



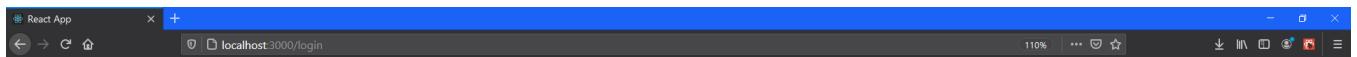
Login Screen



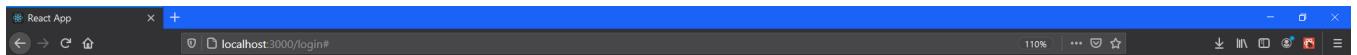
Login Screen #Validation 1



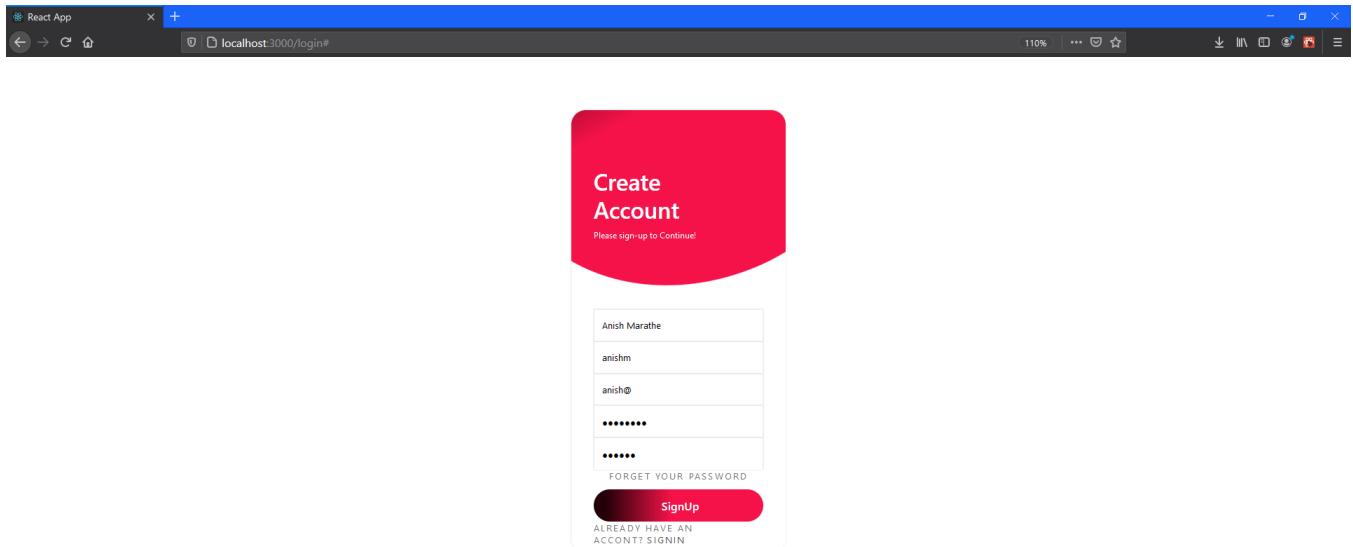
Login Screen #Validation 2



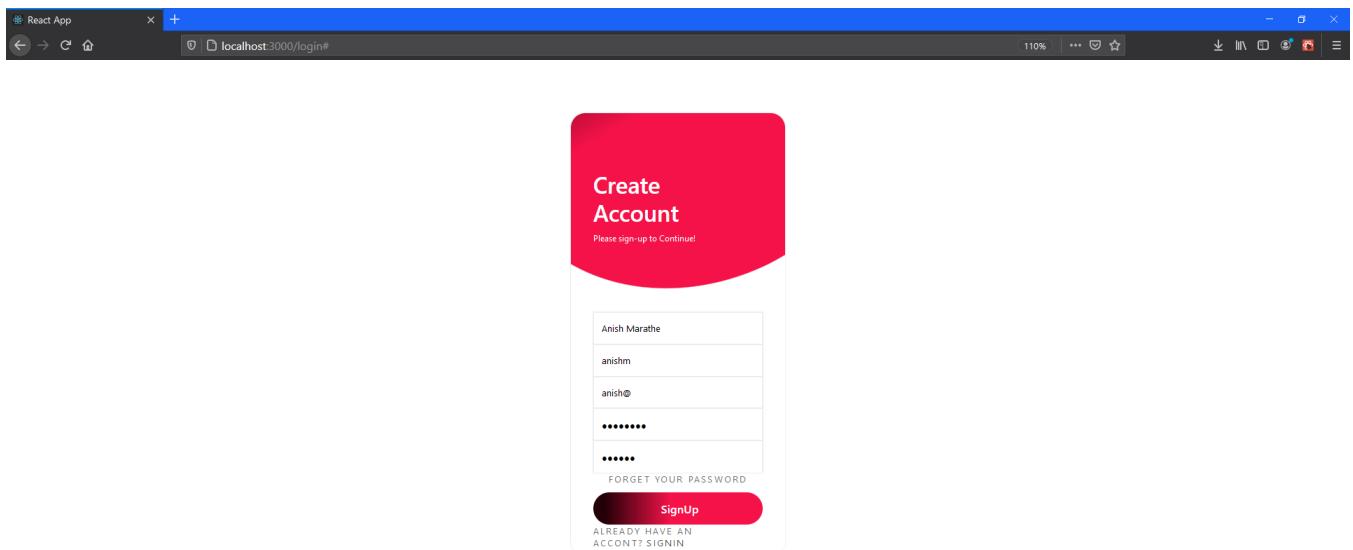
Login Screen #Validation 3



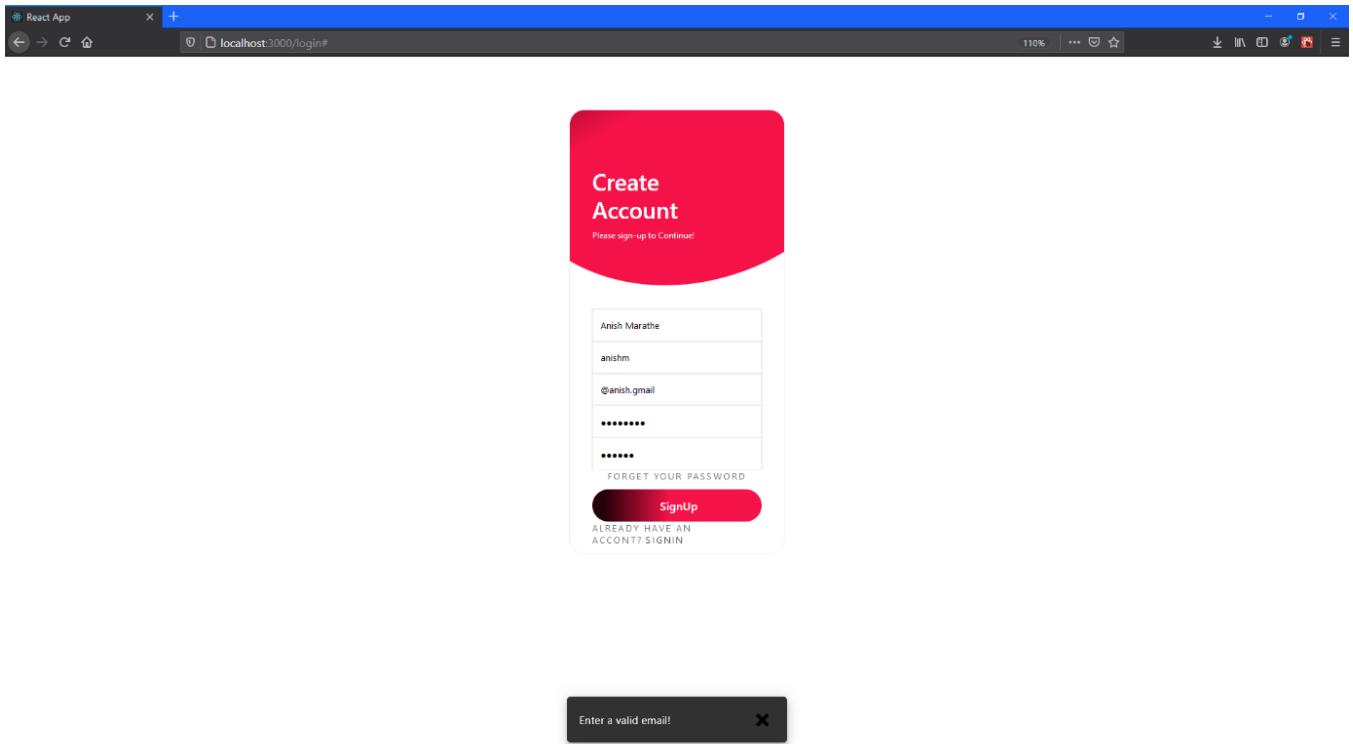
Registration Screen #Validation 1



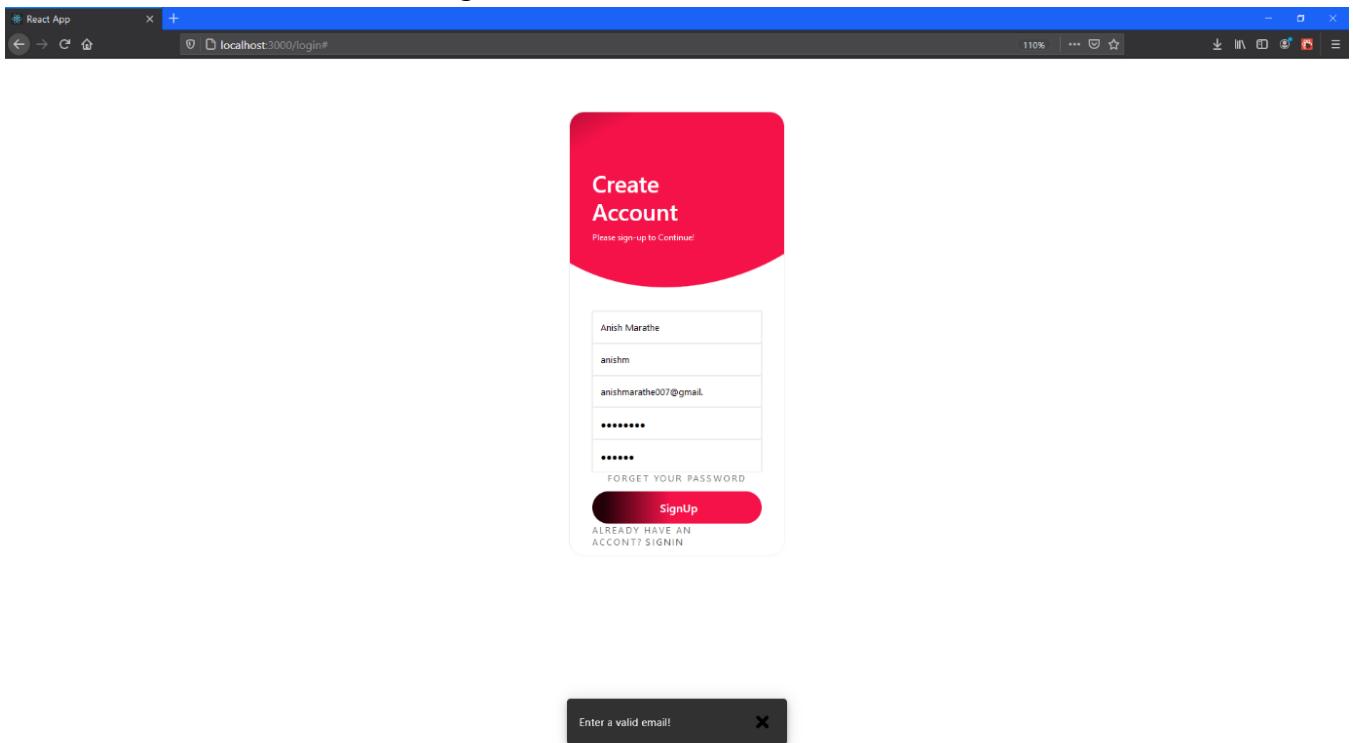
Registration Screen Inputs



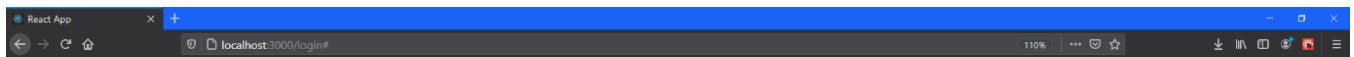
Registration Screen #EMAIL Validation 1



Registration Screen #EMAIL Validation 2

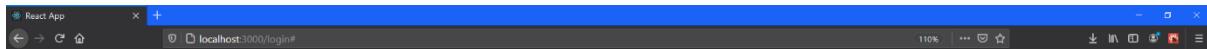


Registration Screen #EMAIL Validation 3



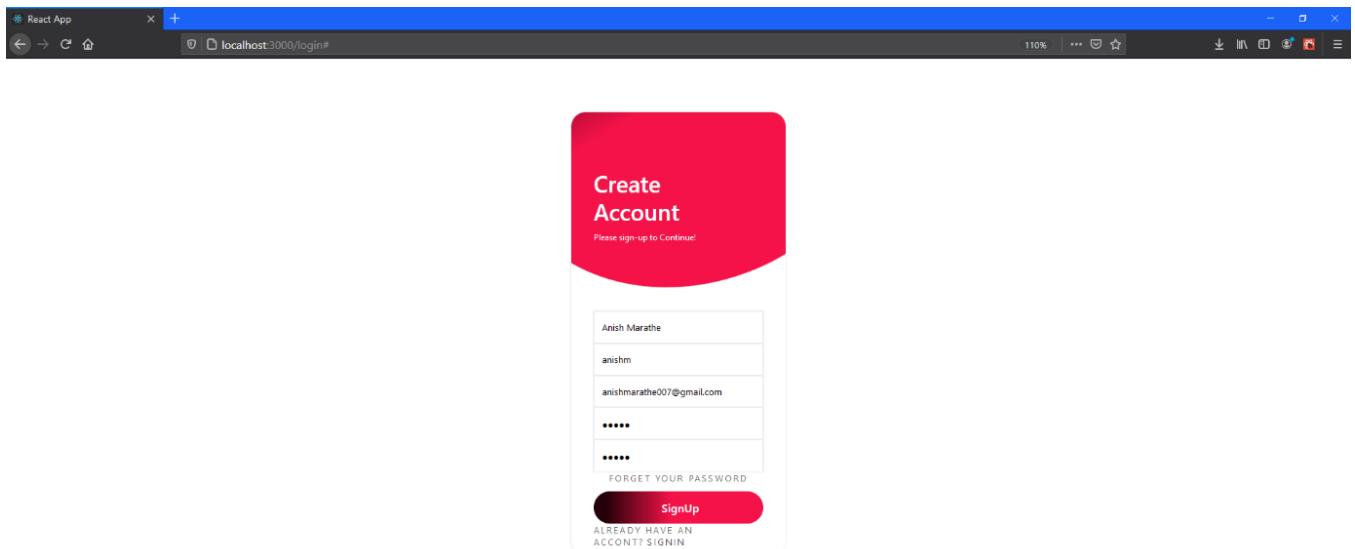
Enter a valid email! ×

Registration Screen #EMAIL Validation 4

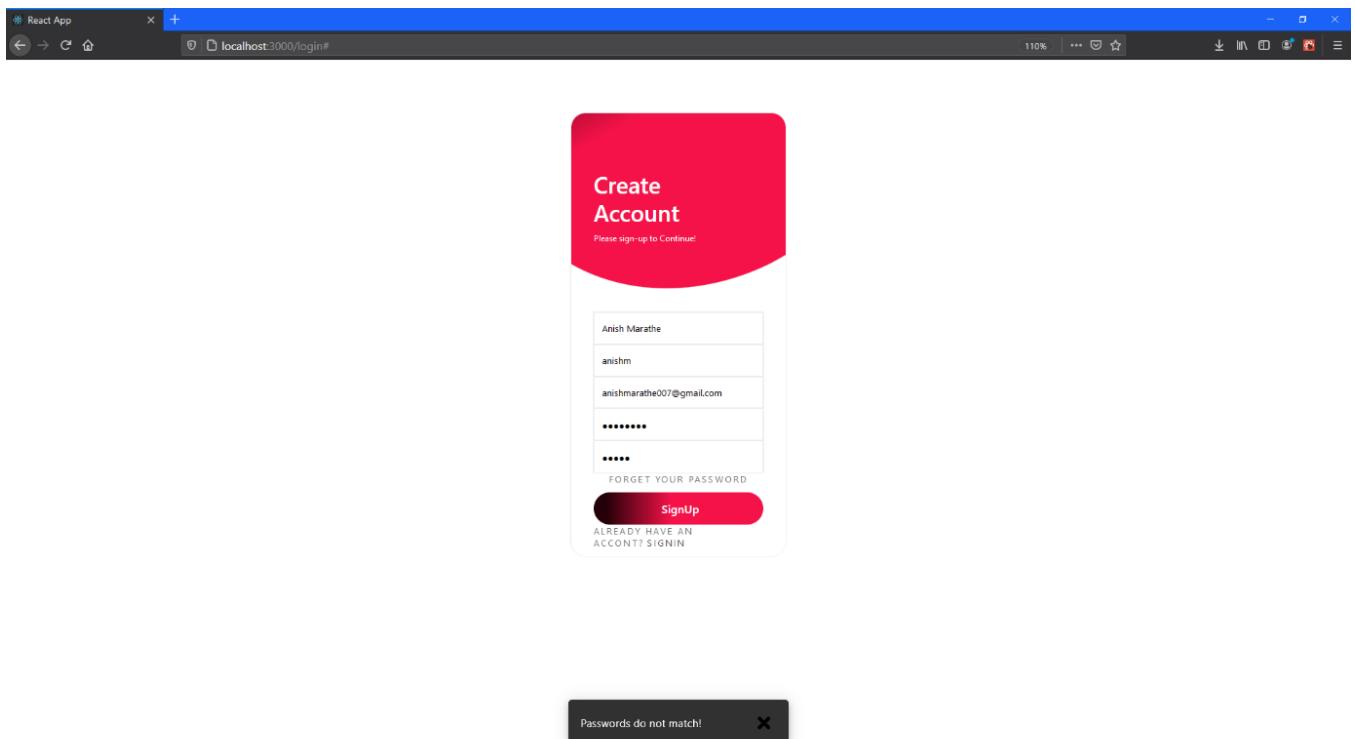


Enter a valid email! ×

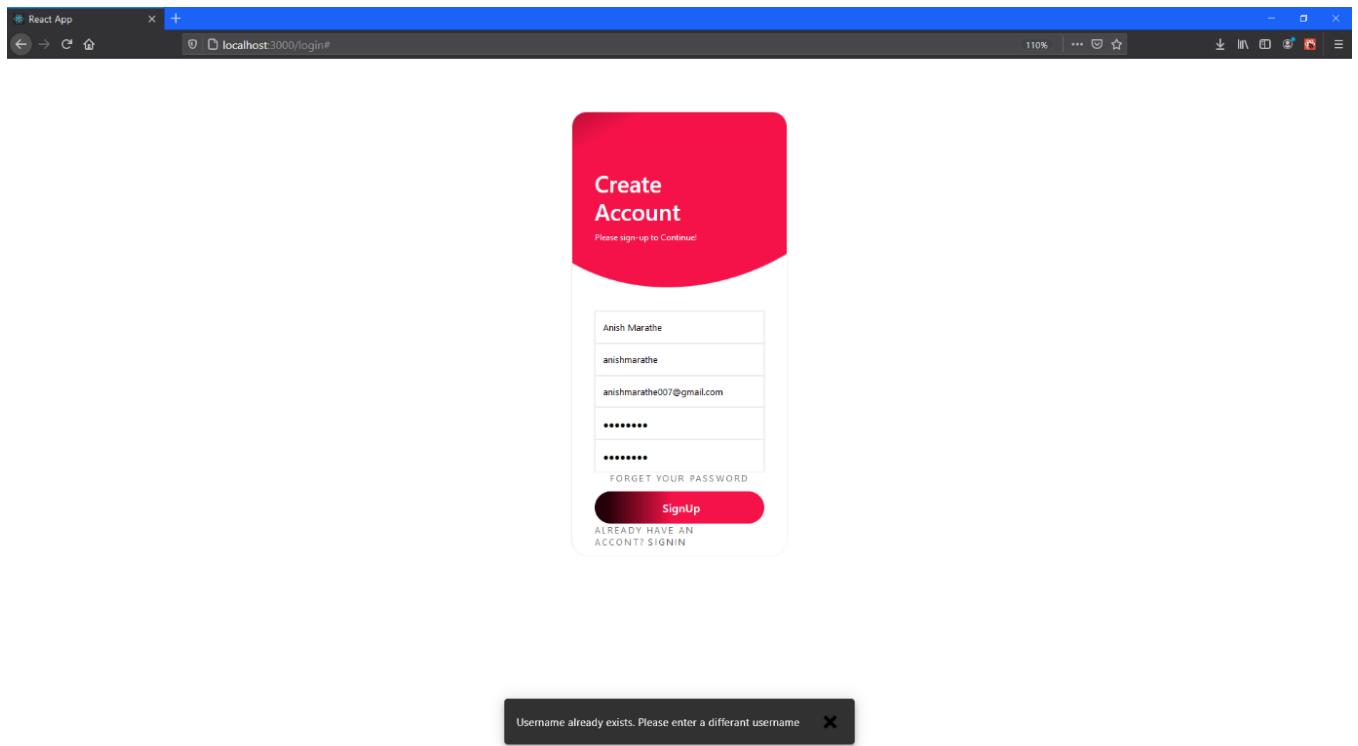
Registration Screen #EMAIL Validation 5



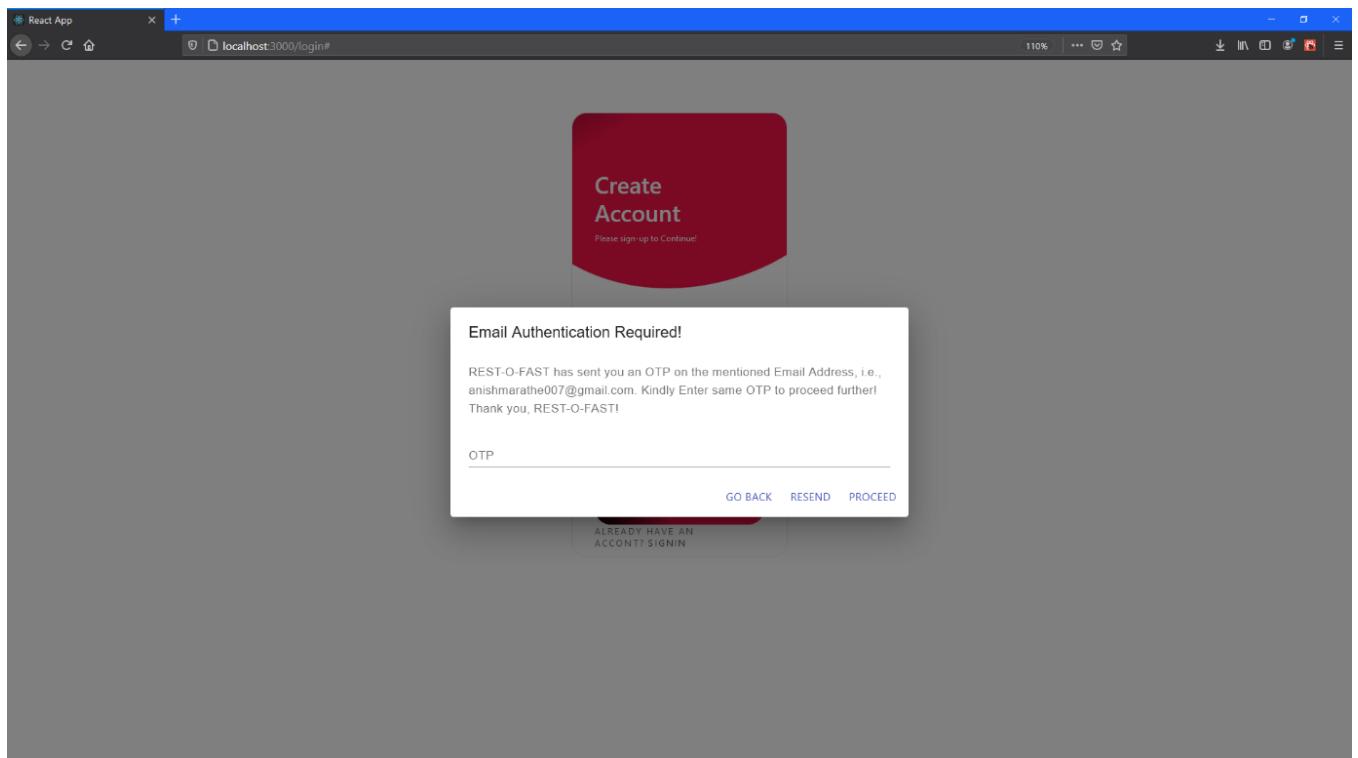
Registration Screen #Validation 2



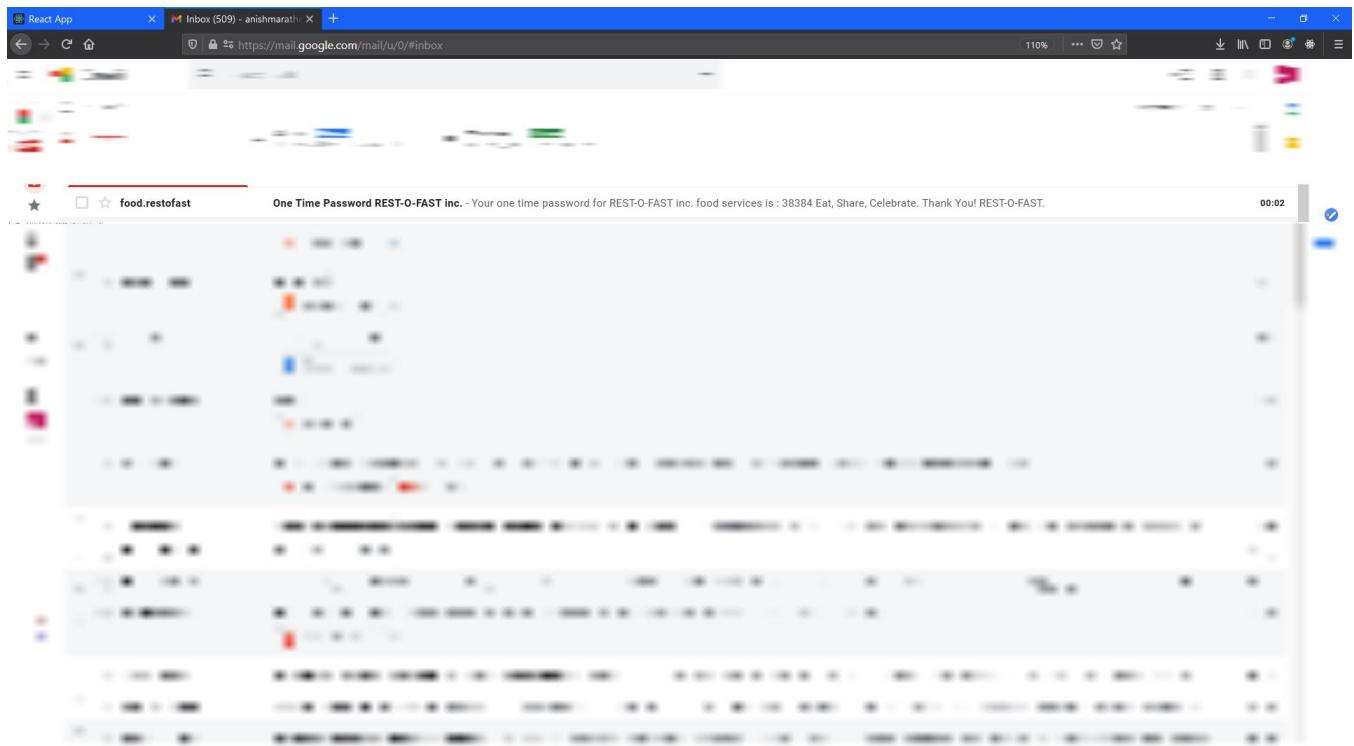
Registration Screen #Validation 3



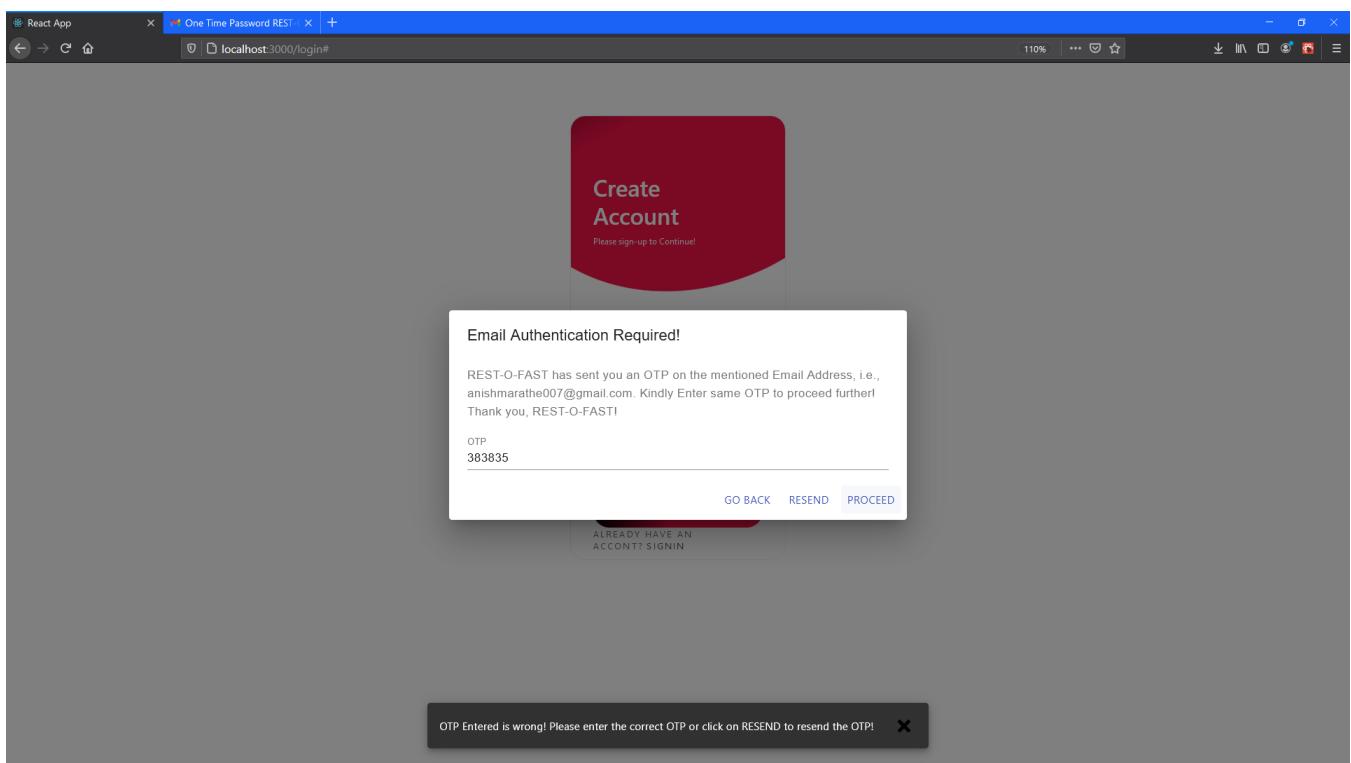
Registration Screen #Validation 4



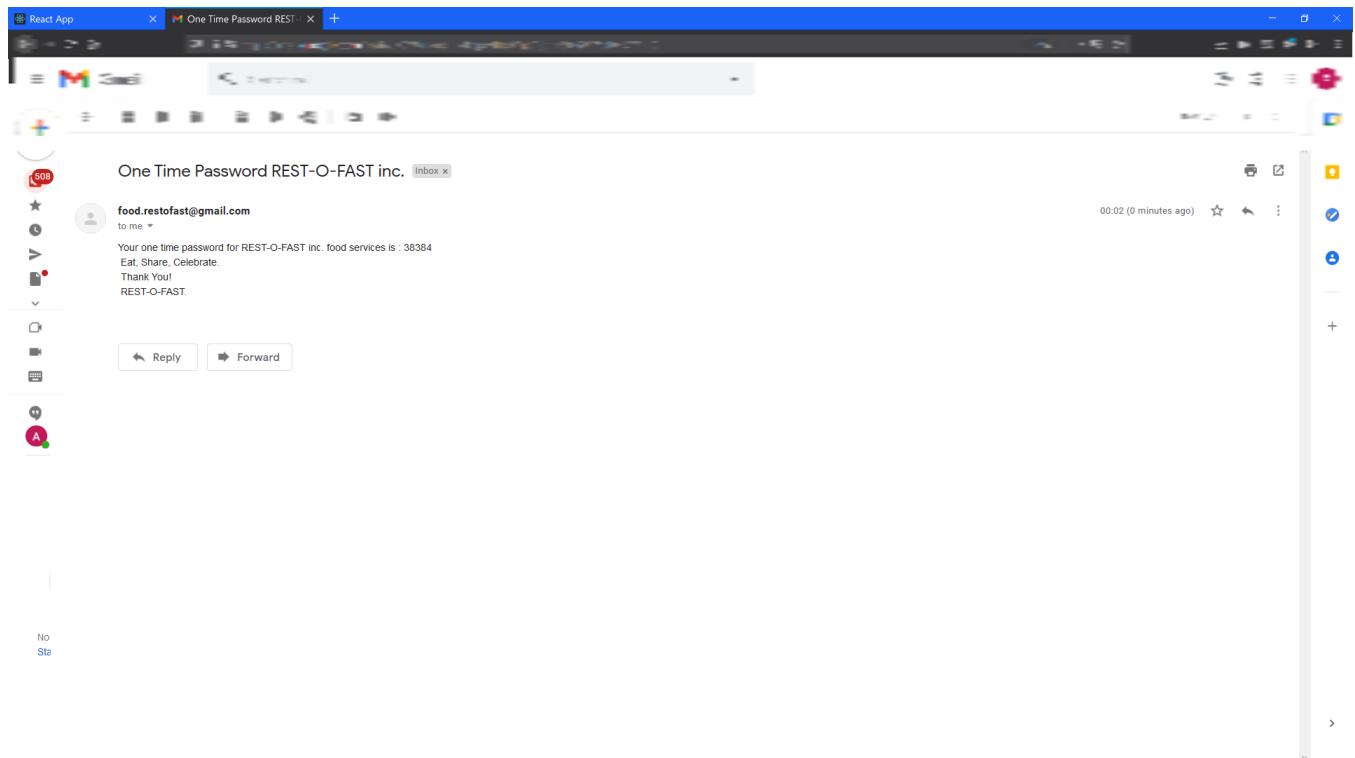
Registration Screen OTP pop up window



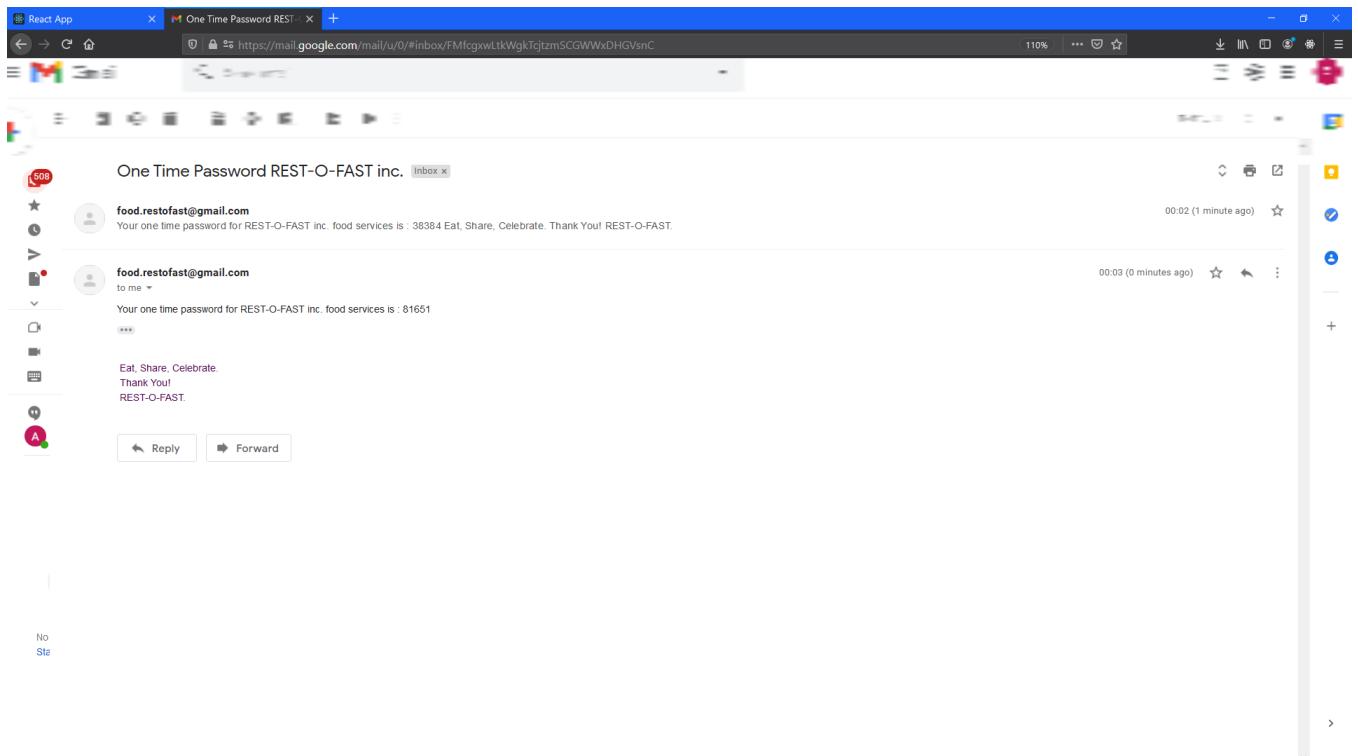
GMAIL window (To display that the mail has arrived)



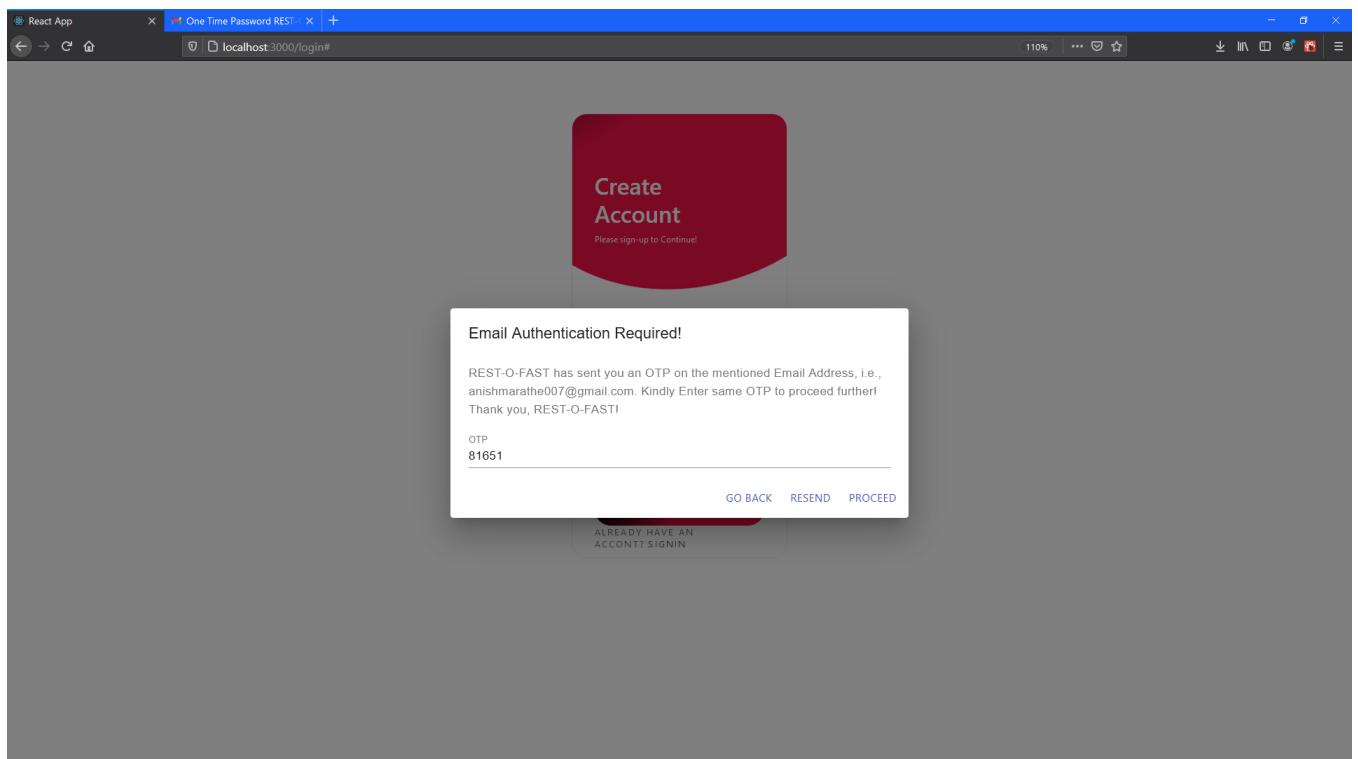
Registration Screen #OTP Validation



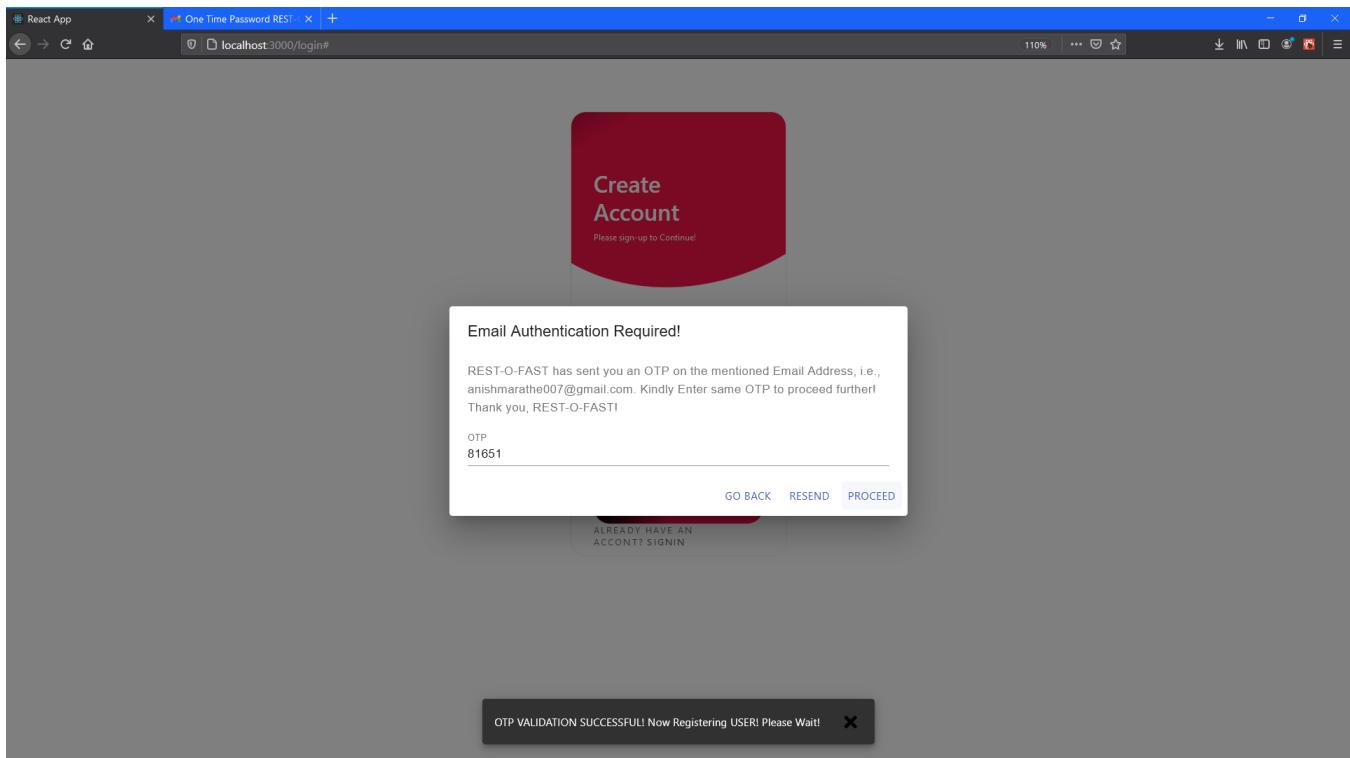
GMAIL WINDOW (Actual Email Viewing)



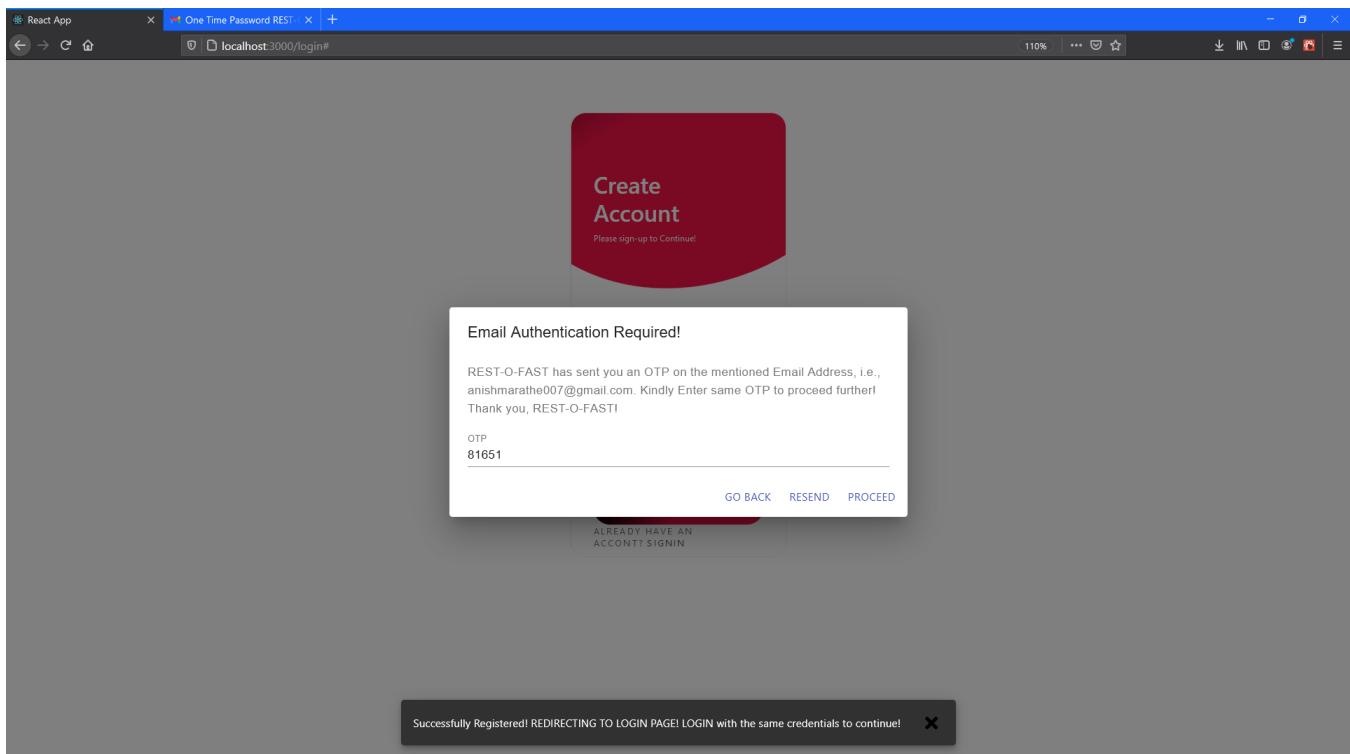
GMAIL window (To display that the second mail has arrived)



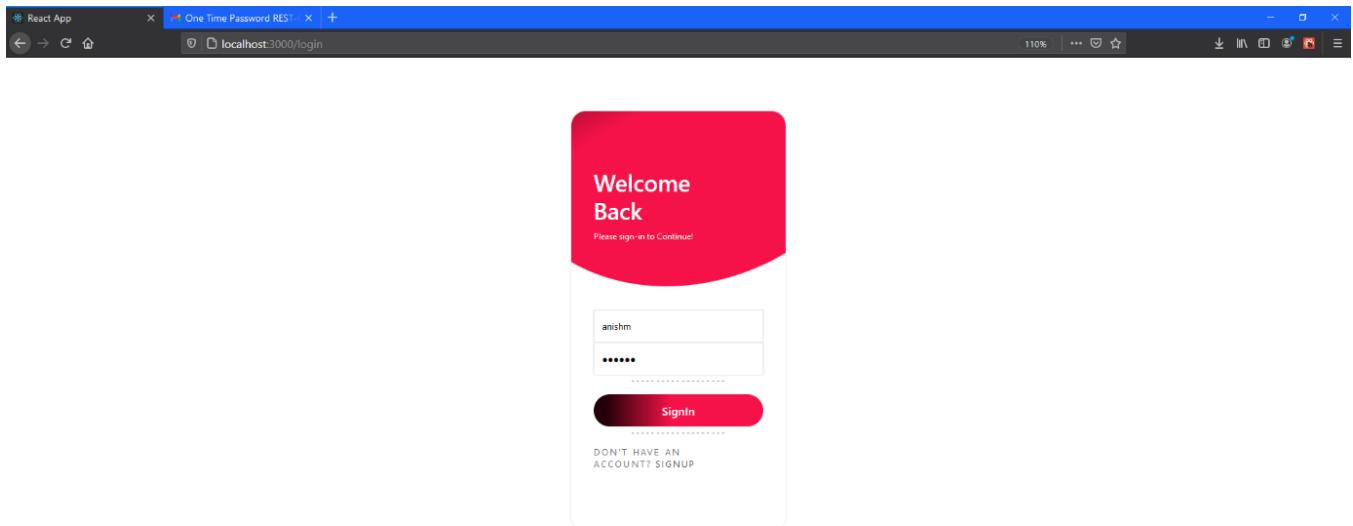
Registration Screen Correct OTP input



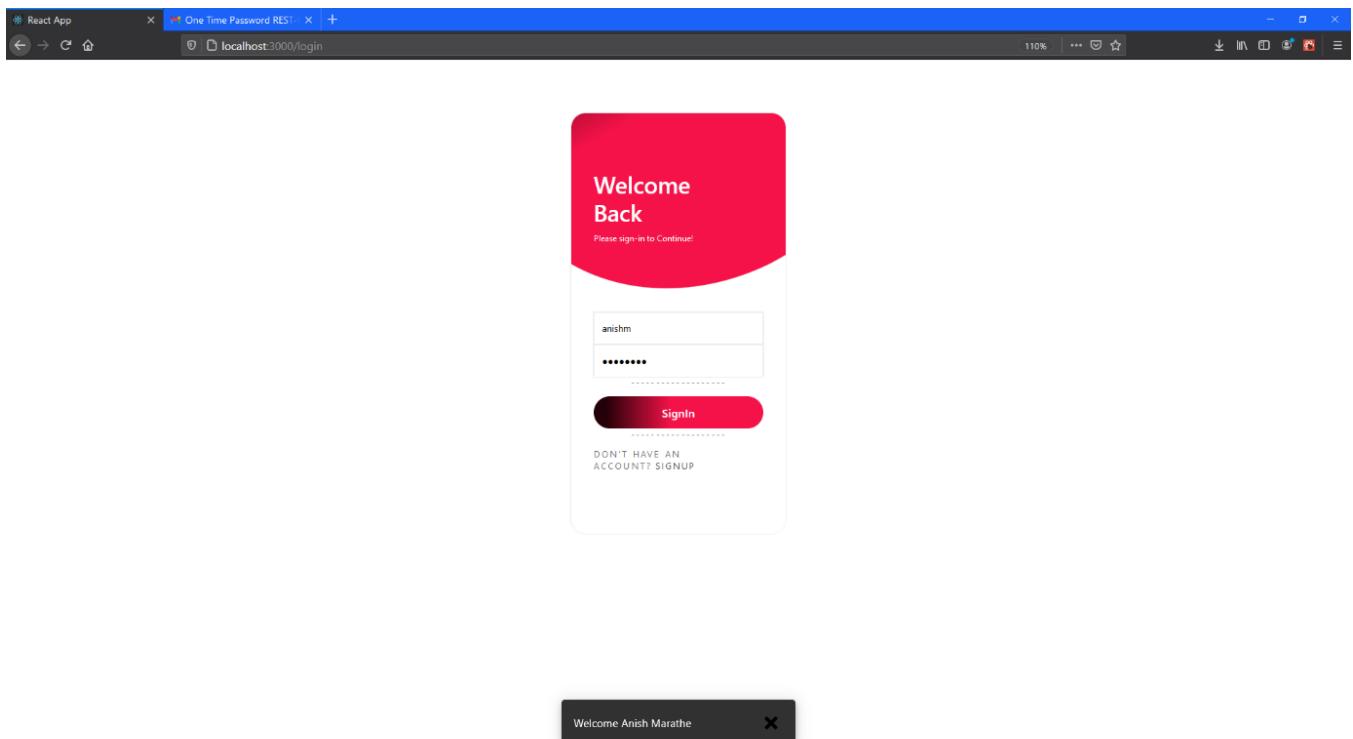
Registration Screen OTP validation message



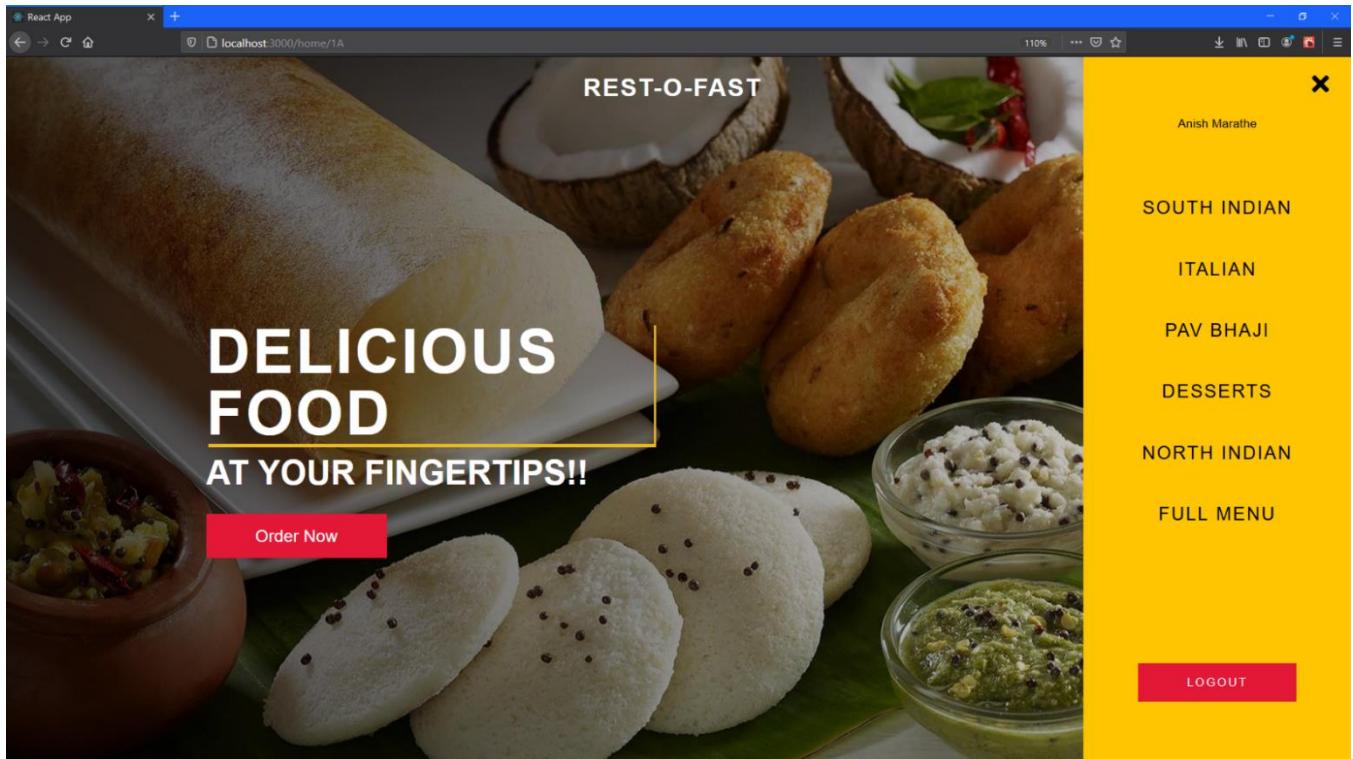
Registration Screen Redirecting message



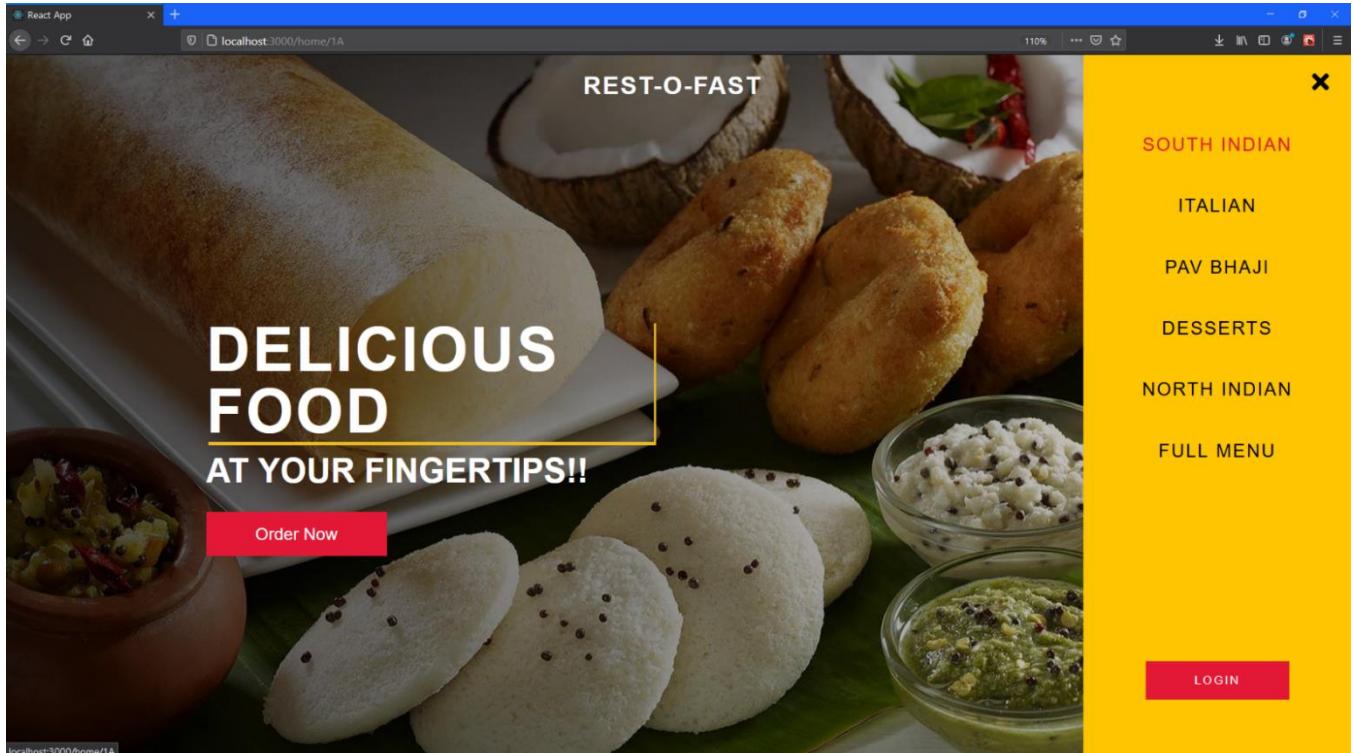
Login Screen #Validation 4



Login Screen success window!



Menu Field (All the categories, full menu Notice that user is now logged in that's why LOGOUT button is displayed along)



Home Page (Currently Logged out. Another way in which user can log in to the system.)

REST-O-FAST

BACK TO HOME CATEGORIES

SEARCH CATEGORY

SOUTH INDIAN
Straight from South!

ITALIAN
Well blended pastas and pizzas

PAV BHAJI
Chef's special

DISCOVER MORE

DISCOVER MORE

DISCOVER MORE

Category View

SOUTH INDIAN
Straight from South!

ITALIAN
Well blended pastas and pizzas

PAV BHAJI
Chef's special

DISCOVER MORE

DISCOVER MORE

DISCOVER MORE

DESSERTS
Something groovy doovy

NORTH INDIAN
Authentic dhaba taste

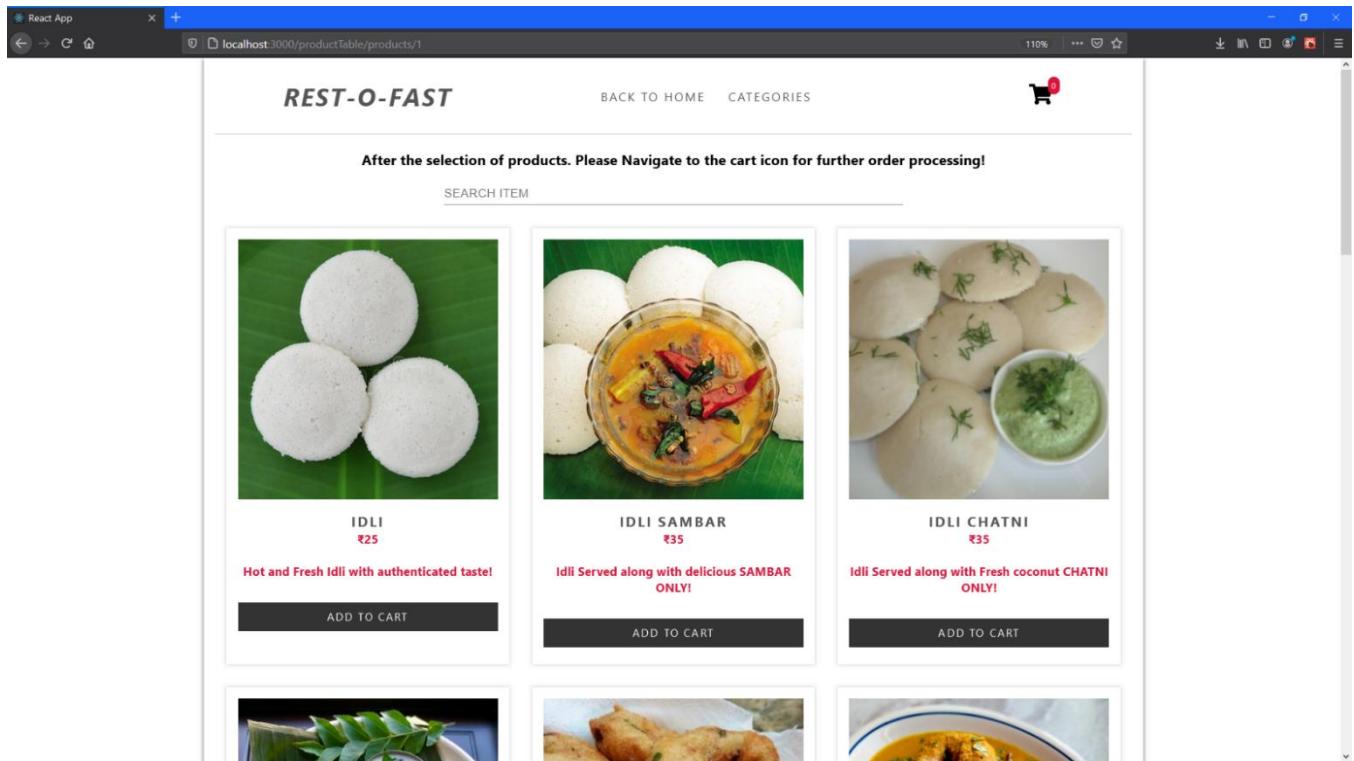
STARTERS
Where North India Meets Chinese

DISCOVER MORE

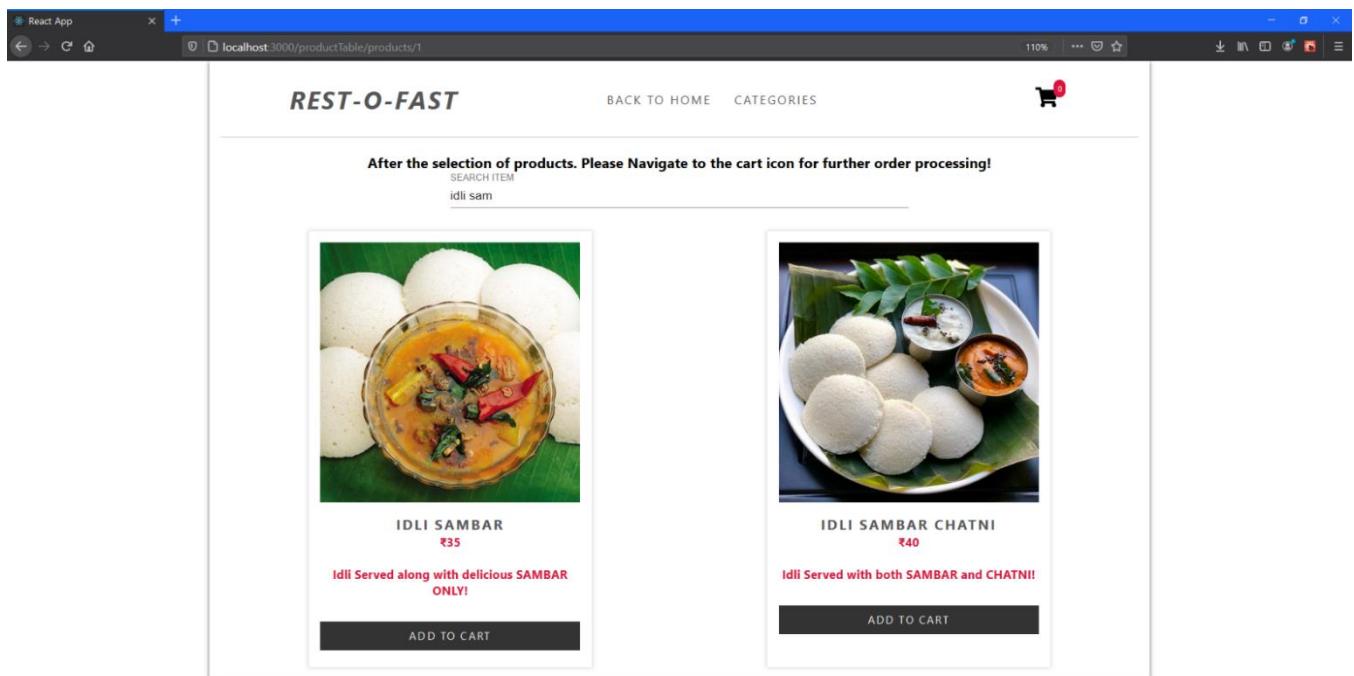
DISCOVER MORE

DISCOVER MORE

Category View



Item View (Selected Category 'SOUTH INDIAN')



SEARCH BAR functionality (item view)

REST-O-FAST

BACK TO HOME CATEGORIES

After the selection of products. Please Navigate to the cart icon for further order processing!

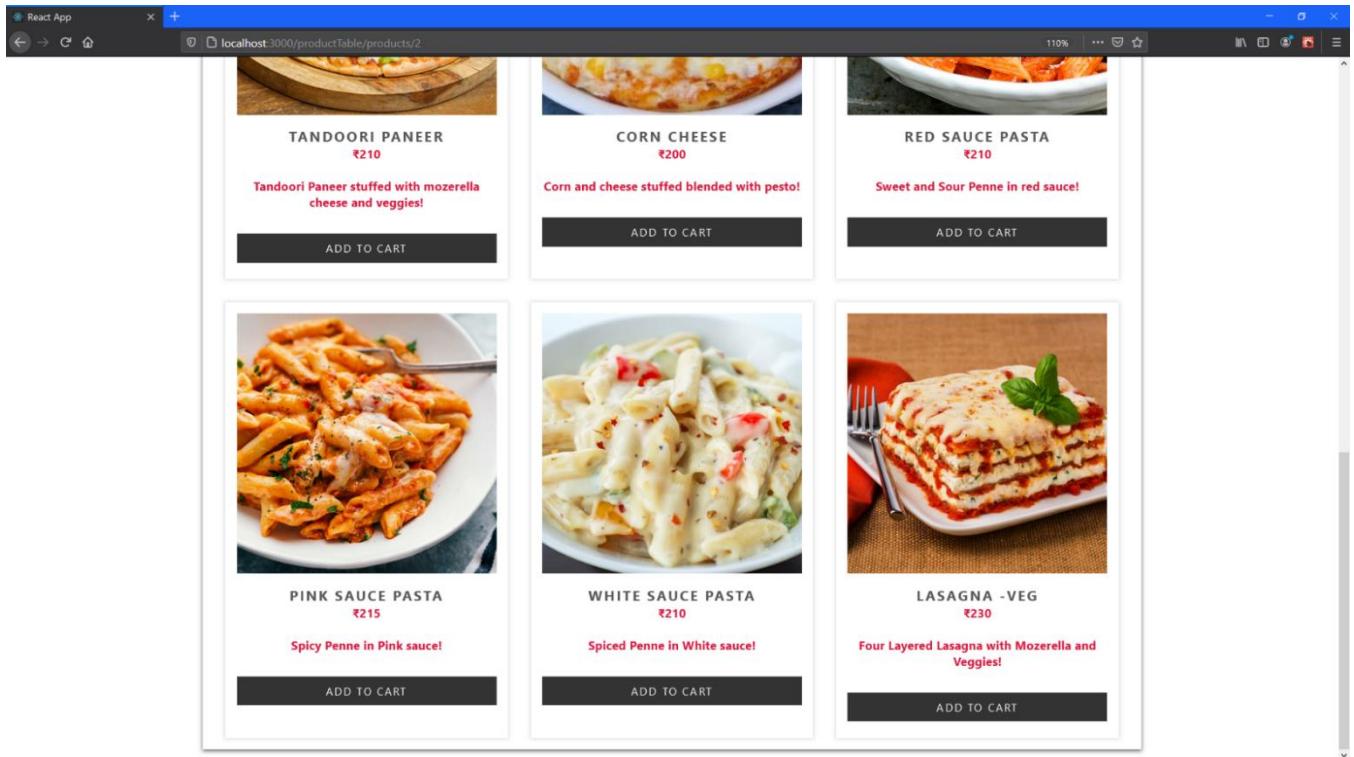
SEARCH ITEM

VEG PIZZA ₹150 Pan Tossed pizza topped with veggies! ADD TO CART	FARMHOUSE ₹180 Veggie pizza with mexican spicy style! ADD TO CART	MARGHERITA ₹190 Double layer cheese with mariana sauce inside! ADD TO CART
TANDOORI PANEER ₹210 Tandoori Paneer stuffed with mozerella cheese and veggies! ADD TO CART	CORN CHEESE ₹200 Corn and cheese stuffed blended with pesto! ADD TO CART	RED SAUCE PASTA ₹210 Sweet and Sour Penne in red sauce! ADD TO CART

Item View (Selected Category 'ITALIAN')

Pan Tossed pizza topped with veggies! ADD TO CART	Veggie pizza with mexican spicy style! ADD TO CART	Double layer cheese with mariana sauce inside! ADD TO CART
TANDOORI PANEER ₹210 Tandoori Paneer stuffed with mozerella cheese and veggies! ADD TO CART	CORN CHEESE ₹200 Corn and cheese stuffed blended with pesto! ADD TO CART	RED SAUCE PASTA ₹210 Sweet and Sour Penne in red sauce! ADD TO CART
TANDOORI PANEER ₹210 Tandoori Paneer stuffed with mozerella cheese and veggies! ADD TO CART	CORN CHEESE ₹200 Corn and cheese stuffed blended with pesto! ADD TO CART	RED SAUCE PASTA ₹210 Sweet and Sour Penne in red sauce! ADD TO CART

Item View (Selected Category 'ITALIAN')



Item View (Selected Category 'ITALIAN')

	PLAIN PAV BHAJI ₹70 Amul Butter Pav Bhaji with perfect blend!		CHEESE PAVBHAJI ₹80 Authentic Amul Butter Pavbhaji with Extra Cheese on the top		Paneer Pavbhaji ₹85 Amul Butter Pav Bhaji with Shredded Paneer
---	--	---	--	---	---

localhost:3000/productTable/details/46

Item View (Selected Category 'PAV BHAJI')

REST-O-FAST

BACK TO HOME CATEGORIES

SEARCH ITEM

After the selection of products. Please Navigate to the cart icon for further order processing!

APPLE PIE ₹125 <i>Cake outside apple on the inside made with love!</i> ADD TO CART	FRUIT SALAD ₹110 <i>Custard based white creamed fresh fruit mix!</i> ADD TO CART	CHOCOLATE BROWNIE ₹140 <i>Chocolate dressing on the top of fresh & hot cake</i> ADD TO CART
---	---	--

Item View (Selected Category 'DESSERTS')

REST-O-FAST

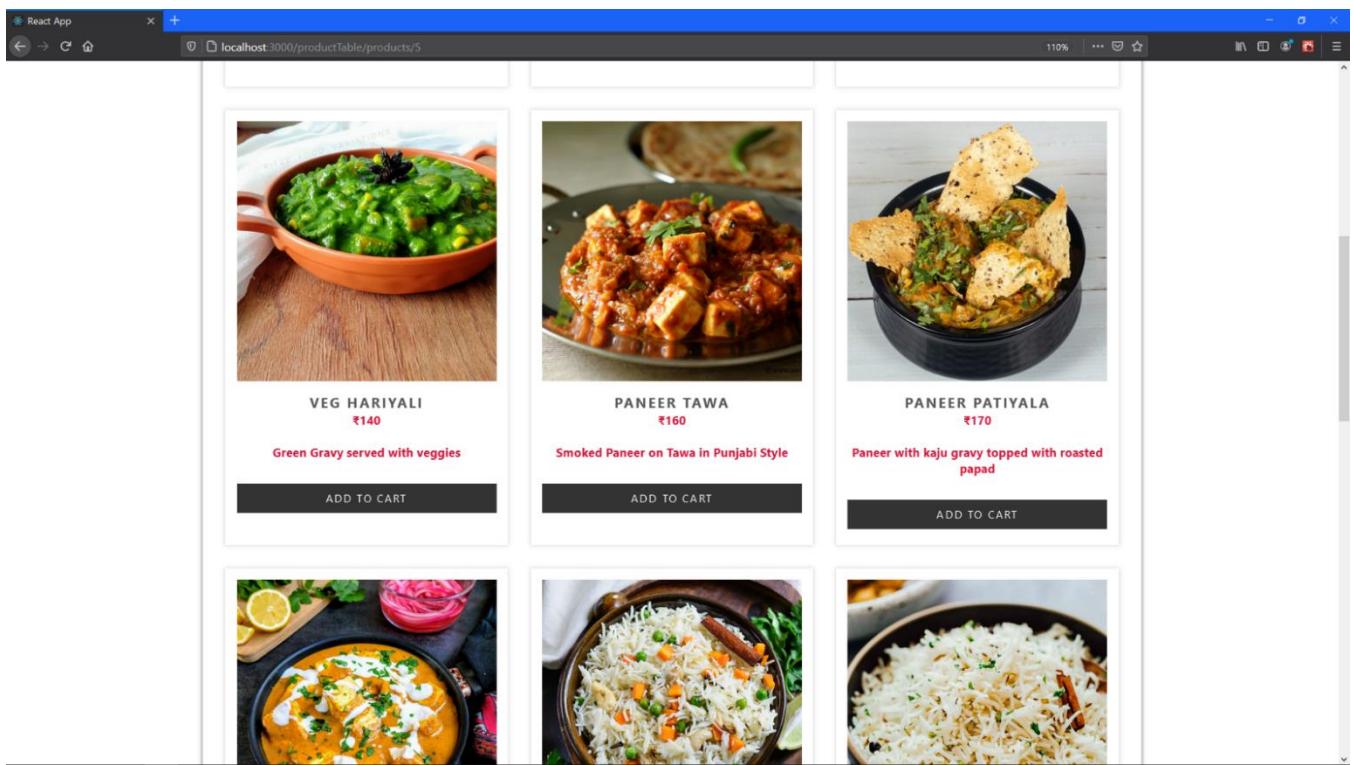
BACK TO HOME CATEGORIES

SEARCH ITEM

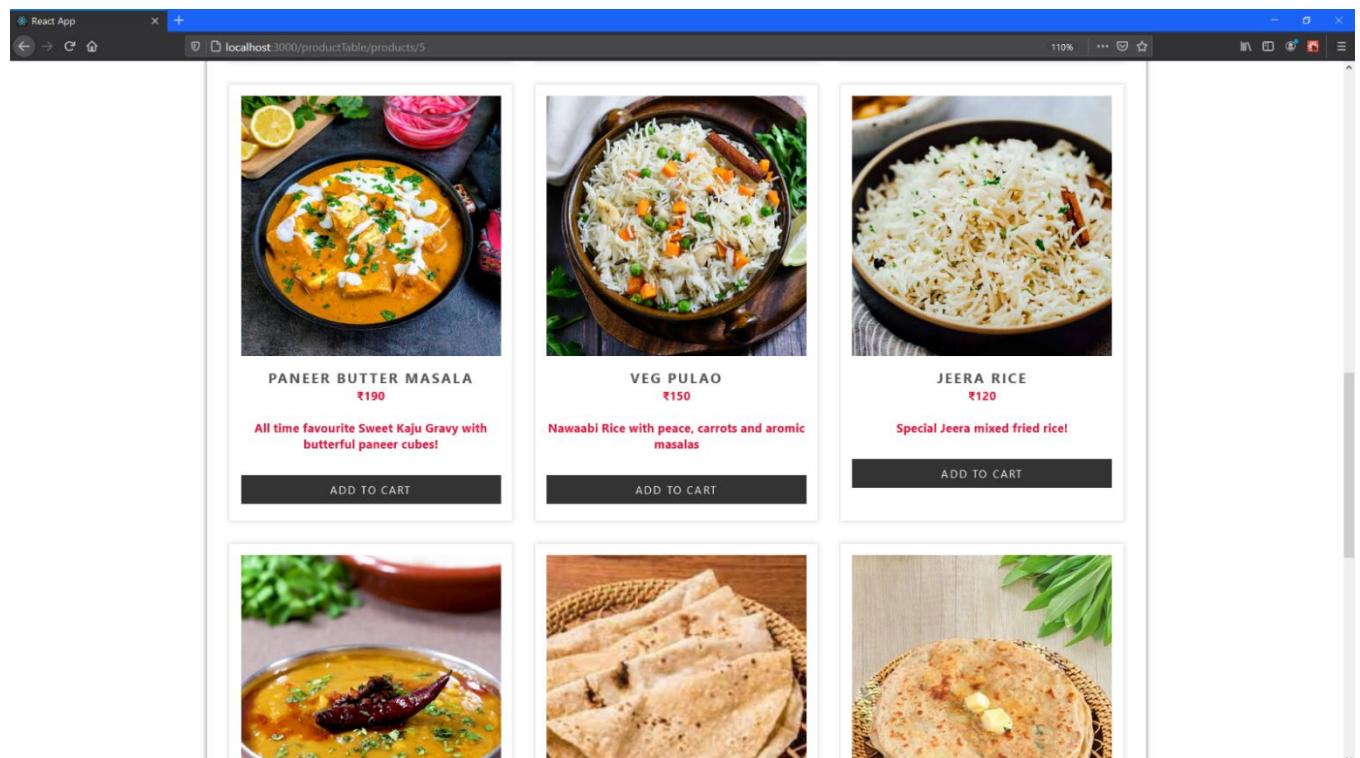
After the selection of products. Please Navigate to the cart icon for further order processing!

APPLE PIE ₹125 <i>Cake outside apple on the inside made with love!</i> ADD TO CART	FRUIT SALAD ₹110 <i>Custard based white creamed fresh fruit mix!</i> ADD TO CART	CHOCOLATE BROWNIE ₹140 <i>Chocolate dressing on the top of fresh & hot cake</i> ADD TO CART
CARAMEL PUDDING ₹135 <i>Custard Apple pudding topped with caramel and vanilla essence</i> ADD TO CART	WALNUT CAKE ₹130 <i>Cake magic stuffed with fresh cream and walnuts!</i> ADD TO CART	BLUEBERRY CHEESE CAKE ₹150 <i>Cheese Cream Cake in blueberry flavor</i> ADD TO CART

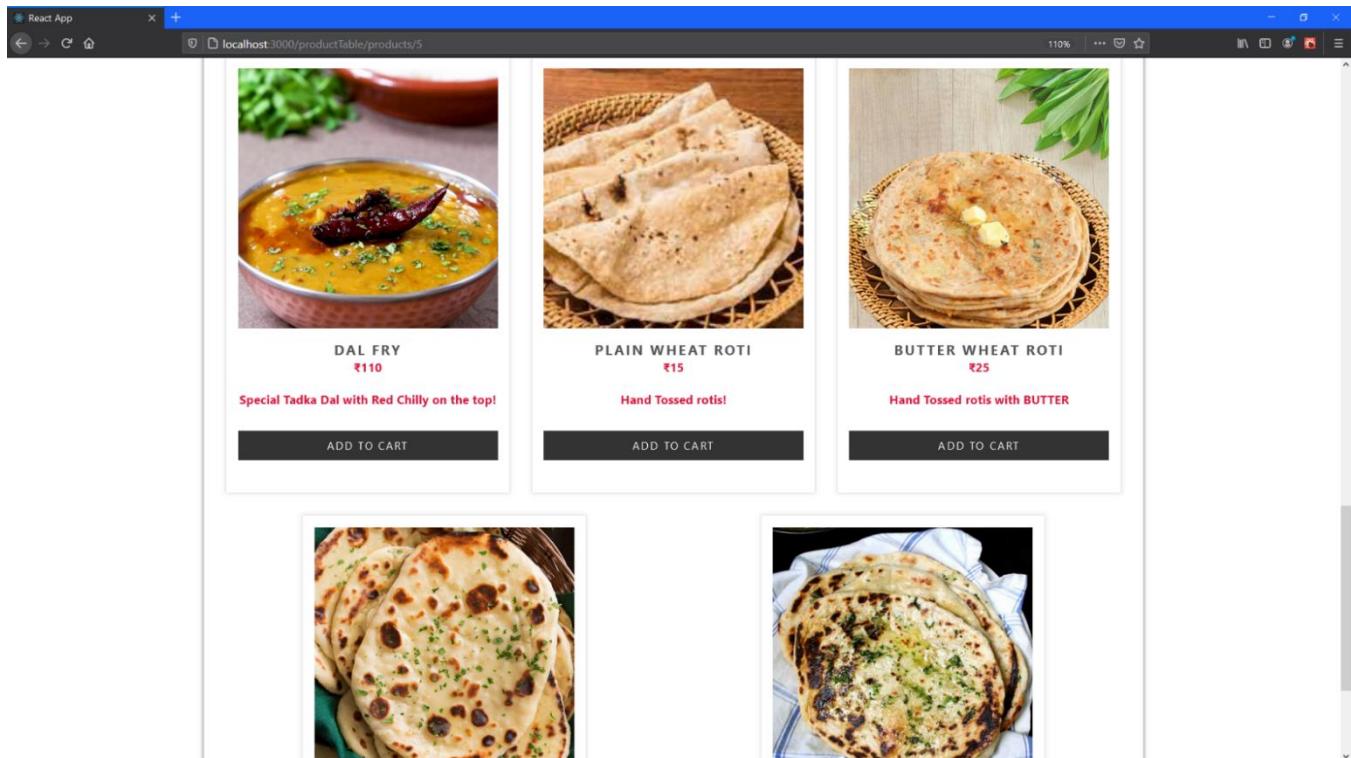
Item View (Selected Category 'DESSERTS')



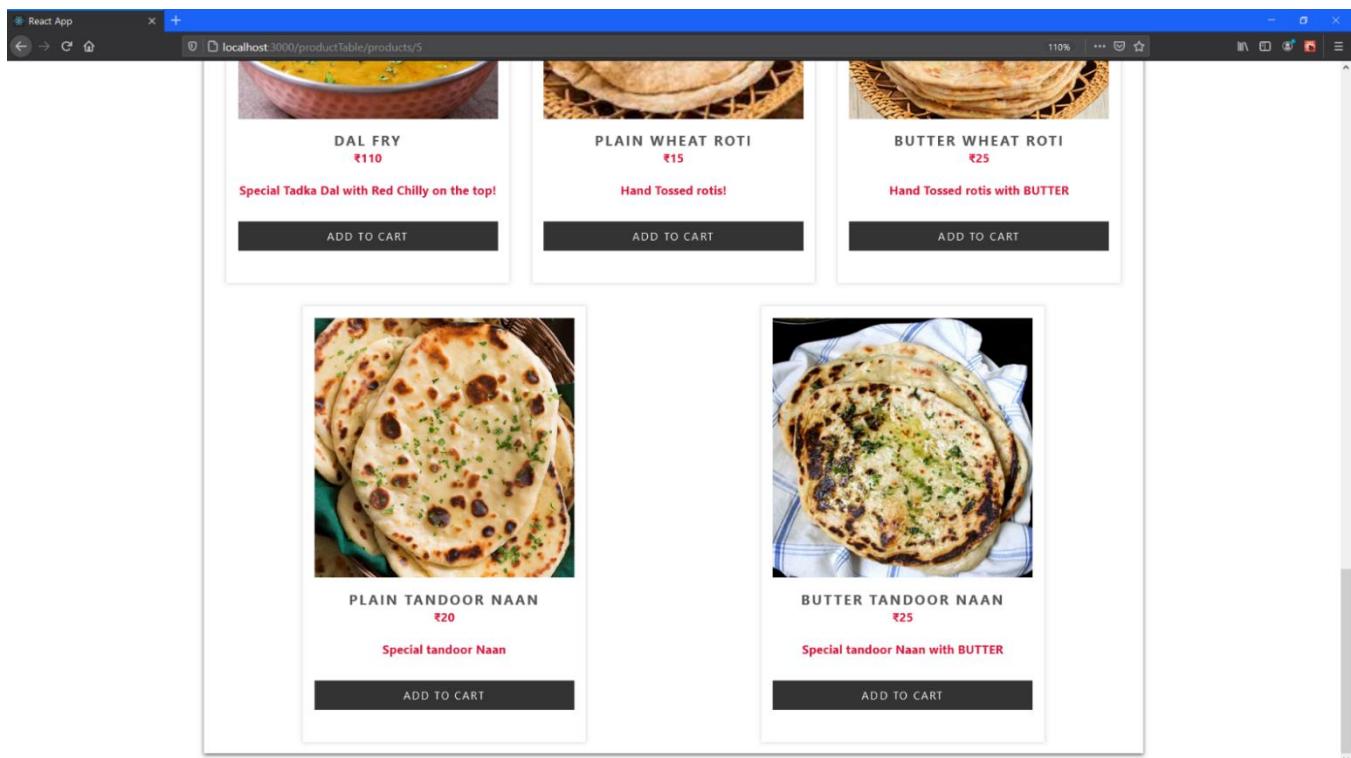
Item View (Selected Category 'NORTH INDIAN')



Item View (Selected Category 'NORTH INDIAN')



Item View (Selected Category 'NORTH INDIAN')



Item View (Selected Category 'NORTH INDIAN')

REST-O-FAST

BACK TO HOME CATEGORIES

After the selection of products. Please Navigate to the cart icon for further order processing!

SEARCH ITEM

CHEESE BALLS ₹80 Liquid cheese wrapped around a cover! ADD TO CART	CHEESE NACHOS ₹85 Corn grain nachos served with cheese! ADD TO CART	PANEER 65 ₹90 Fried Paneer cubes spiced with masalas! ADD TO CART
--	---	---

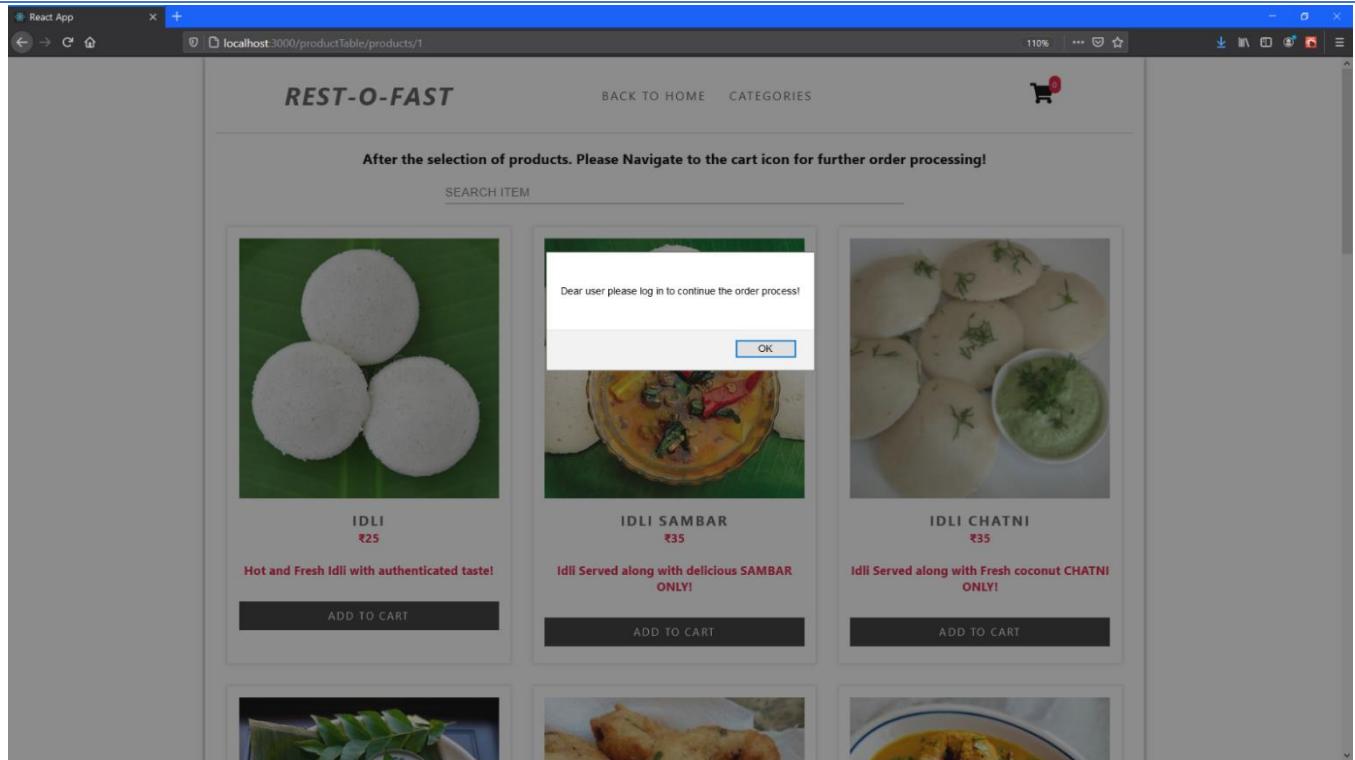
Item View (Selected Category 'STARTERS')

React App

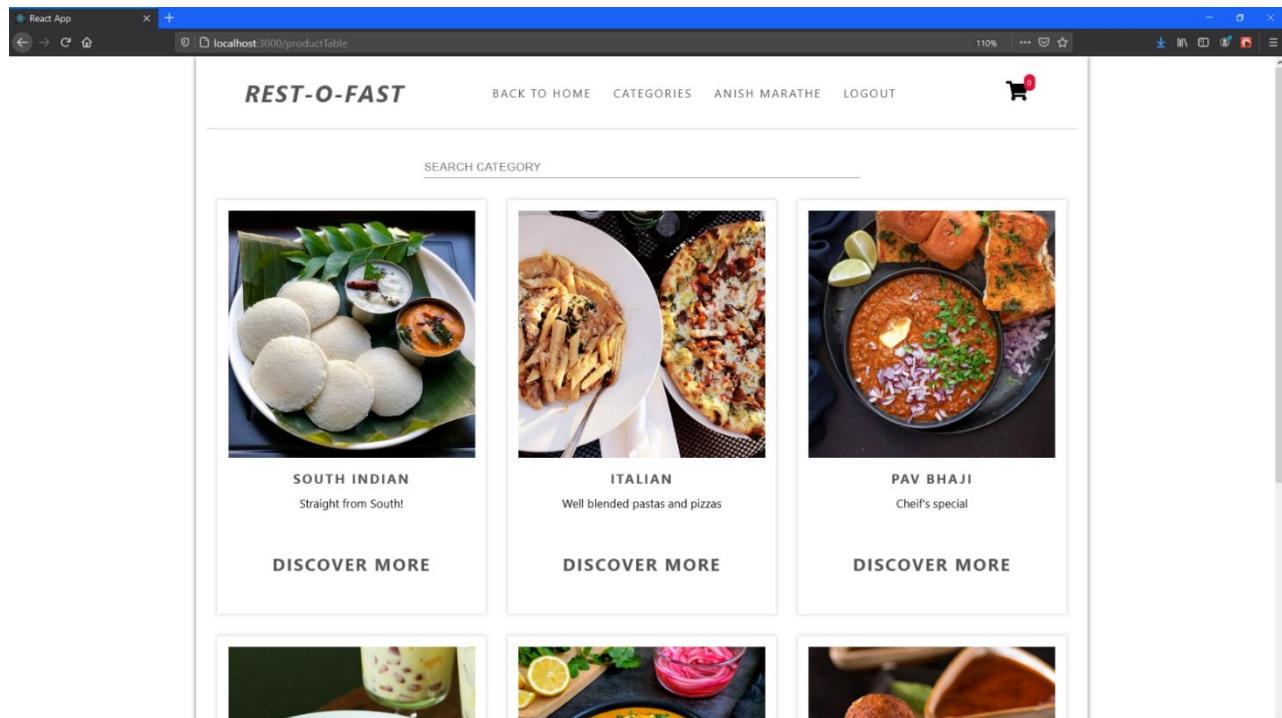
localhost:3000/productTable/products/1

IDLI ₹25 Hot and Fresh Idli with authenticated taste! ADD TO CART	IDLI SAMBAR ₹35 Idli Served along with delicious SAMBAR ONLY! ADD TO CART	IDLI CHATNI ₹35 Idli Served along with Fresh coconut CHATNI ONLY! ADD TO CART
IDLI SAMBAR CHATNI ₹40 Idli Served with both SAMBAR and CHATNI! ADD TO CART	MEDU WADA ₹30 Perfectly cooked Hot and Fresh Medu Wadas ADD TO CART	MEDU WADA SAMBAR ₹35 Medu Wadas served with Sambar ADD TO CART

Item View (Selected Category 'SOUTH INDIAN')



Selects ADD TO CART FOR menu item = IDLI. This is how a user can first view the menu, and then if he is not logged in he/she gets a prompt like this. This again will redirect user through all the login screens as mentioned above!



Here the user is logged in (Notice the header items being changed).

REST-O-FAST

BACK TO HOME CATEGORIES ANISH MARATHE LOGOUT

After the selection of products. Please Navigate to the cart icon for further order processing!

SEARCH ITEM

		
IDLI ₹25 Hot and Fresh Idli with authenticated taste!	IDLI SAMBAR ₹35 Idli Served along with delicious SAMBAR ONLY!	IDLI CHATNI ₹35 Idli Served along with Fresh coconut CHATNI ONLY!
ADD TO CART	ADD TO CART	ADD TO CART
		

Now proceeding towards the placing the order

VEG PIZZA
₹150

Pan Tossed pizza topped with veggies!

FARMHOUSE
₹180

Veggie pizza with mexican spicy style!

MARGHERITA
₹190

Double layer cheese with mariana sauce inside!

TANDOORI PANEER
₹210

Tandoori Paneer stuffed with mozerella cheese and veggies!

CORN CHEESE
₹200

Corn and cheese stuffed blended with pesto!

RED SAUCE PASTA
₹210

Sweet and Sour Penne in red sauce!

Selecting the menu items.

React App localhost:3000/productTable/products/3

REST-O-FAST

BACK TO HOME CATEGORIES ANISH MARATHA LOGOUT

After the selection of products. Please Navigate to the cart icon for further order processing!

SEARCH ITEM

PLAIN PAV BHAJI
₹70
Amul Butter Pav Bhaji with perfect blend!

CHEESE PAVBHAJI
₹80
Authentic Amul Butter Pavbhaji with Extra Cheese on the top

PANEER PAVBHAJI
₹85
Amul Butter Pav Bhaji with Shredded Paneer

ADD TO CART **ADD TO CART** **ADD TO CART**

Selecting the menu items (Pav Bhaji).

React App localhost:3000/productTable/products/5

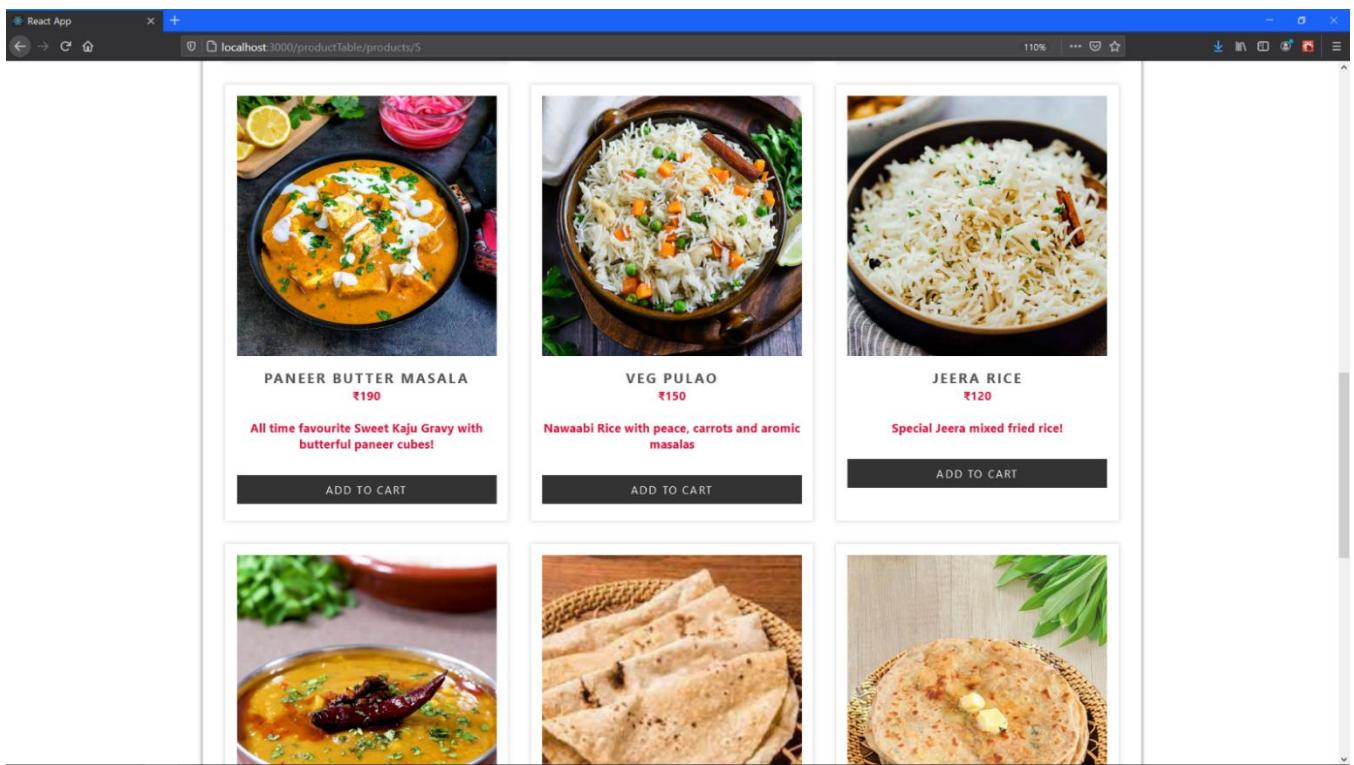
DAL FRY
₹110
Special Tadka Dal with Red Chilly on the top!

PLAIN WHEAT ROTI
₹15
Hand Tossed rotis!

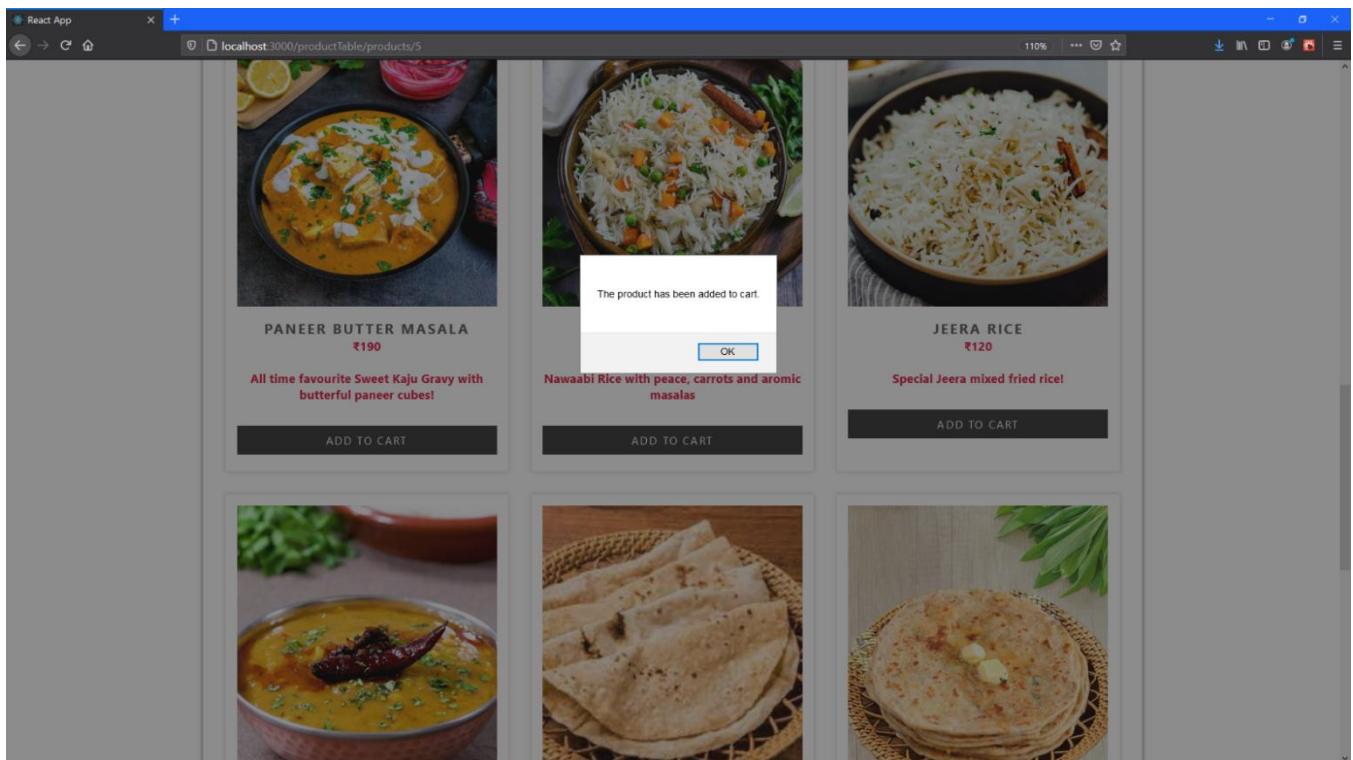
BUTTER WHEAT ROTI
₹25
Hand Tossed rotis with BUTTER

ADD TO CART **ADD TO CART** **ADD TO CART**

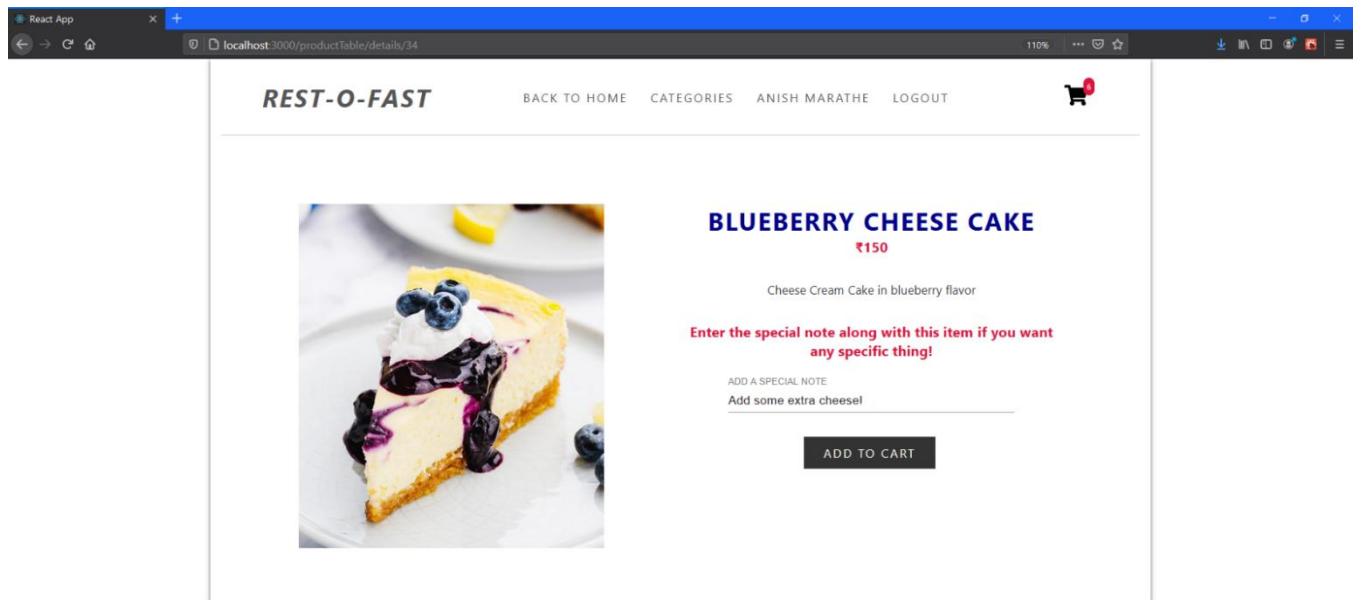
Selecting the menu items (Dal Fry).



Selecting the menu items (Jeera Rice).

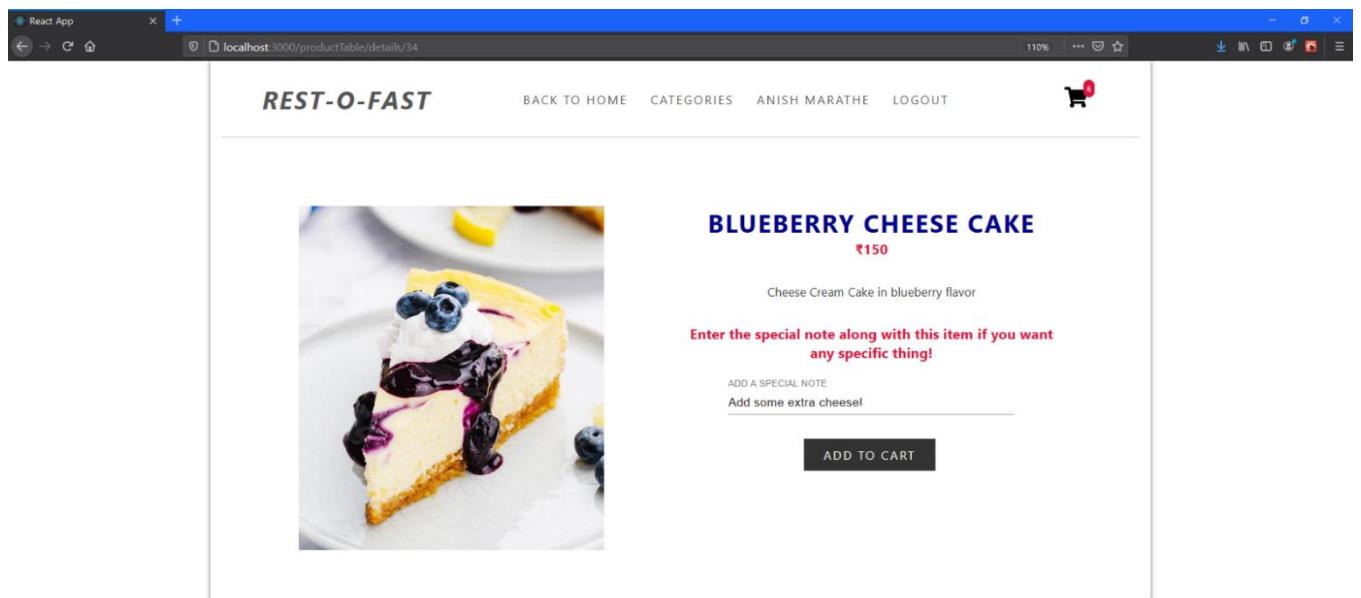


Clicked on Jeera Rice again user gets a pop up saying he has already selected this item!



The screenshot shows a product detail page for a Blueberry Cheese Cake. The page has a header with the logo 'REST-O-FAST' and navigation links for 'BACK TO HOME', 'CATEGORIES', 'ANISH MARATHE', and 'LOGOUT'. A shopping cart icon with a red notification badge is also present. The main content features a large image of a slice of blueberry cheese cake on the left. To the right, the product name 'BLUEBERRY CHEESE CAKE' is displayed in bold blue text, followed by the price '₹150'. Below the name, a description reads 'Cheese Cream Cake in blueberry flavor'. There is a pink text box prompting users to 'Enter the special note along with this item if you want any specific thing!'. Below this, there are input fields for 'ADD A SPECIAL NOTE' and 'Add some extra cheesel'. A dark blue 'ADD TO CART' button is located at the bottom right.

Selected Blueberry cheese cake from DESSERTS category! Option to add a special note along with every item!



This screenshot shows the same product detail page for the Blueberry Cheese Cake, but with a success message at the bottom. The message reads 'Item has been successfully Added to cart!' in a small, dark box. The rest of the page content is identical to the first screenshot, including the product image, name, price, description, special note input fields, and the 'ADD TO CART' button.

Added to the cart Message!

REST-O-FAST	
BACK TO HOME	CATEGORIES
ANISH MARATHE	LOGOUT
	X
	IDLI Rs.25 - 1 +
	RED SAUCE PASTA Rs.210 - 1 +

[View Cart](#) (Can modify the quantity as well as can remove items from cart over here!)

Cart	
	<p>RED SAUCE PASTA Rs.210 - 1 +</p>
	<p>PANEER PAVBHAJI Rs.85 - 1 +</p>

[View Cart \(2\)](#)

React App localhost:3000/productTable/cart

The screenshot shows a React application window with a blue header bar containing the text "React App" and "localhost:3000/productTable/cart". The main content area displays two food items in separate sections. The top section features a white rectangular dish containing a serving of PANEER PAVBHAJI, garnished with cilantro and a lime wedge. To the right of the image, the text "PANEER PAVBHAJI" is displayed in bold blue capital letters, followed by "Rs.85" in red, and a quantity selector with a value of "1". The bottom section features a dark-colored bowl filled with JEERA RICE, garnished with herbs and spices. To the right of the image, the text "JEERA RICE" is displayed in bold blue capital letters, followed by "Rs.120" in red, and a quantity selector with a value of "1". Both sections have a small "X" icon in the top right corner.

PANEER PAVBHAJI
Rs.85

JEERA RICE
Rs.120

[View Cart \(3\)](#)

React App localhost:3000/productTable/cart

The screenshot shows a React application window with a blue header bar containing the text "React App" and "localhost:3000/productTable/cart". The main content area displays two food items in separate sections. The top section features a dark-colored bowl filled with JEERA RICE, garnished with herbs and spices. To the right of the image, the text "JEERA RICE" is displayed in bold blue capital letters, followed by "Rs.120" in red, and a quantity selector with a value of "1". The bottom section features a close-up view of a bowl of DAL FRY, garnished with cilantro and a red chili. To the right of the image, the text "DAL FRY" is displayed in bold blue capital letters, followed by "Rs.110" in red, and a quantity selector with a value of "1". Both sections have a small "X" icon in the top right corner.

JEERA RICE
Rs.120

DAL FRY
Rs.110

[View Cart \(4\)](#)

The screenshot shows a React application interface for a food delivery or ordering system. At the top, the URL is `localhost:3000/productTable/cart`. The page displays two items:

- DAL FRY** (Rs.110) - A bowl of yellow dal with garnish and a red chili pepper.
- BLUEBERRY CHEESE CAKE** (Rs.150) - A slice of cake topped with blueberries and cream.

Each item has a quantity selector with a value of 1.

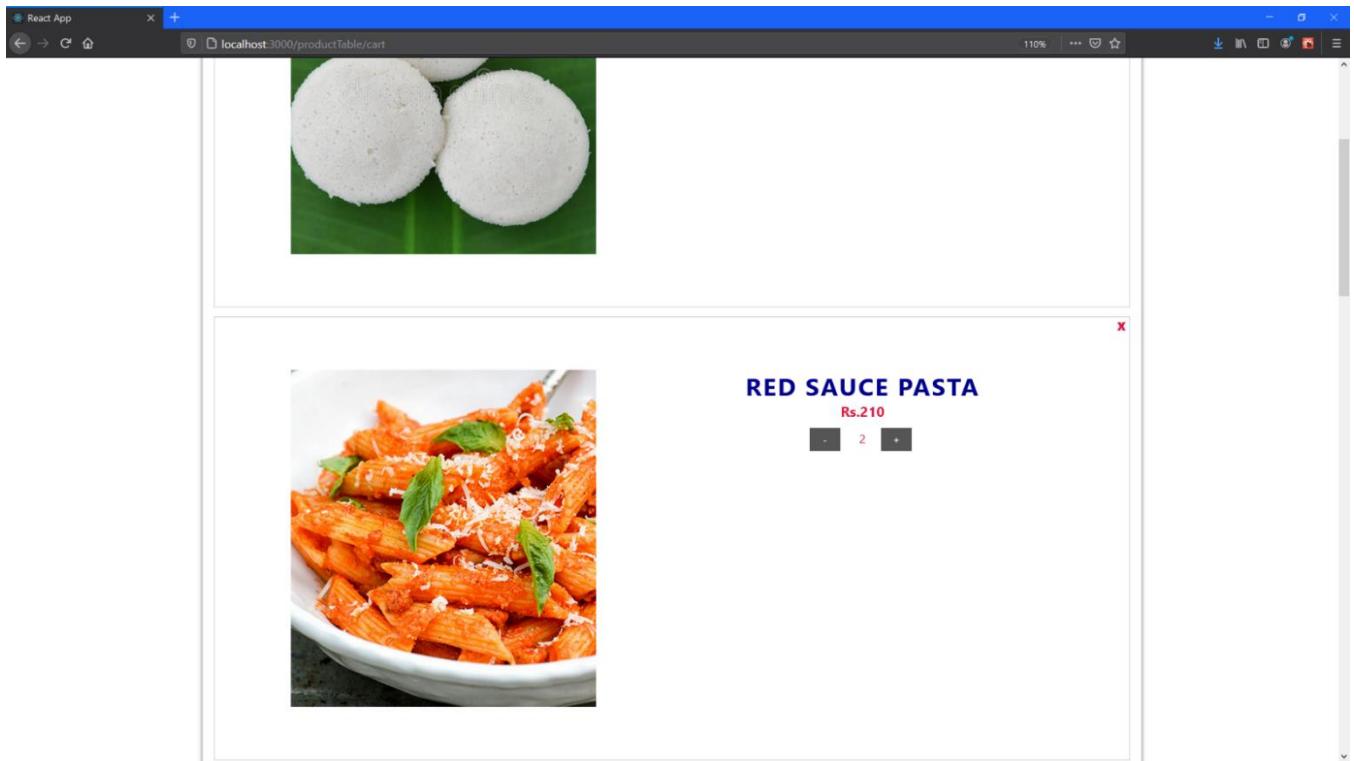
[View Cart \(5\)](#)

The screenshot shows the cart page with the following details:

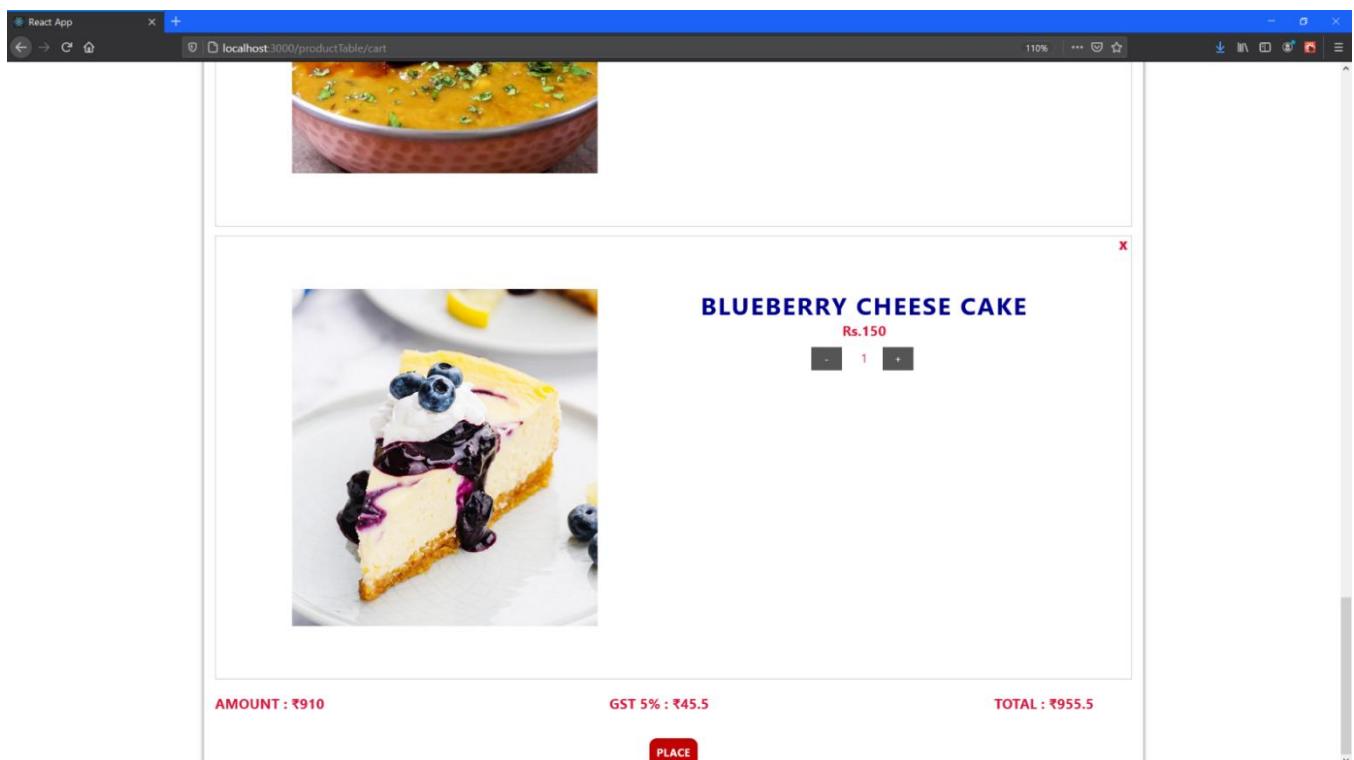
- AMOUNT : ₹700**
- GST 5% : ₹35**
- TOTAL : ₹735**

A red "PLACE ORDER" button is visible at the bottom.

[View Cart \(6\) AMOUNT + GST and Total Amount is displayed](#)



View Cart (7) Notice the Pasta Quantity has changed to 2 Plates!



View Cart (8) Notice the Amount, GST and Total Amount reflects the new item quantity added

REST-O-FAST

Checkout

- 1 Payment details
- 2 Review your order

Payment method

Name on card *	Card number *
Expiry date *	CVV *
Add date without /	Last three digits on signature strip

NEXT

Copyright © REST-O-FAST INC. 2021.

All fields are compulsory!

Checkout Page #Validation 1

REST-O-FAST

Checkout

- 1 Payment details
- 2 Review your order

Payment method

Name on card *	Card number *
Anish Milind Marathe	12345678
Expiry date *	CVV *
0716	••
Add date without /	Last three digits on signature strip

NEXT

Copyright © REST-O-FAST INC. 2021.

CARD NUMBER MUST BE EXACTLY 16 DIGITS LONG!

Checkout Page #Validation 2

REST-O-FAST

Checkout

1 Payment details 2 Review your order

Payment method

Name on card * Anish Milind Marathe

Card number * 12345678912345678

Expiry date * 0716

CVV * **

Add date without / Last three digits on signature strip

NEXT

Copyright © REST-O-FAST INC., 2021.

CARD NUMBER MUST BE EXACTLY 16 DIGITS LONG!

Checkout Page #Validation 3

REST-O-FAST

Checkout

1 Payment details 2 Review your order

Payment method

Name on card * Anish Milind Marathe

Card number * 1234567812345678

Expiry date * 0716

CVV * **

Add date without / Last three digits on signature strip

NEXT

Copyright © REST-O-FAST INC., 2021.

CVV MUST BE EXACTLY 3 DIGITS LONG!

Checkout Page #Validation 4

REST-O-FAST

Checkout

1 Payment details **2 Review your order**

Payment method

Name on card *	Card number *
Anish Milind Marathe	1234567812345678
Expiry date *	CVV *
0716	****
Add date without /	Last three digits on signature strip

NEXT

Copyright © REST-O-FAST INC. 2021.

CVV MUST BE EXACTLY 3 DIGITS LONG!

Checkout Page #Validation 5

REST-O-FAST

Checkout

1 Payment details **2 Review your order**

Payment method

Name on card *	Card number *
Anish Milind	1234567812345678
Expiry date *	CVV *
0716	***
Add date without /	Last three digits on signature strip

NEXT

Copyright © REST-O-FAST INC. 2021.

CARD DETAILS ENTERED ARE NOT CORRECT!

Checkout Page #Validation 6

REST-O-FAST

Checkout

1 Payment details 2 Review your order

Payment method

Name on card *	Card number *
Anish Milind Marathe	1234567812345678
Expiry date *	CVV *
0716	***
Add date without /	Last three digits on signature strip

NEXT

Copyright © REST-O-FAST INC. 2021.

ACCESS GRANTED!

Card Details on correct input!

REST-O-FAST

Checkout

✓ Payment details 2 Review your order

Order summary

Item	Quantity	Price
Idli	= 1PLATE(S)	25
Red Sauce Pasta	= 2PLATE(S)	210
Paneer Pavbhaji	= 1PLATE(S)	85
Jeera Rice	= 1PLATE(S)	120
Dal Fry	= 1PLATE(S)	110
Blueberry Cheese Cake	= 1PLATE(S)	150
Total		₹910
GST 5%		₹45.5
GRAND TOTAL		₹955.5

Order Summery (1)

React App

localhost:3000/checkout

Red Sauce Pasta = 2PLATE(S)	210
Paneer Pavbhaji = 1PLATE(S)	85
Jeera Rice = 1PLATE(S)	120
Dal Fry = 1PLATE(S)	110
Blueberry Cheese Cake = 1PLATE(S)	150
Total	₹910
GST 5%	₹45.5
GRAND TOTAL	₹955.5

Payment details

Card type	Visa
Card holder	Anish Milind Marathe
Card number	xxxx-xxxx-xxxx-5678
Expiry date	xx/2016

BACK PLACE ORDER

Copyright © REST-O-FAST INC. 2021.

Order Summary (2)

React App

localhost:3000/checkout

Red Sauce Pasta = 2PLATE(S)	210
Paneer Pavbhaji = 1PLATE(S)	85
Jeera Rice = 1PLATE(S)	120
Dal Fry = 1PLATE(S)	110
Blueberry Cheese Cake	150

Place Order?

REST-O-FAST will give you a window of 10 seconds in which you will be able to cancel your order. Once the time expires the order will be automatically placed. Once placed you cannot cancel the order! Thank you, REST-O-FAST!

GO BACK PROCEED

Card type	Visa
Card holder	Anish Milind Marathe
Card number	xxxx-xxxx-xxxx-5678
Expiry date	xx/2016

BACK PLACE ORDER

Copyright © REST-O-FAST INC. 2021.

Place Order Prompt

Red Sauce Pasta
= 2PLATE(S) 210

Paneer Pavbhaji
= 1PLATE(S) 85

Jeera Rice
= 1PLATE(S) 120

Dal Fry
= 1PLATE(S) 110

Blueberry Cheese Cake
= 1PLATE(S) 150

Total ₹910

GST 5% ₹45.5

GRAND TOTAL ₹955.5

Payment details

Card type	Visa
Card holder	Anish Milind Marathe
Card number	xxxx-xxxx-xxxx-5678
Expiry date	xx/2016

Copyright © REST-O-FAST INC. 2021.

10 Seconds Window Display (1)

Red Sauce Pasta
= 2PLATE(S) 210

Paneer Pavbhaji
= 1PLATE(S) 85

Jeera Rice
= 1PLATE(S) 120

Dal Fry
= 1PLATE(S) 110

Blueberry Cheese Cake
= 1PLATE(S) 150

Total ₹910

GST 5% ₹45.5

GRAND TOTAL ₹955.5

Payment details

Card type	Visa
Card holder	Anish Milind Marathe
Card number	xxxx-xxxx-xxxx-5678
Expiry date	xx/2016

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10 Seconds Window Display (2)

Red Sauce Pasta
= 2PLATE(S) 210

Paneer Pavbhaji
= 1PLATE(S) 85

Jeera Rice
= 1PLATE(S) 120

Dal Fry
= 1PLATE(S) 110

Blueberry Cheese Cake
= 1PLATE(S) 150

Total 910

GST 5% 45.5

GRAND TOTAL 955.5

Payment details

Card type	Visa
Card holder	Anish Milind Marathe
Card number	xxxx-xxxx-xxxx-5678
Expiry date	xx/2016

2 BACK CANCEL

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10 Seconds Window Display (3)

Red Sauce Pasta
= 2PLATE(S) 210

Paneer Pavbhaji
= 1PLATE(S) 85

Jeera Rice
= 1PLATE(S) 120

Dal Fry
= 1PLATE(S) 110

Blueberry Cheese Cake
= 1PLATE(S) 150

Total 910

GST 5% 45.5

GRAND TOTAL 955.5

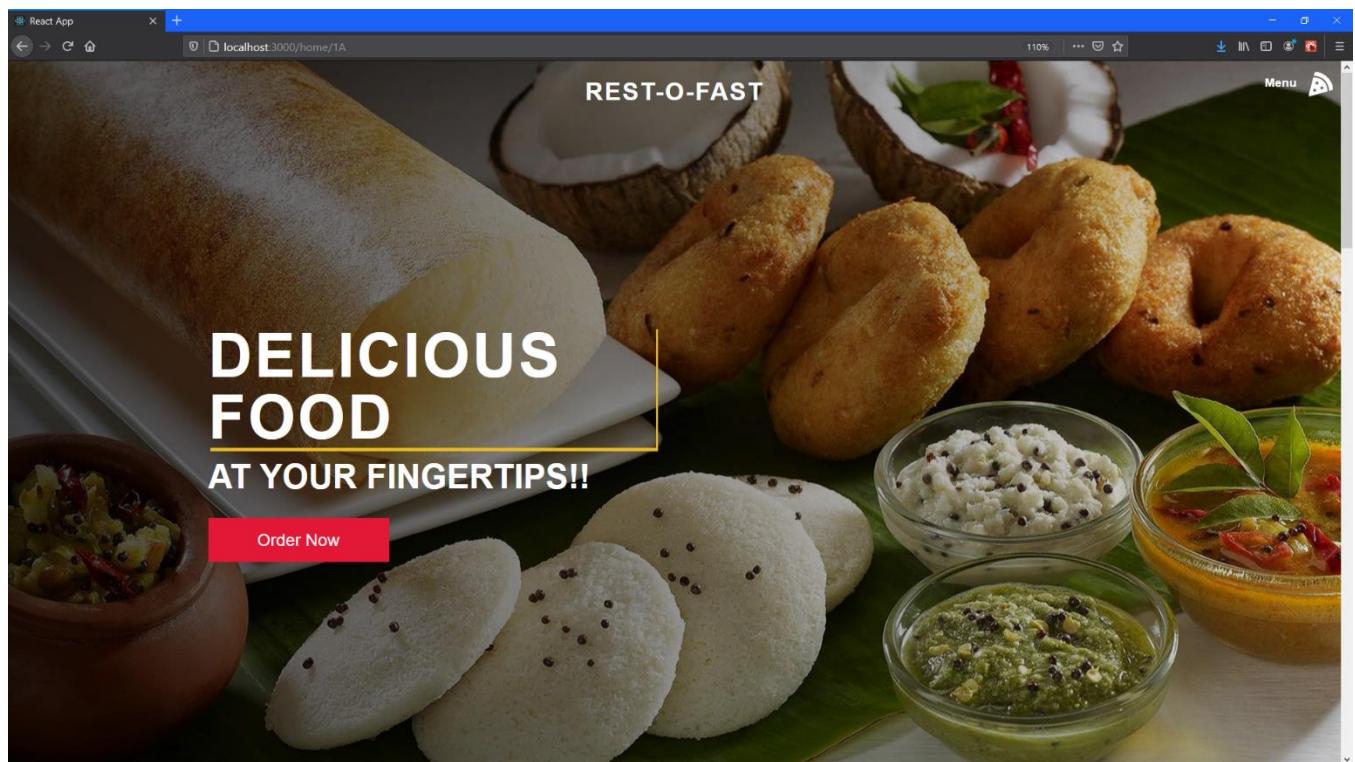
Payment details

Card type	Visa
Card holder	Anish Milind Marathe
Card number	xxxx-xxxx-xxxx-5678
Expiry date	xx/2016

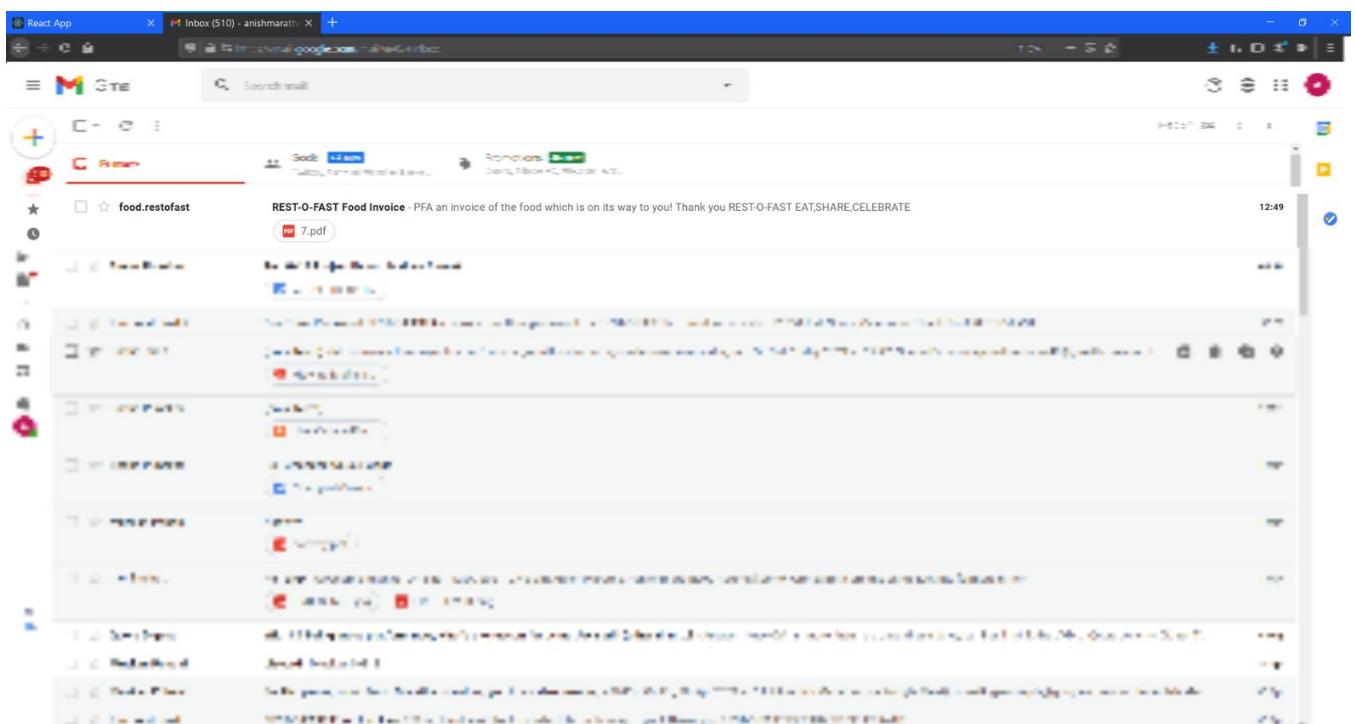
BACK CANCEL

Your order is placed! You will now automatically logged out of the system. And a mail containing all the order details is being sent to you!

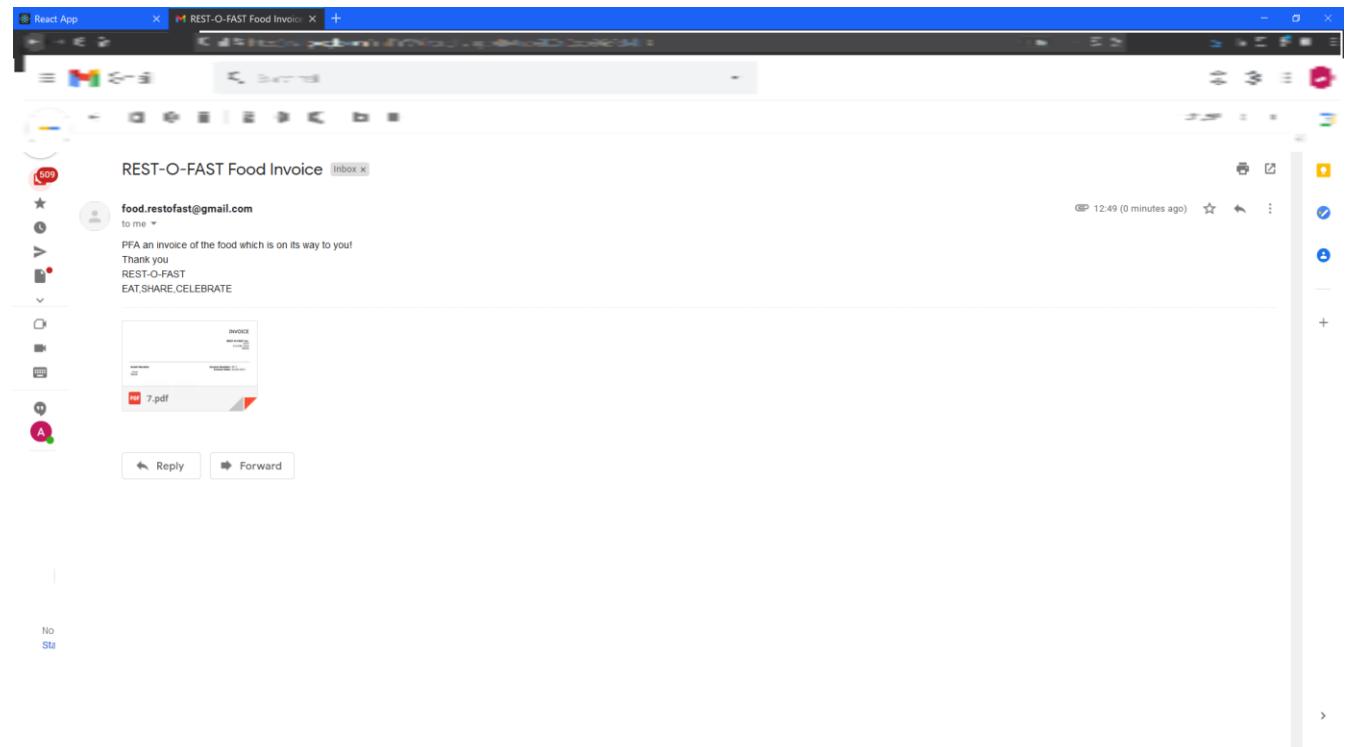
Once 10 seconds are over! Order is placed, Payment is deducted and Invoice is sent to on to the registered Email-ID.



Once order is placed, Automatically Logged out of the system!



GMAIL window for showing the invoice has received!



GMAIL window for showing the invoice mail contents!

INVOICE

REST-O-FAST INC.
Pune, INDIA

Anish Marathe
Pune, INDIA

Invoice Number: RF-7
Invoice Date: 02/05/2021

Products	Quantity	Price	Total
Idli	1	₹ 25.00	₹ 25.00
Red Sauce Pasta	2	₹ 210.00	₹ 420.00
Paneer Pavbhaji	1	₹ 85.00	₹ 85.00
Jeera Rice	1	₹ 120.00	₹ 120.00
Dal Fry	1	₹ 110.00	₹ 110.00
Blueberry Cheese Cake	1	₹ 150.00	₹ 150.00

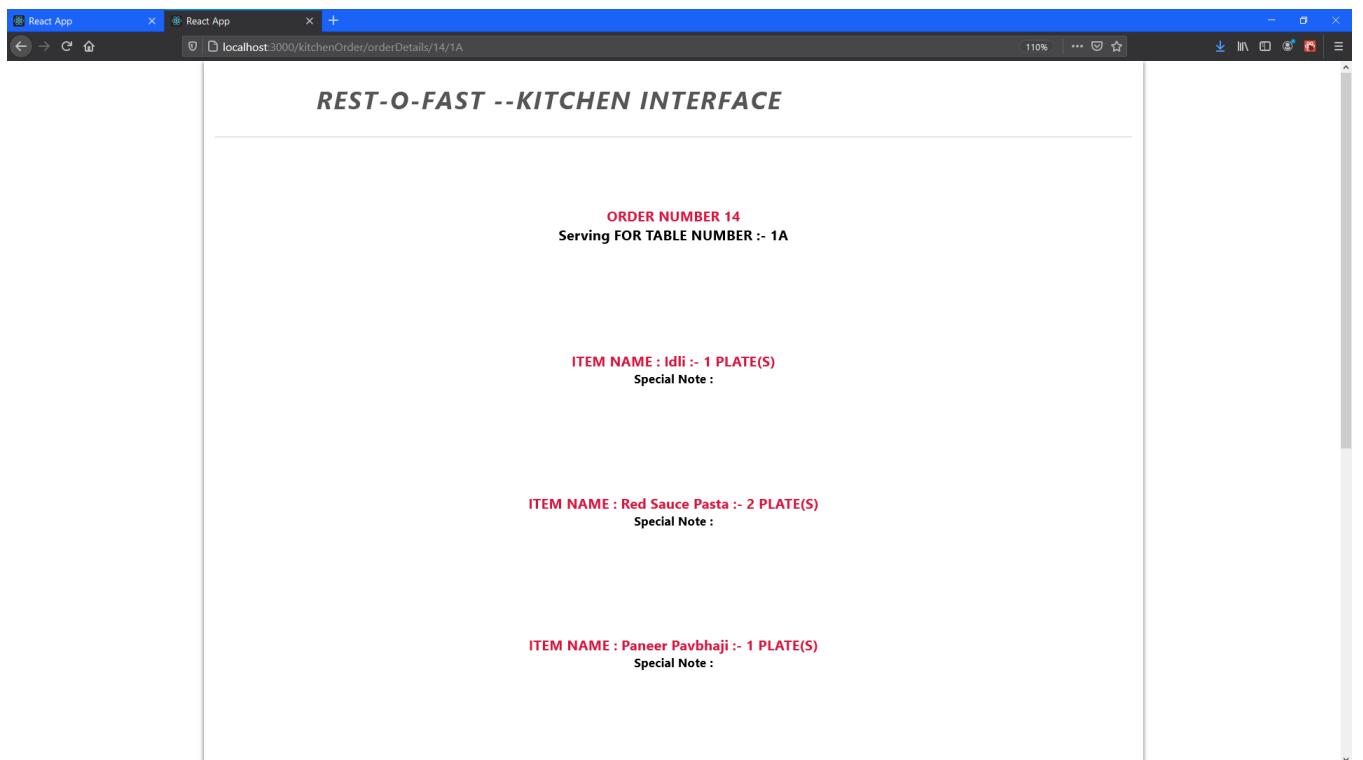
Subtotal: ₹ 910.00
GST 5%: ₹ 45.50
Total: ₹ 955.50

This is a system generated invoice and you have already paid the bill! Thank You, REST-O-FAST.

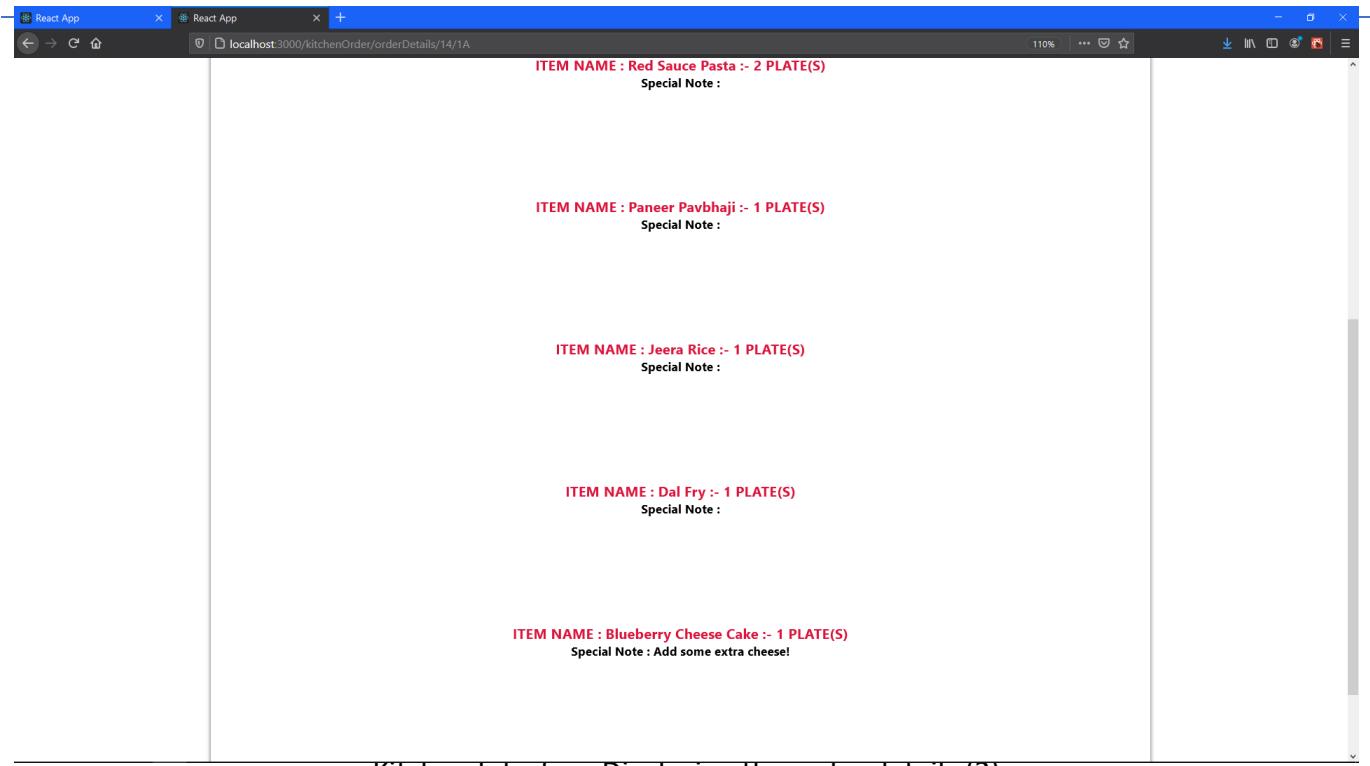
The actual dynamic invoice!



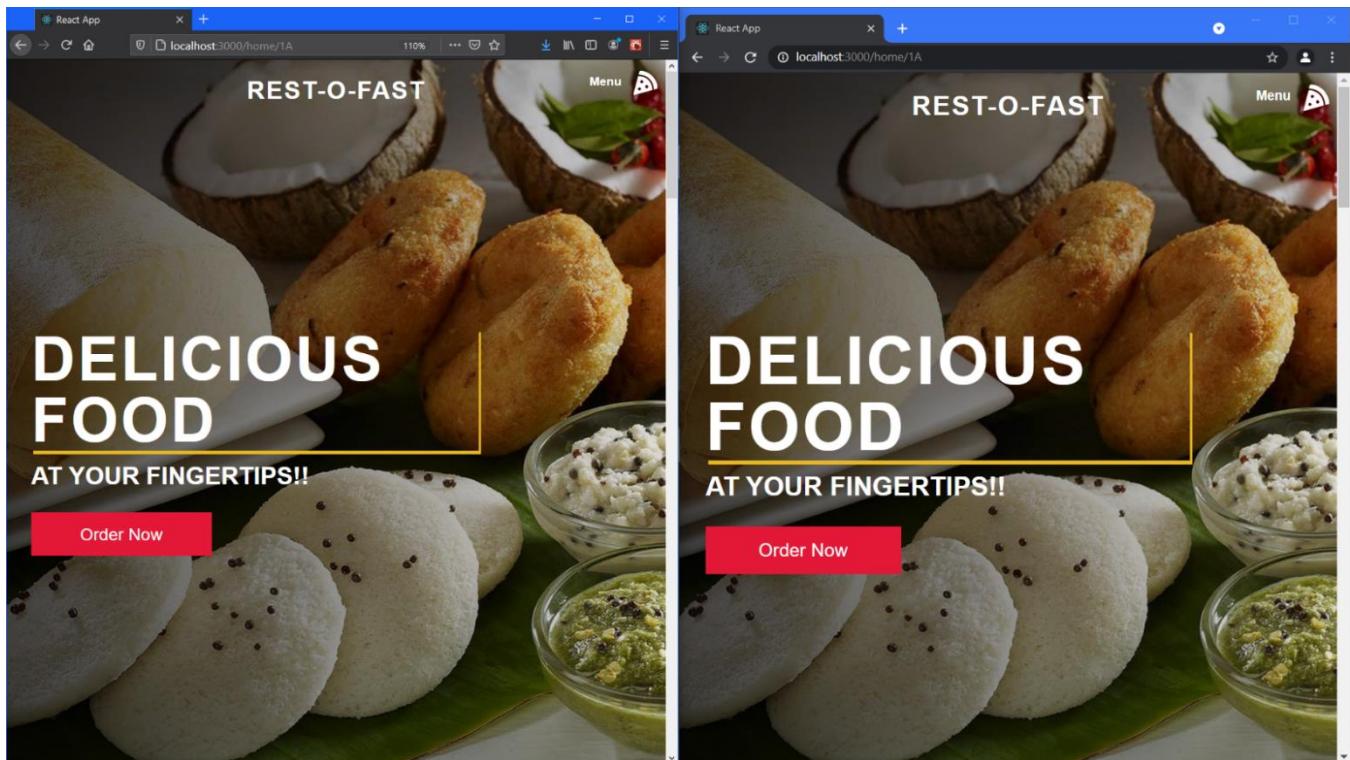
Kitchen Interface Displaying the list of orders along with table numbers



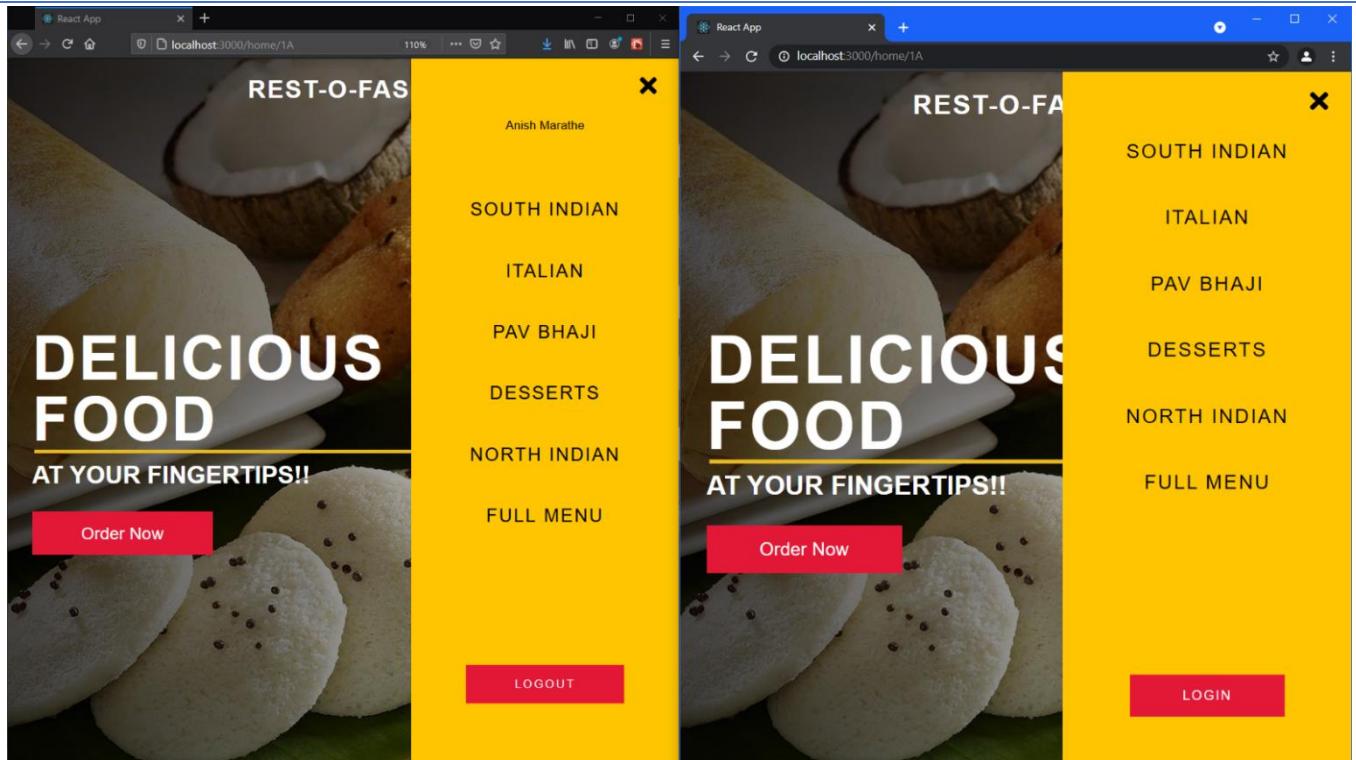
Kitchen Interface Displaying the order details (1)



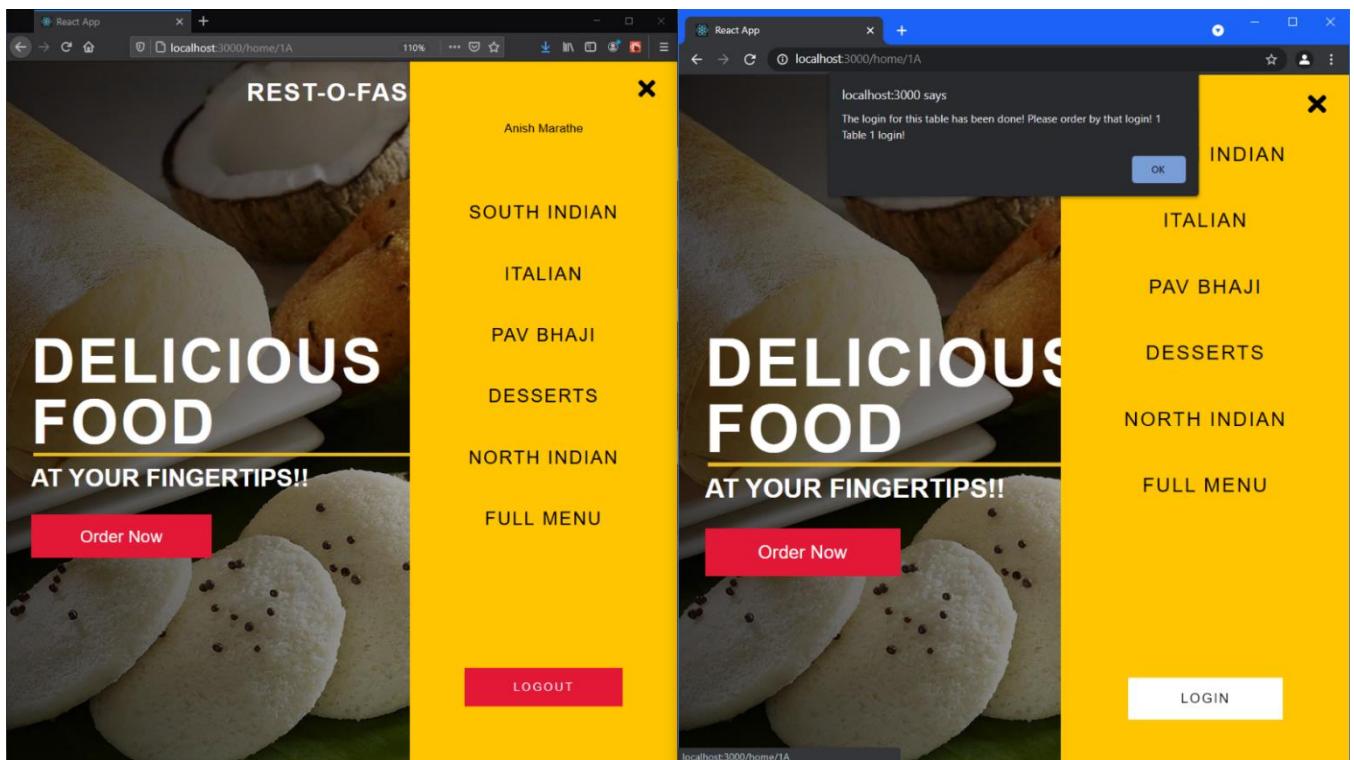
Kitchen Interface Displaying the order details (2)



2 Different Browsers representing 2 different users if scan the same QR code placed in front of same seat. (Notice the same seat number i.e., 1A)



Left browser has logged in, while the right one is not!



If the right browser also tries to log in at the time. It is prompted with an error!

REST-O-FAS

Anish Marathe

DELICIOUS FOOD AT YOUR FINGERTIPS!!

Order Now

SOUTH INDIAN
ITALIAN
PAV BHAJI
DESSERTS
NORTH INDIAN
FULL MENU

LOGOUT

REST-O-FAST

BACK TO HOME CATEGORIES

SEARCH CATEGORY

SOUTH INDIAN

Straight from South!

DISCOVER MORE

But the right one can still view the whole menu

REST-O-FAS

Anish Marathe

DELICIOUS FOOD AT YOUR FINGERTIPS!!

Order Now

SOUTH INDIAN
ITALIAN
PAV BHAJI
DESSERTS
NORTH INDIAN
FULL MENU

LOGOUT

REST-O-FAST

localhost:3000 says
The login for this table has been done! Please order by that login! 1 Table 1 login!

After the selection processing!

SEARCH ITEM

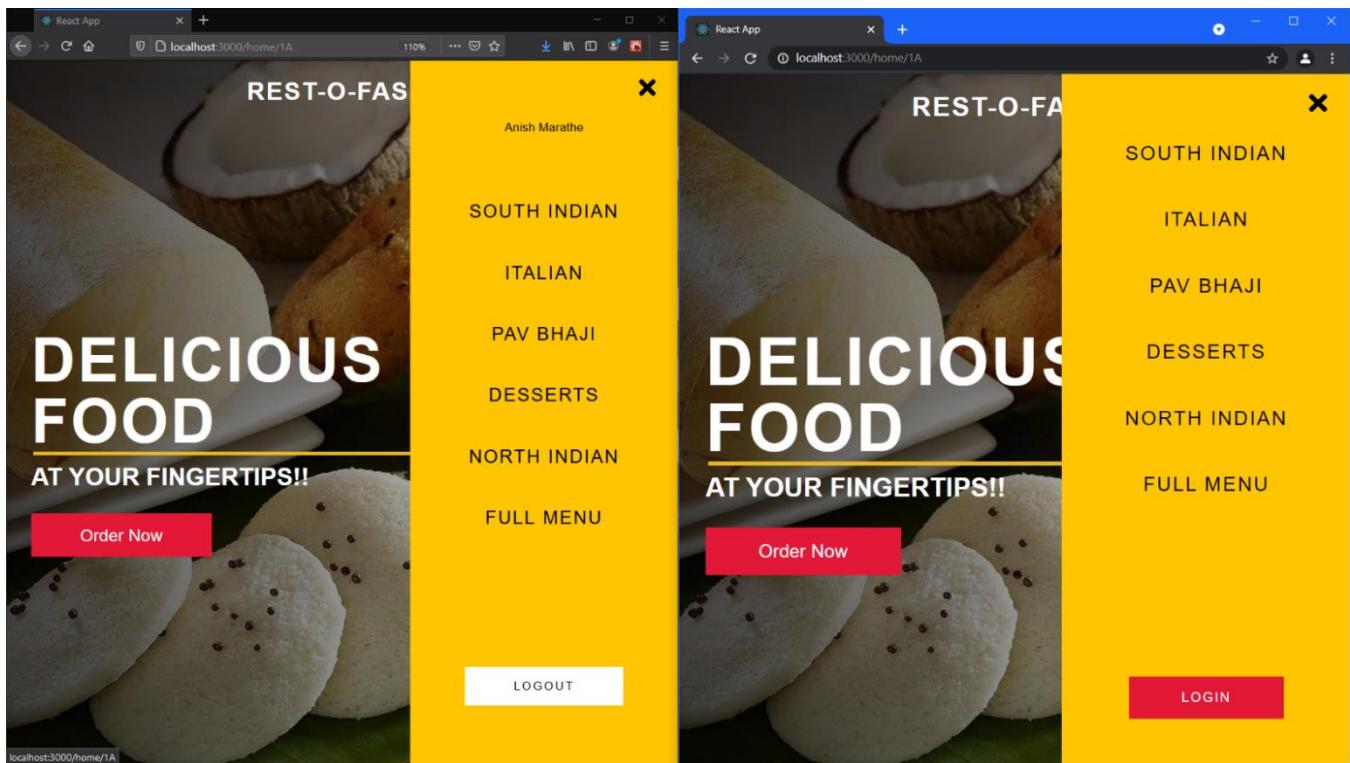
IDLI

₹25

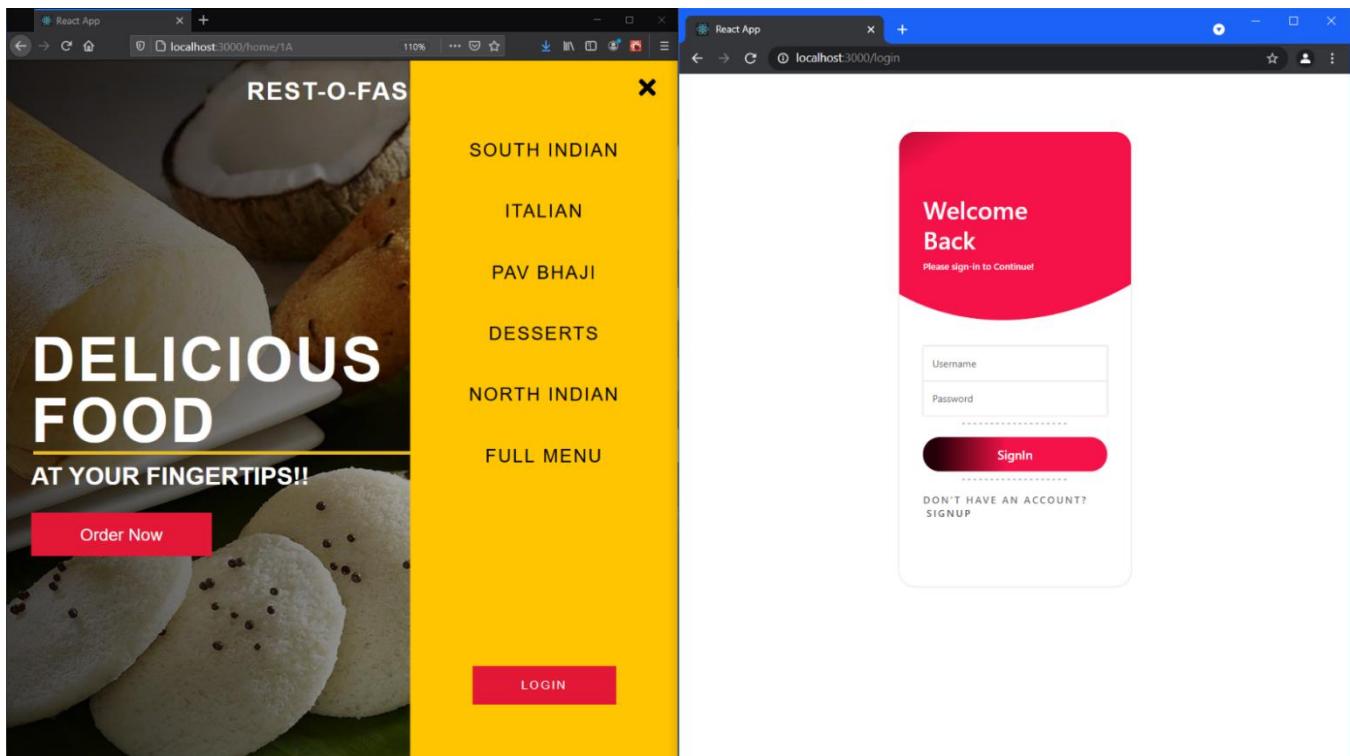
Hot and Fresh Idli with authenticated taste!

ADD TO CART

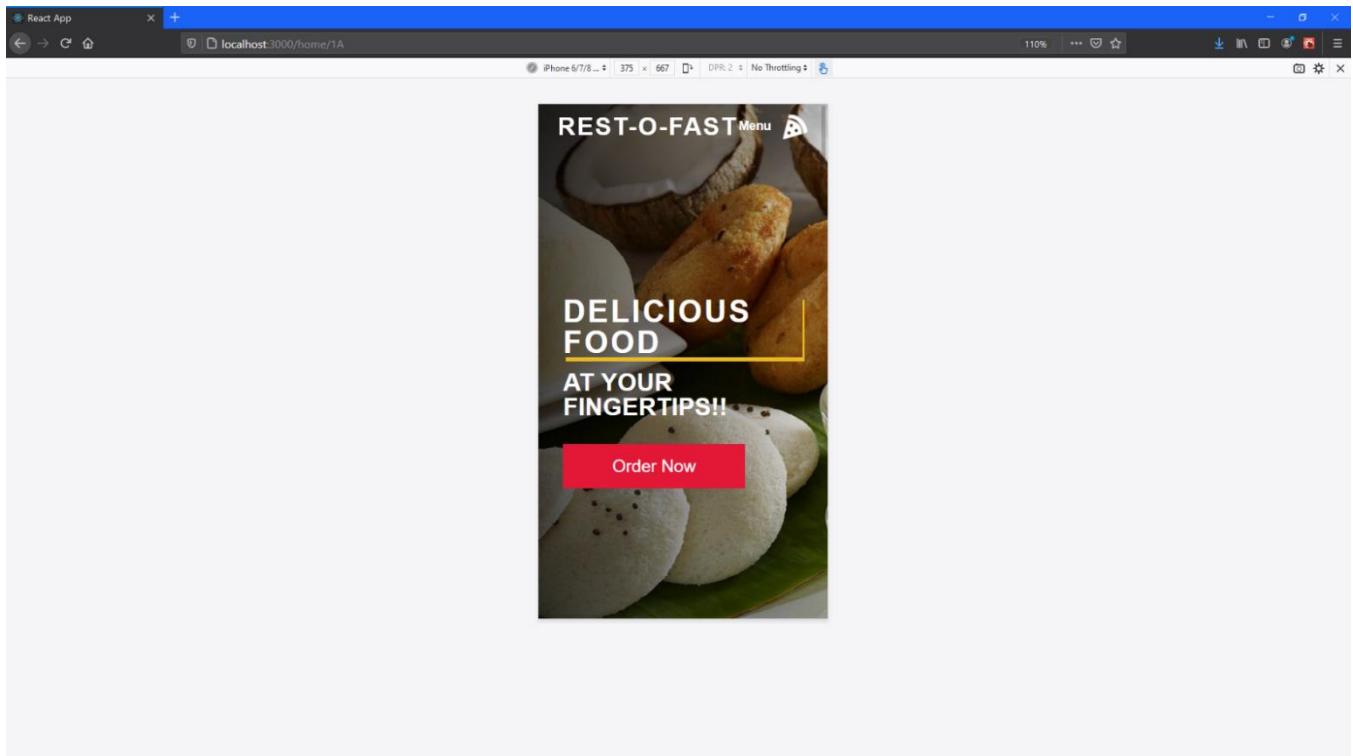
As soon as the right browser tries to add something to the cart. It gets an error. Because the seat 1A has already booked by some other user.



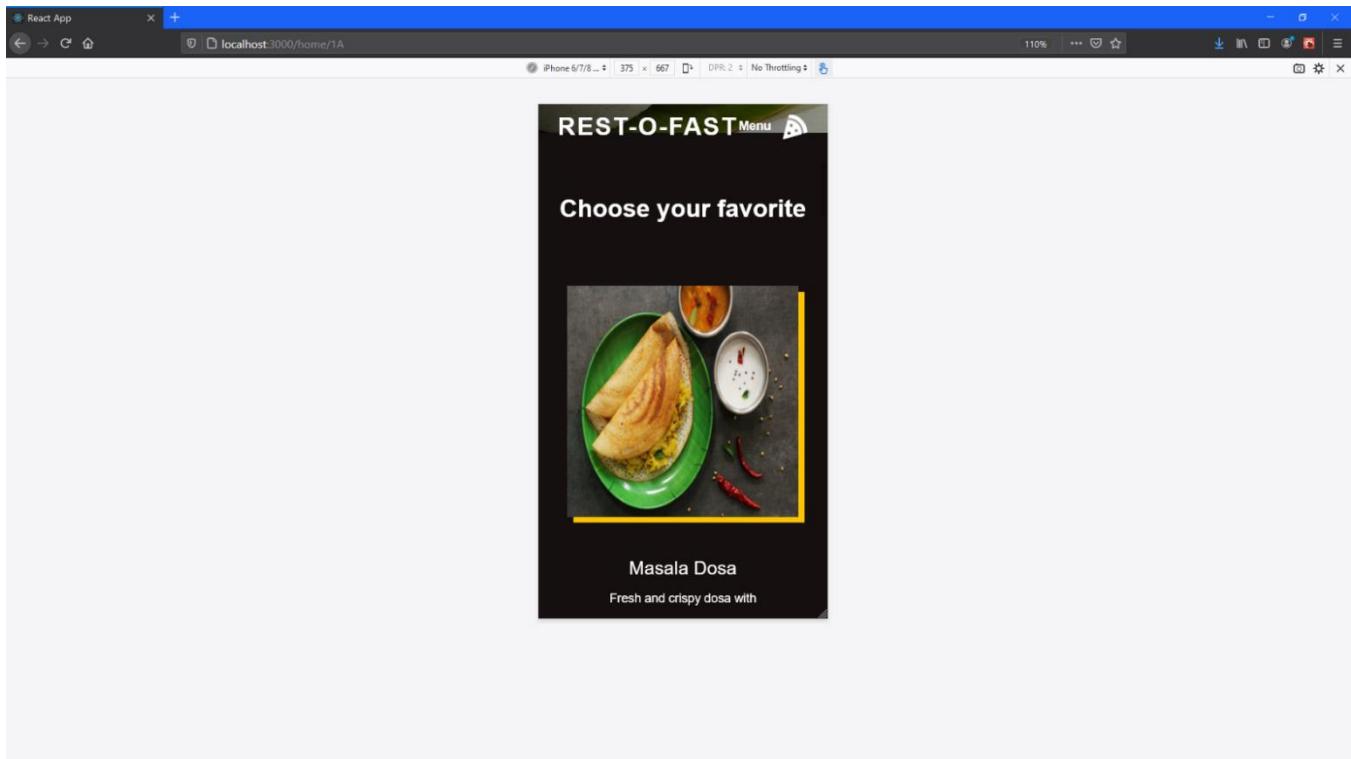
But as soon as the left browser logs out of the session. Seat at Table is freed! i.e., seat 1A is no longer occupied



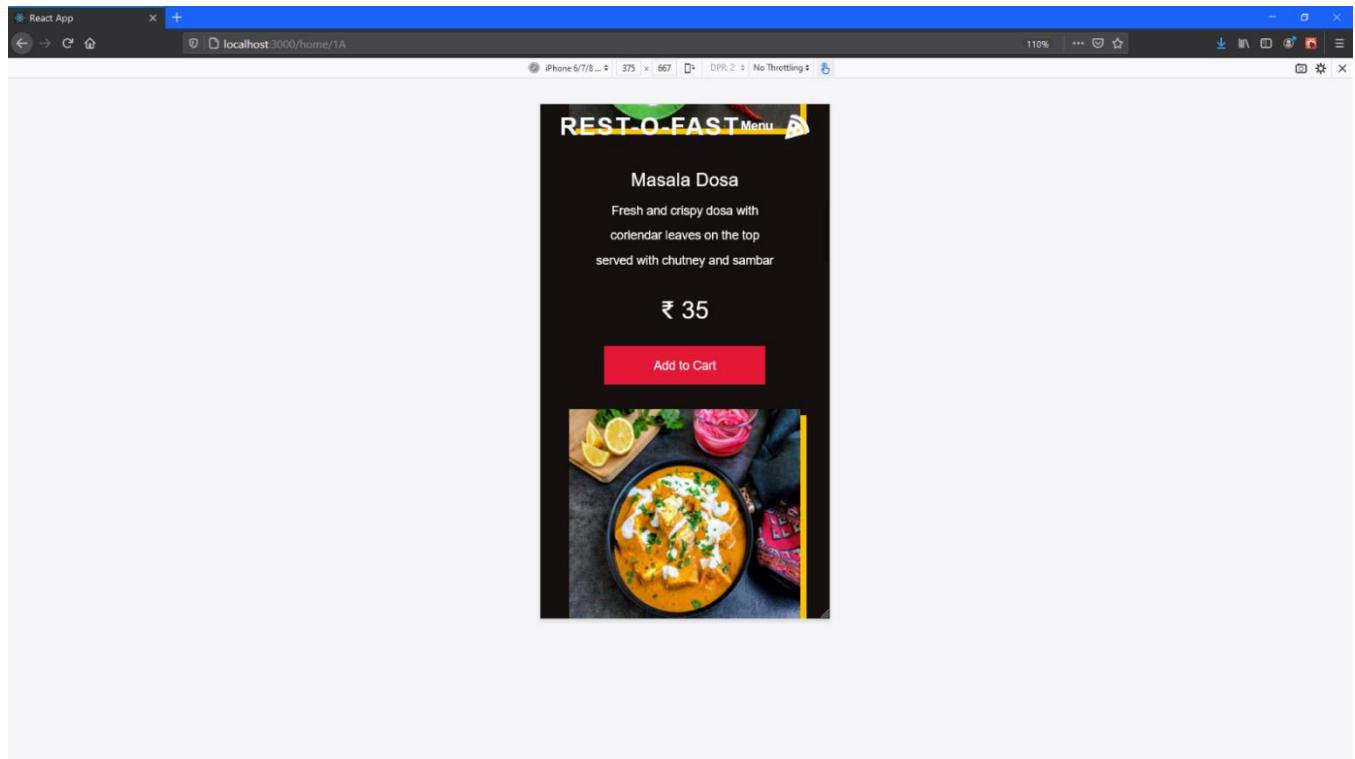
Now if the right browser wishes to log in, it can login now.



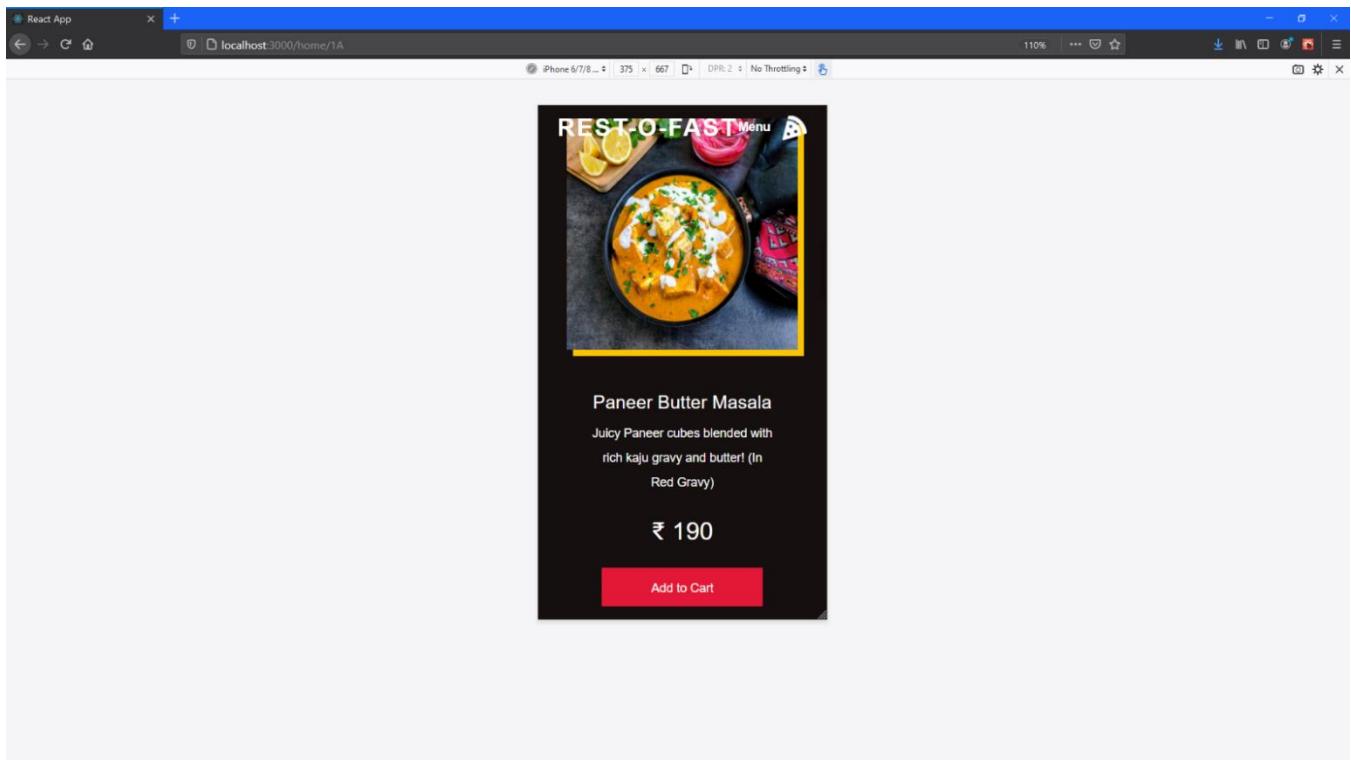
How the site loads up on the mobile screens! (Responsive (1))



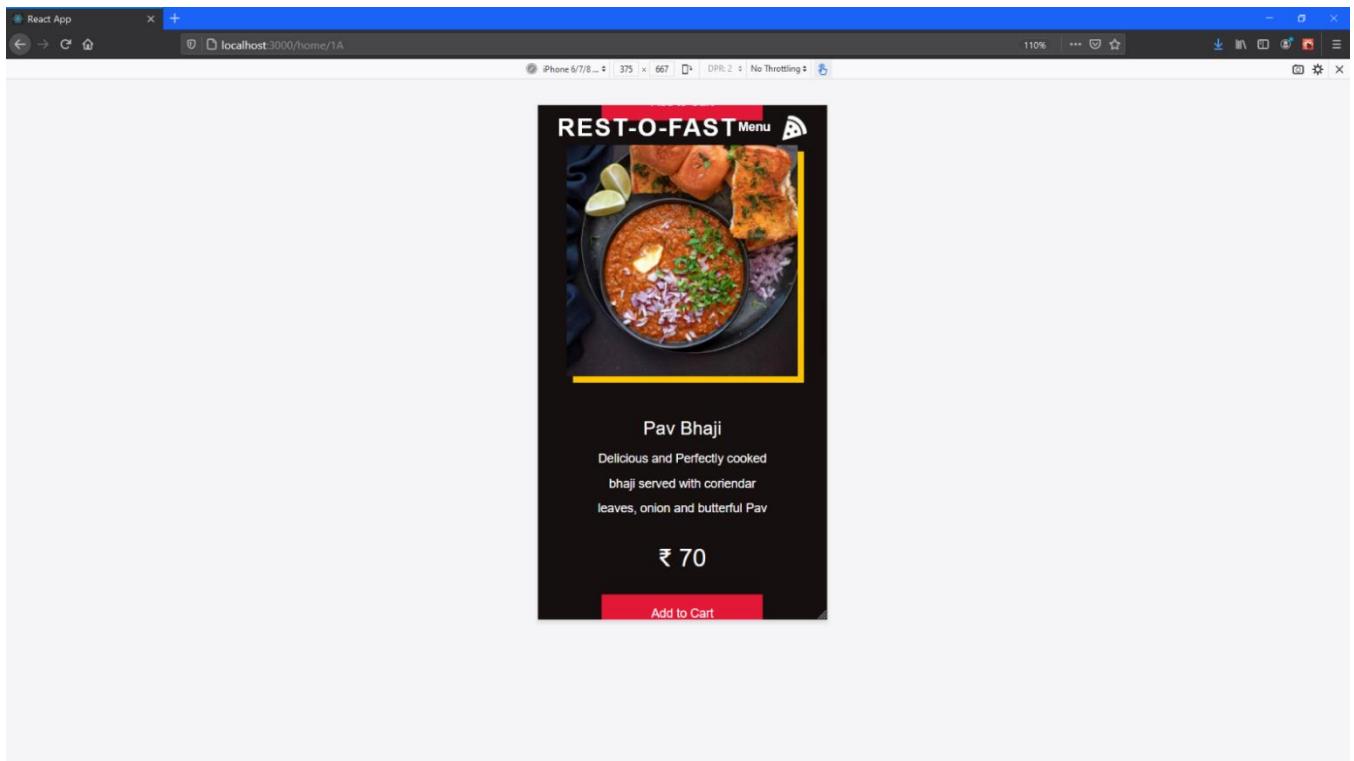
Responsive (2)



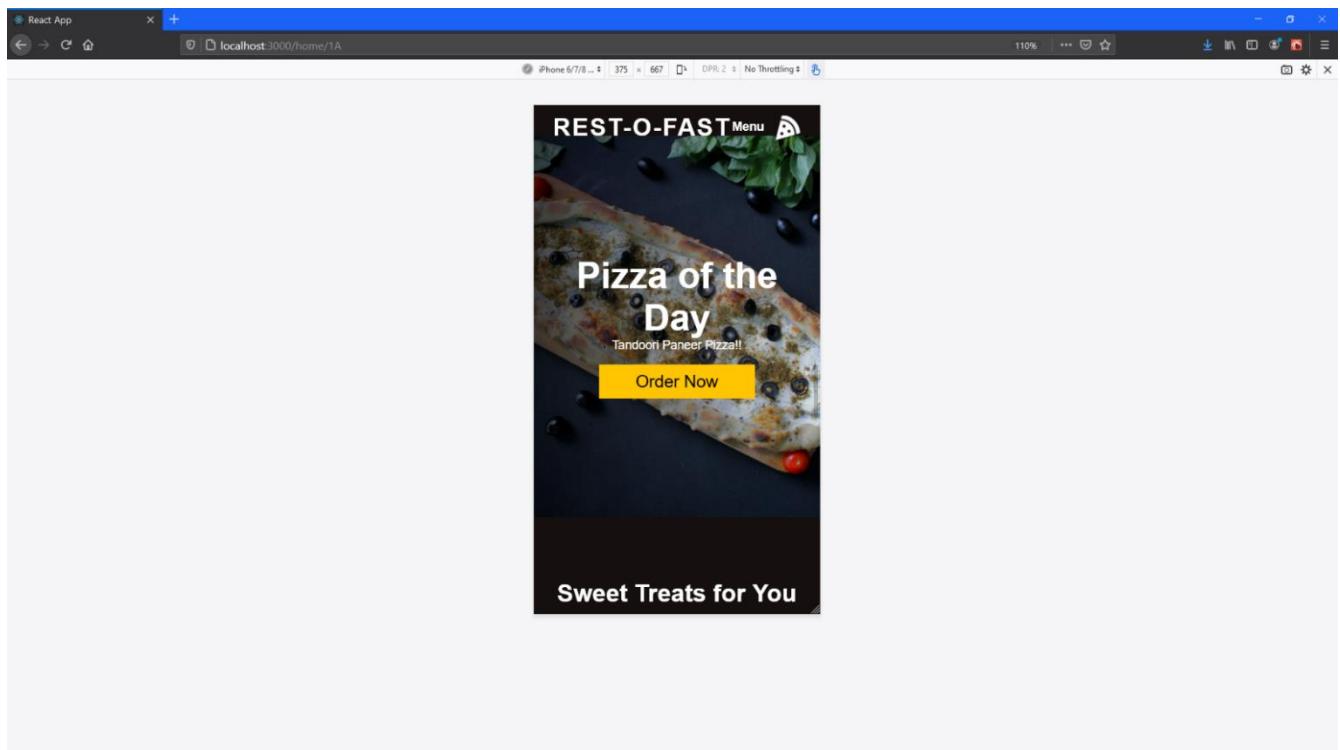
Responsive (3)



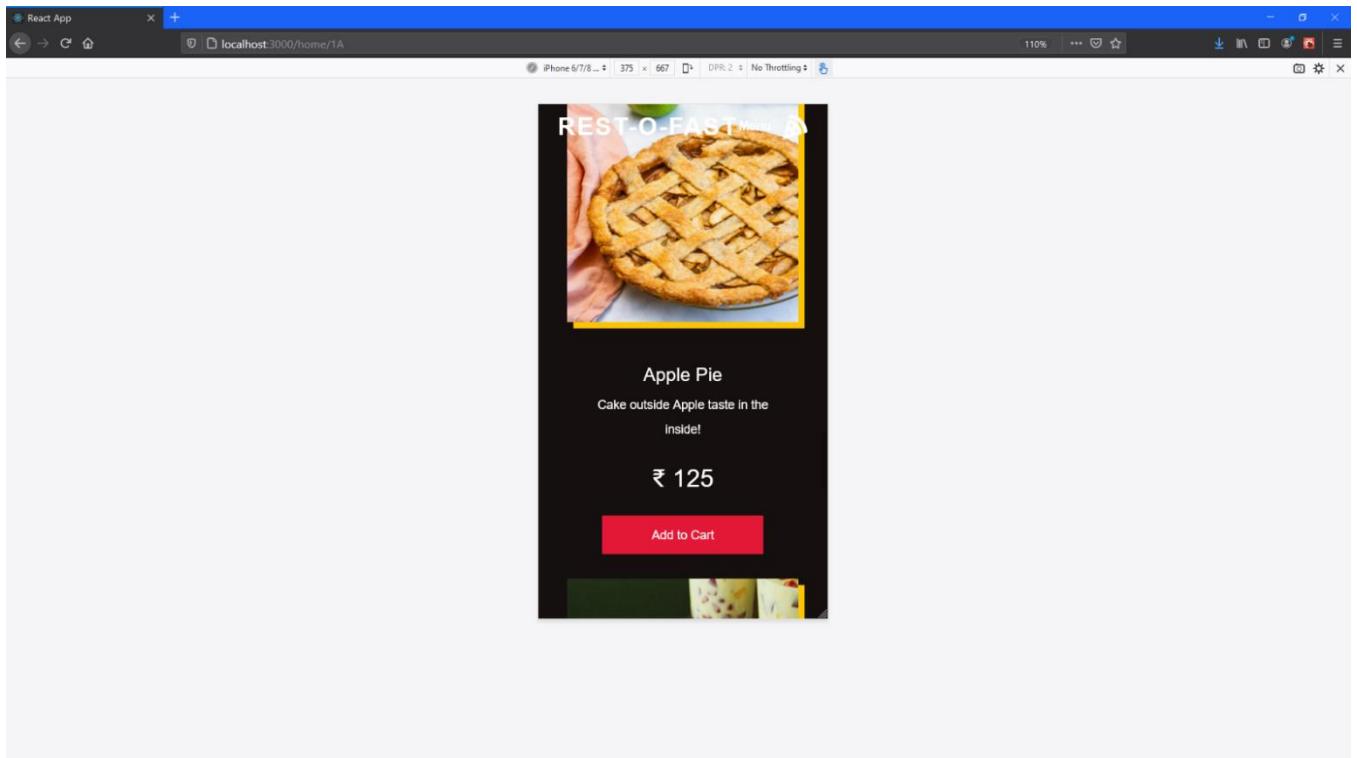
Responsive (4)



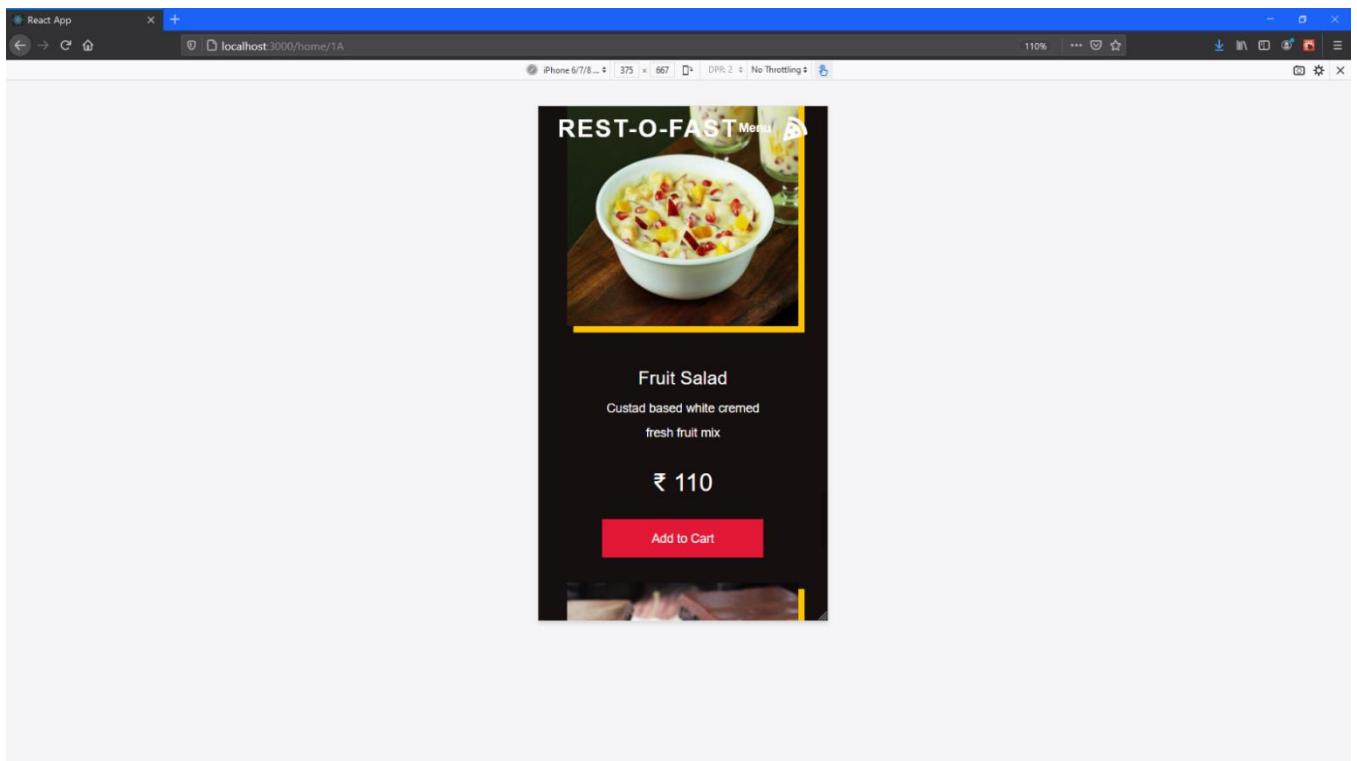
Responsive (5)



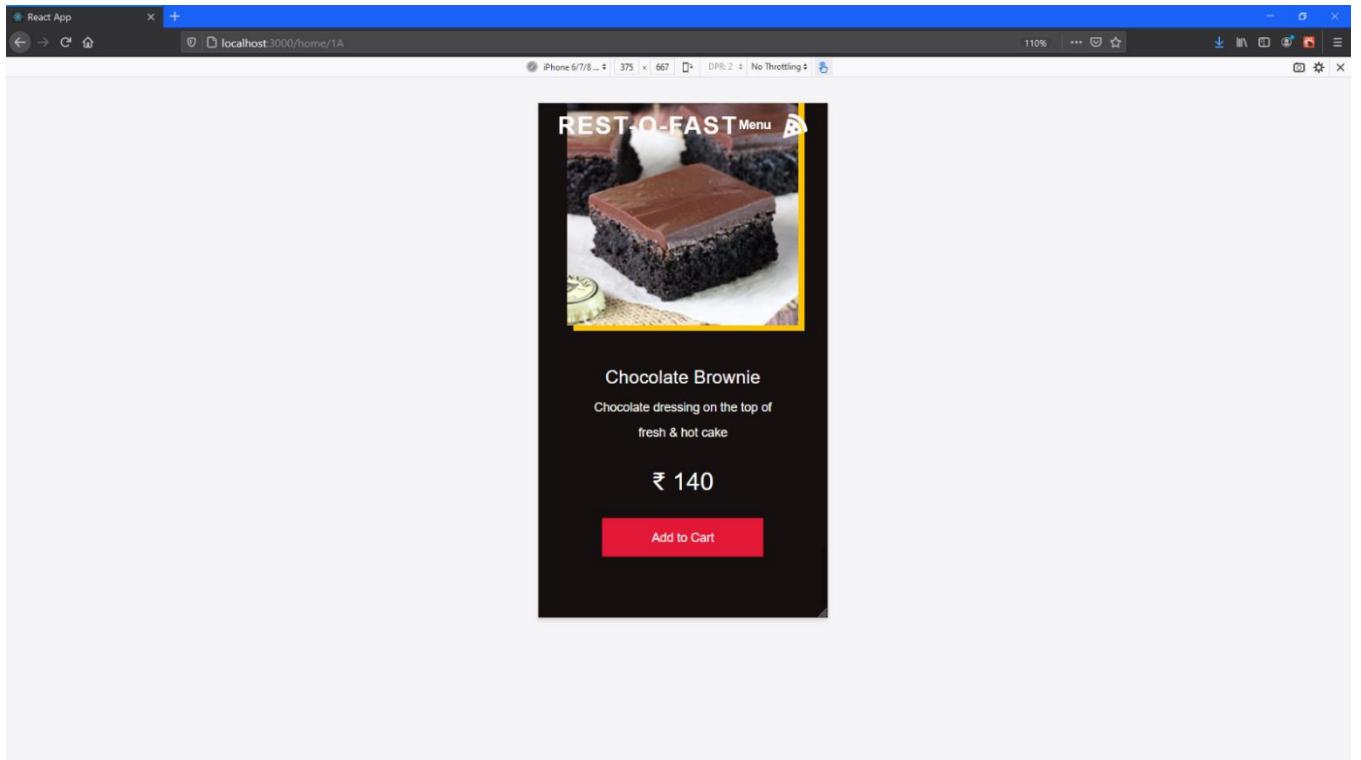
Responsive (6)



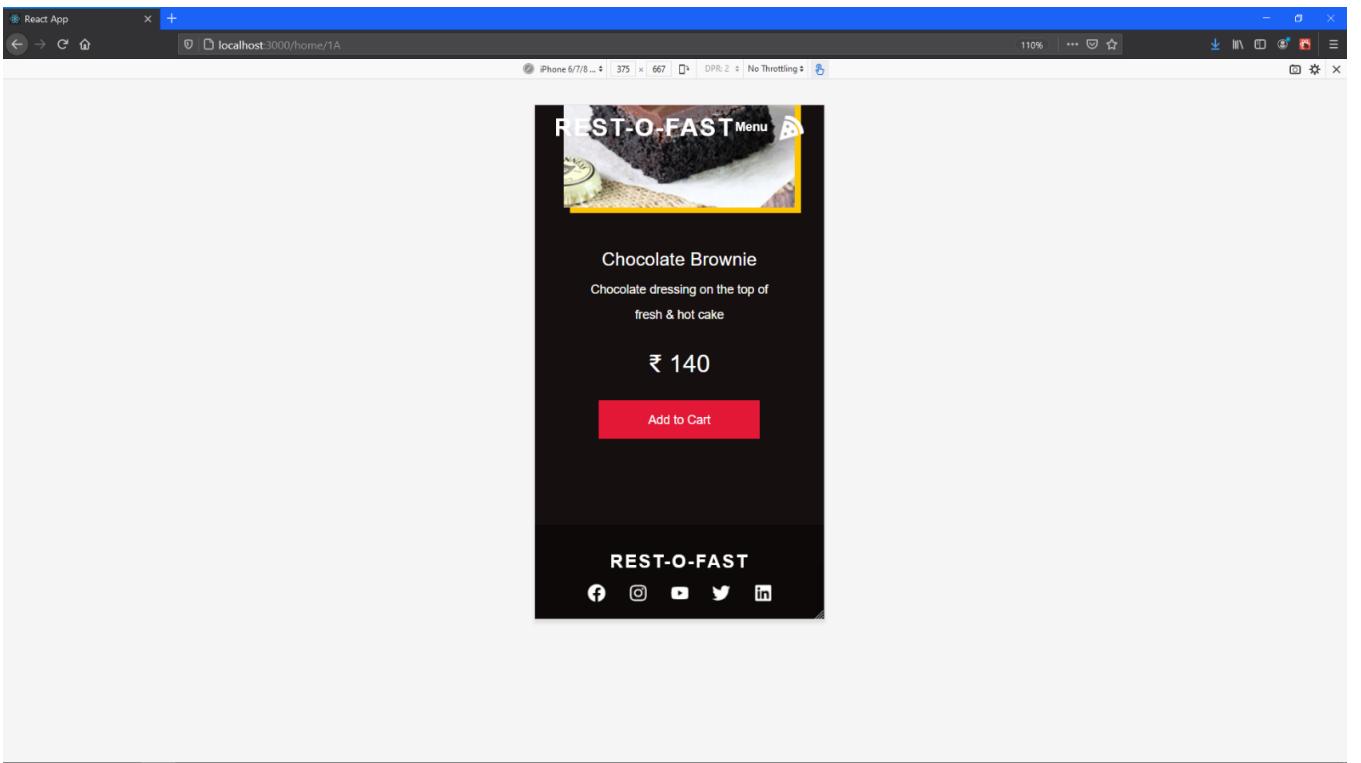
Responsive (7)



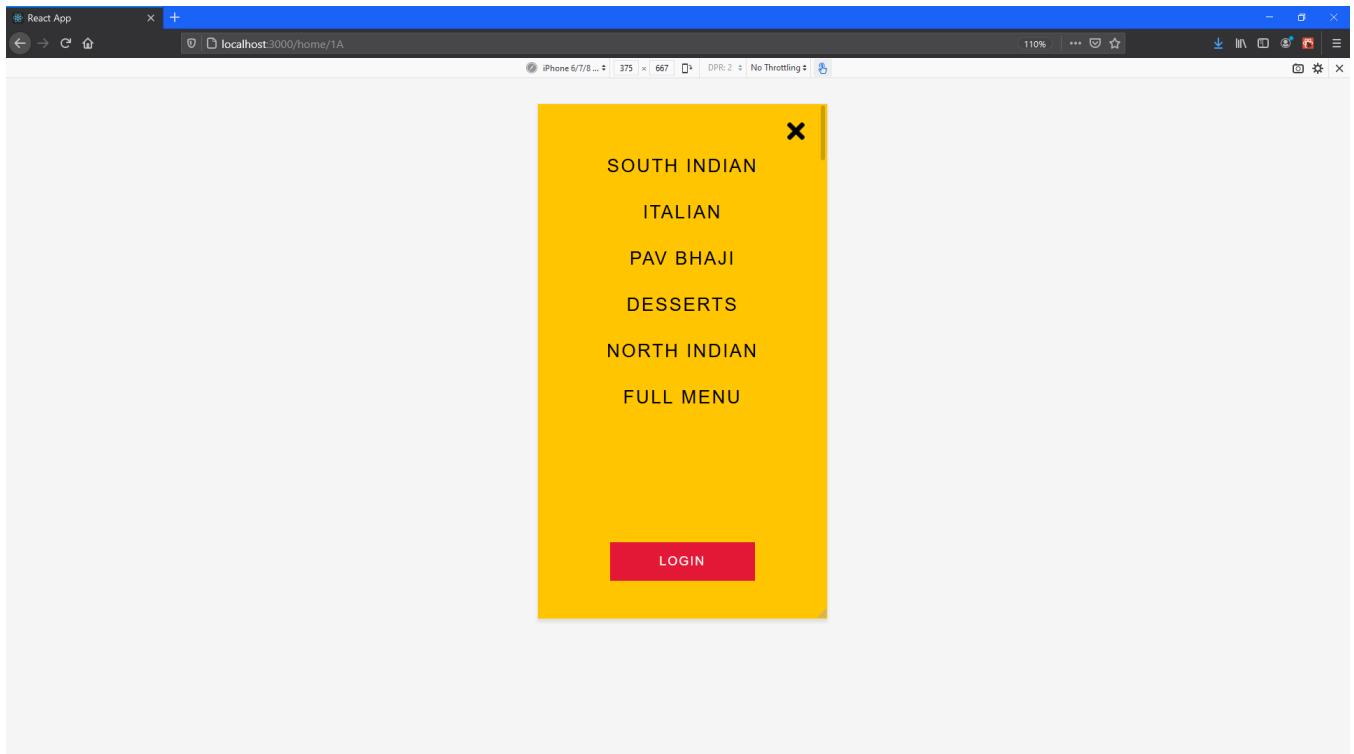
Responsive (8)



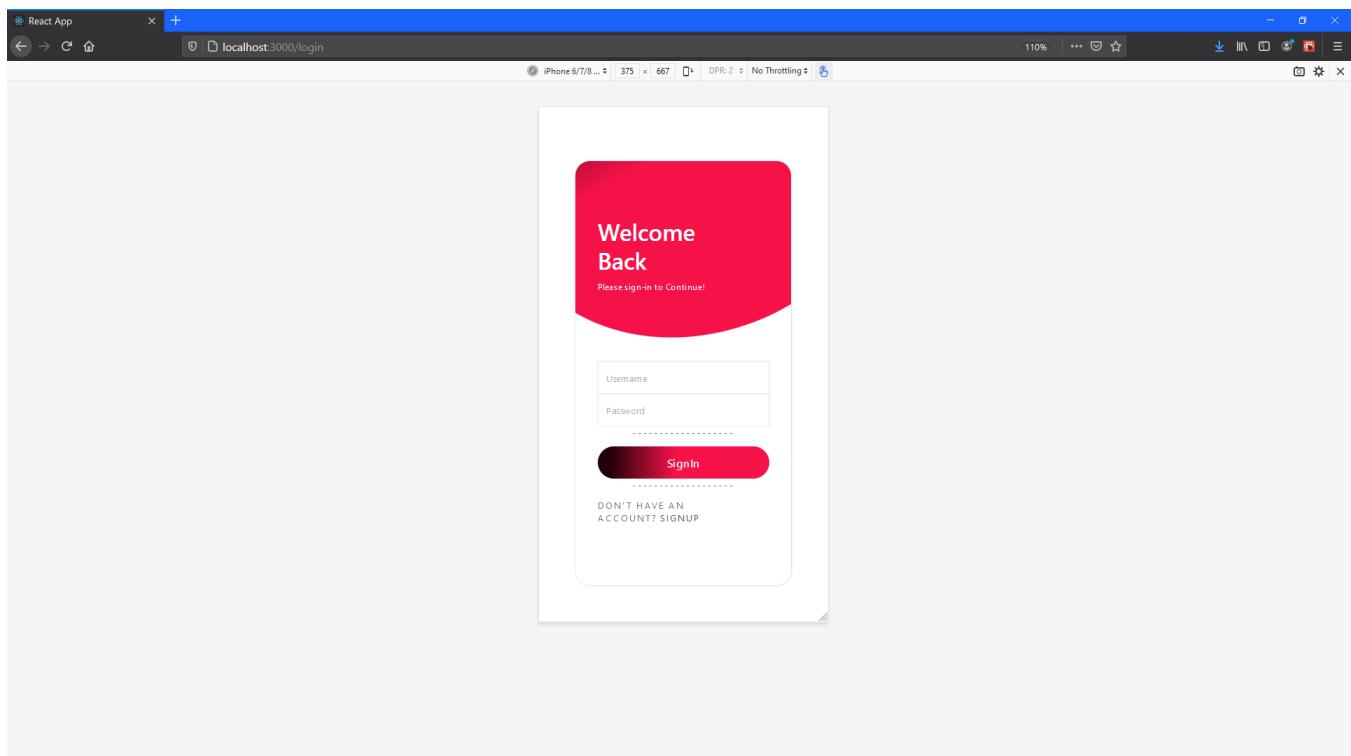
Responsive (9)



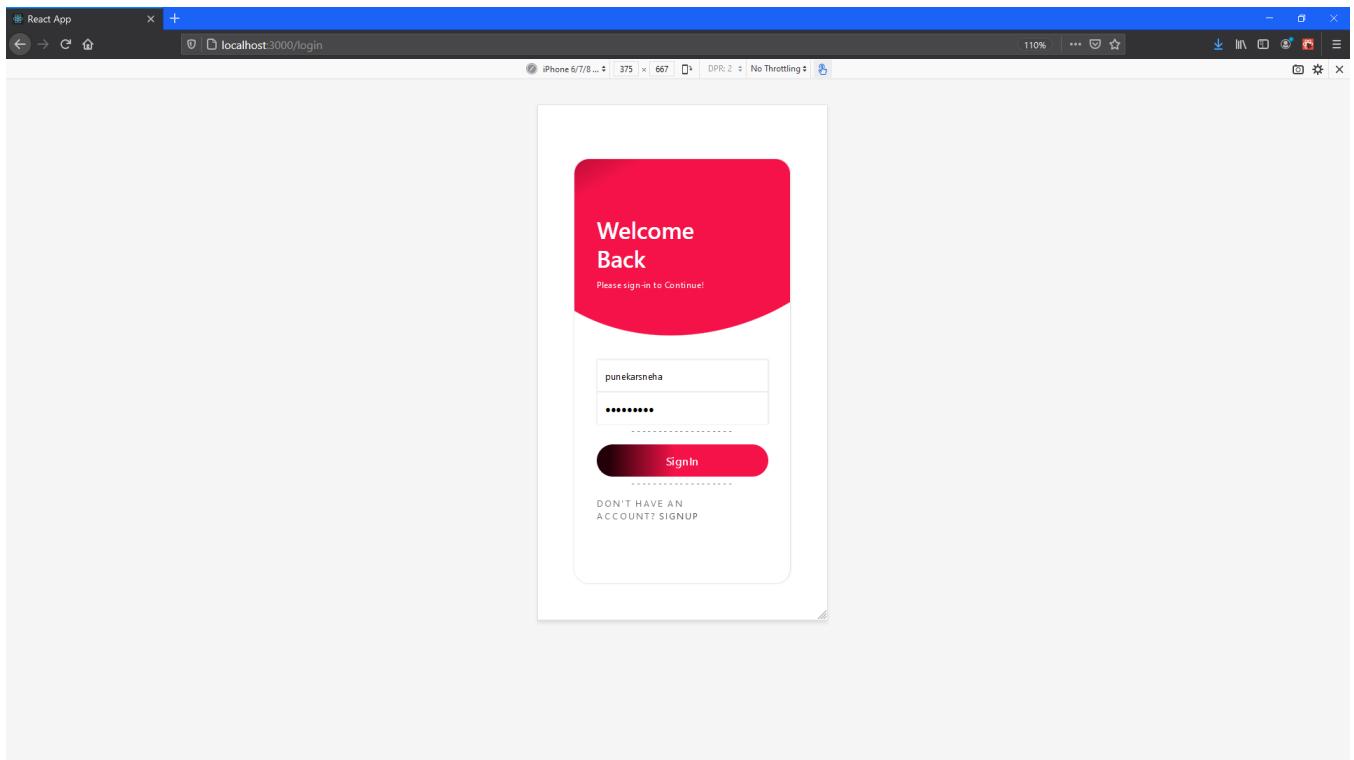
Responsive (10)



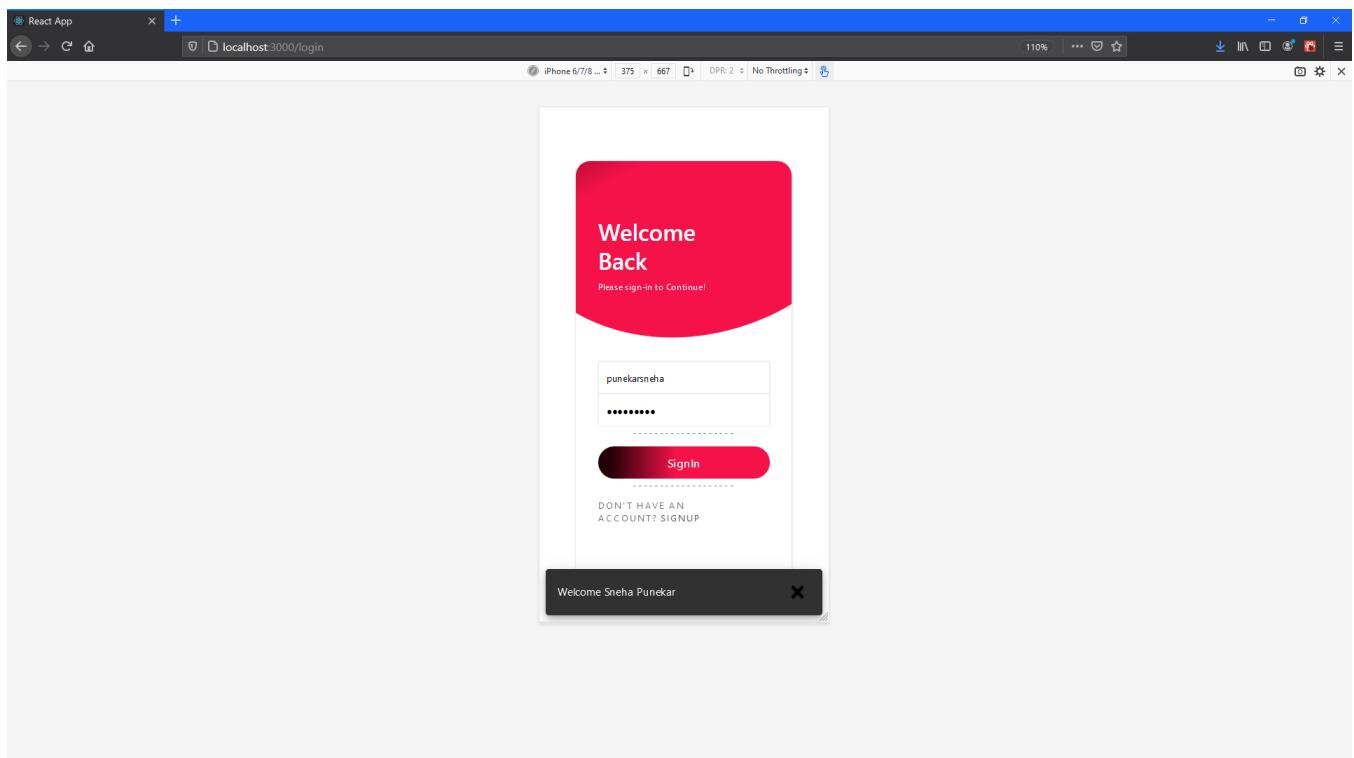
Responsive (11)



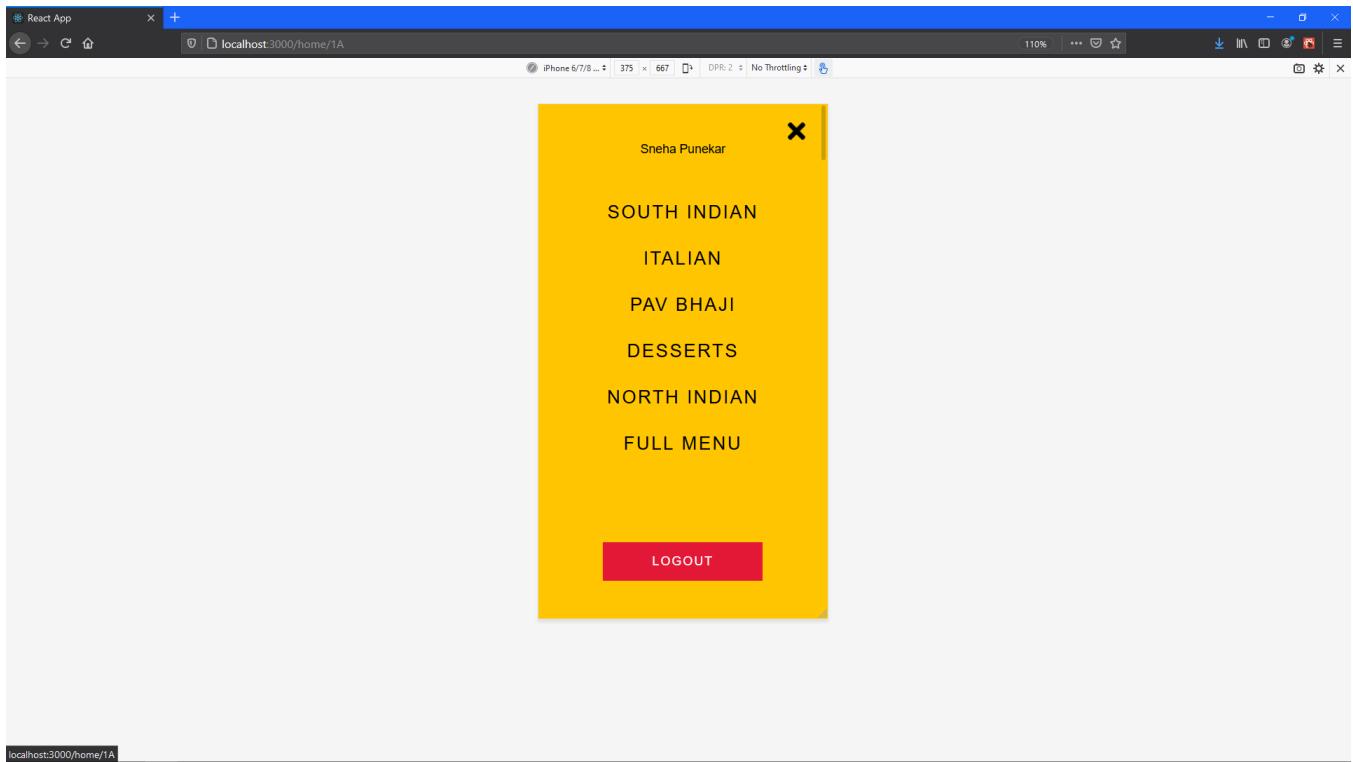
Responsive (12) Login Screen



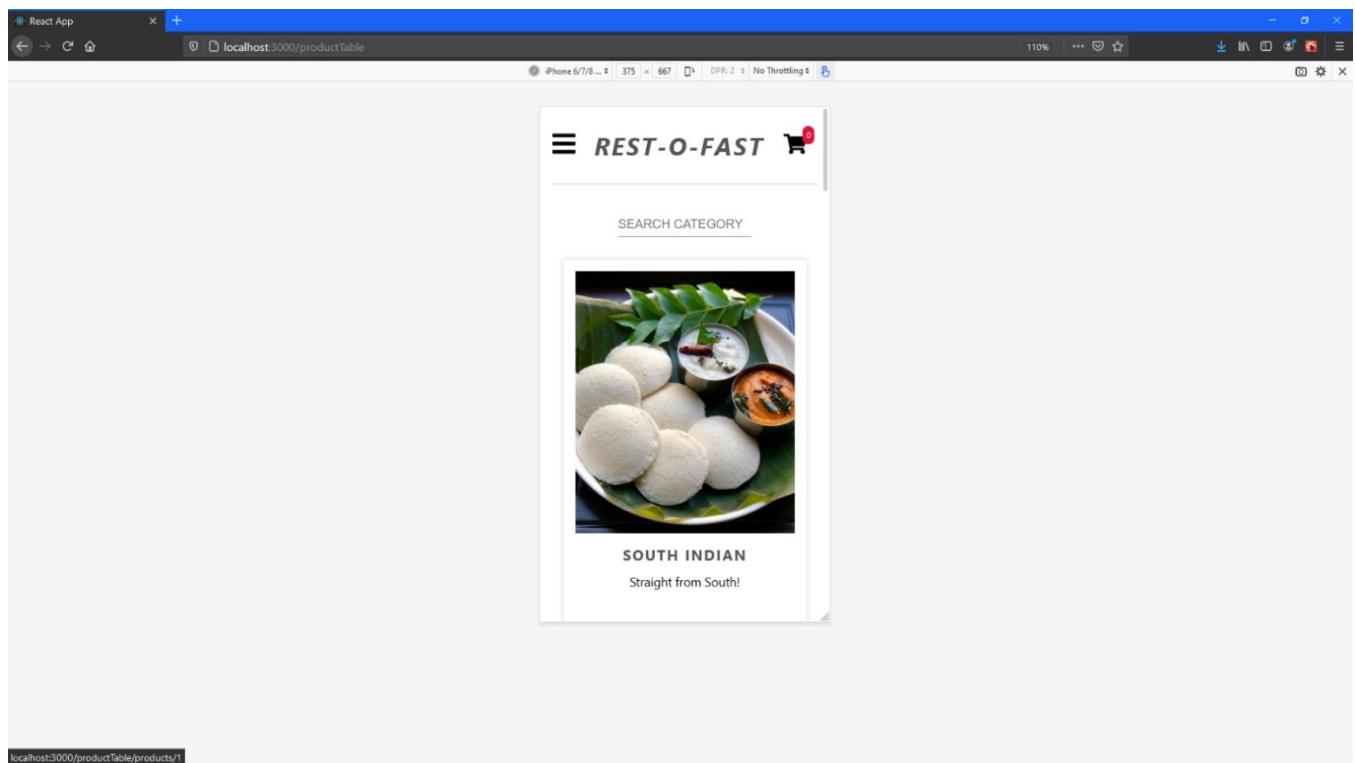
Responsive (13) Login Screen



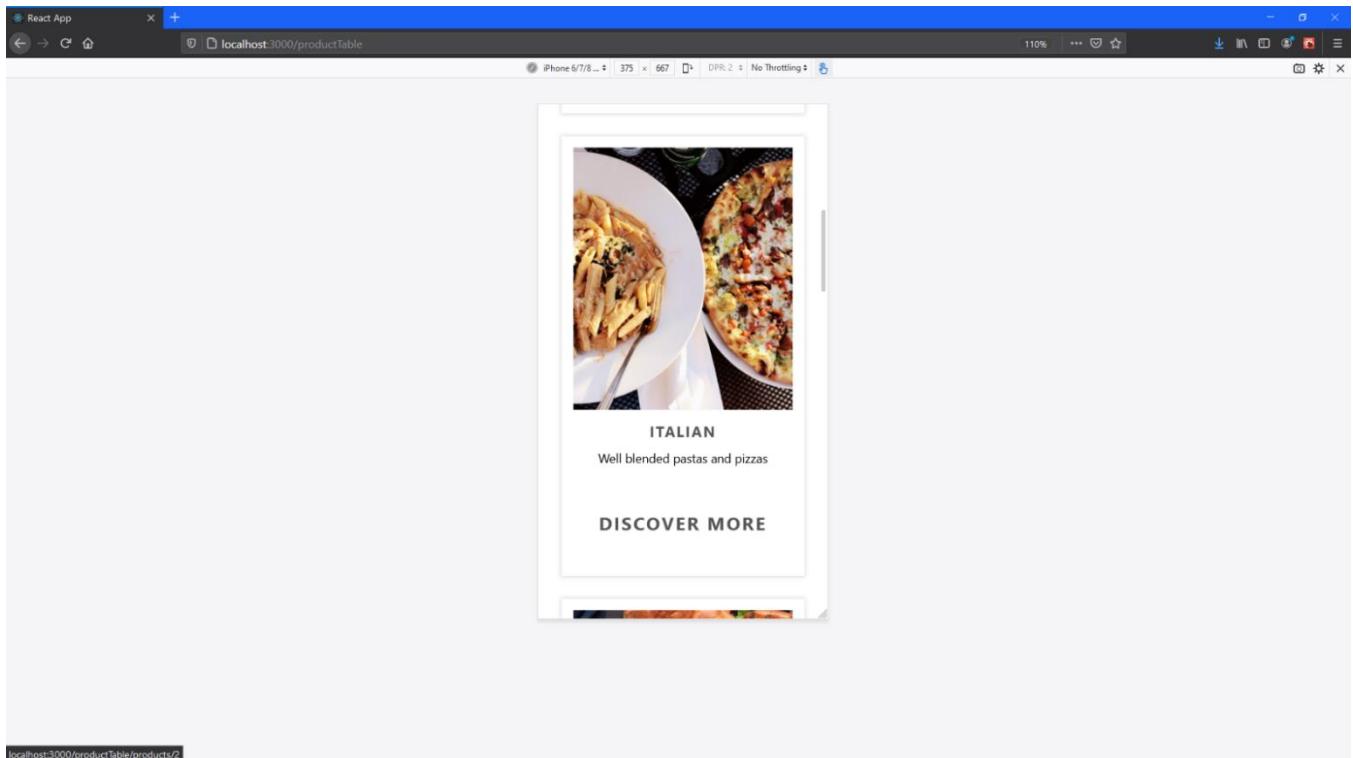
Responsive (13) Login Screen



Responsive (14) Logged in Status

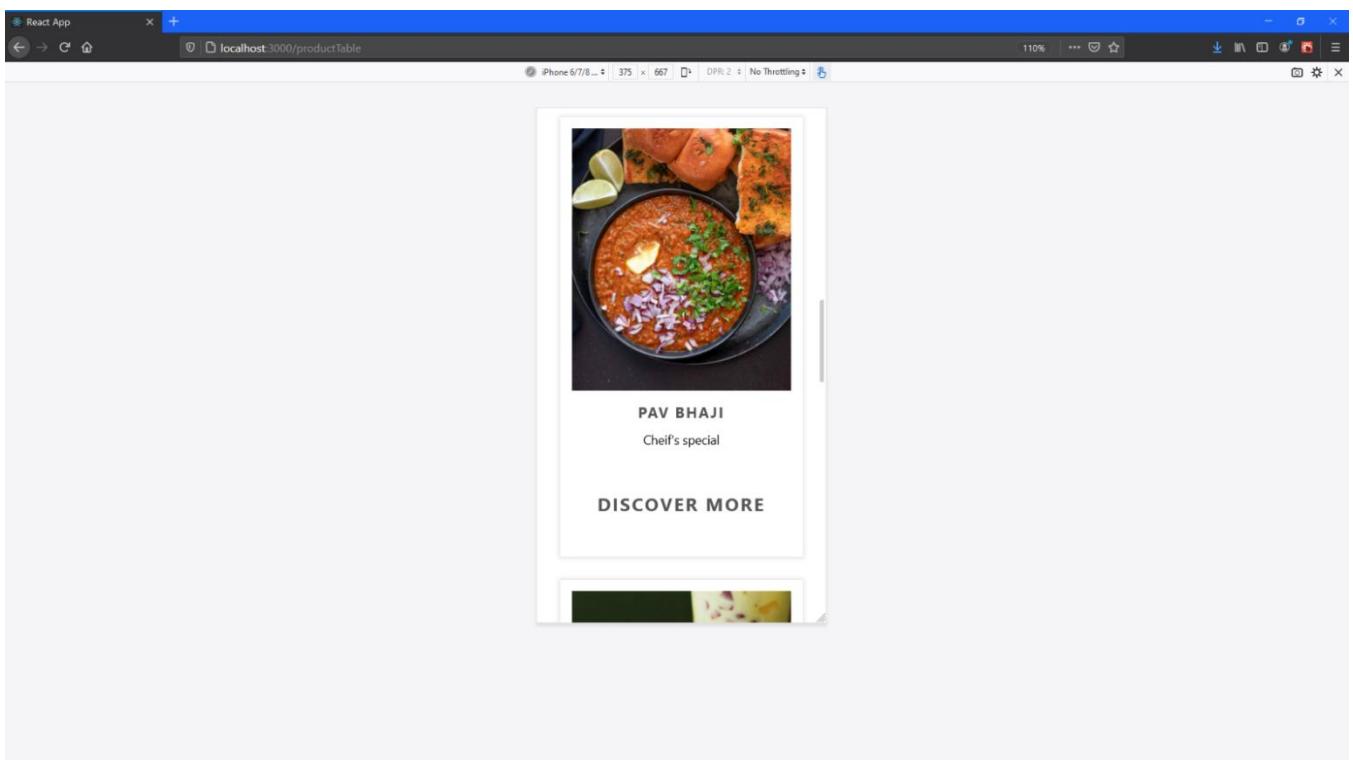


Responsive (15) Category Menu

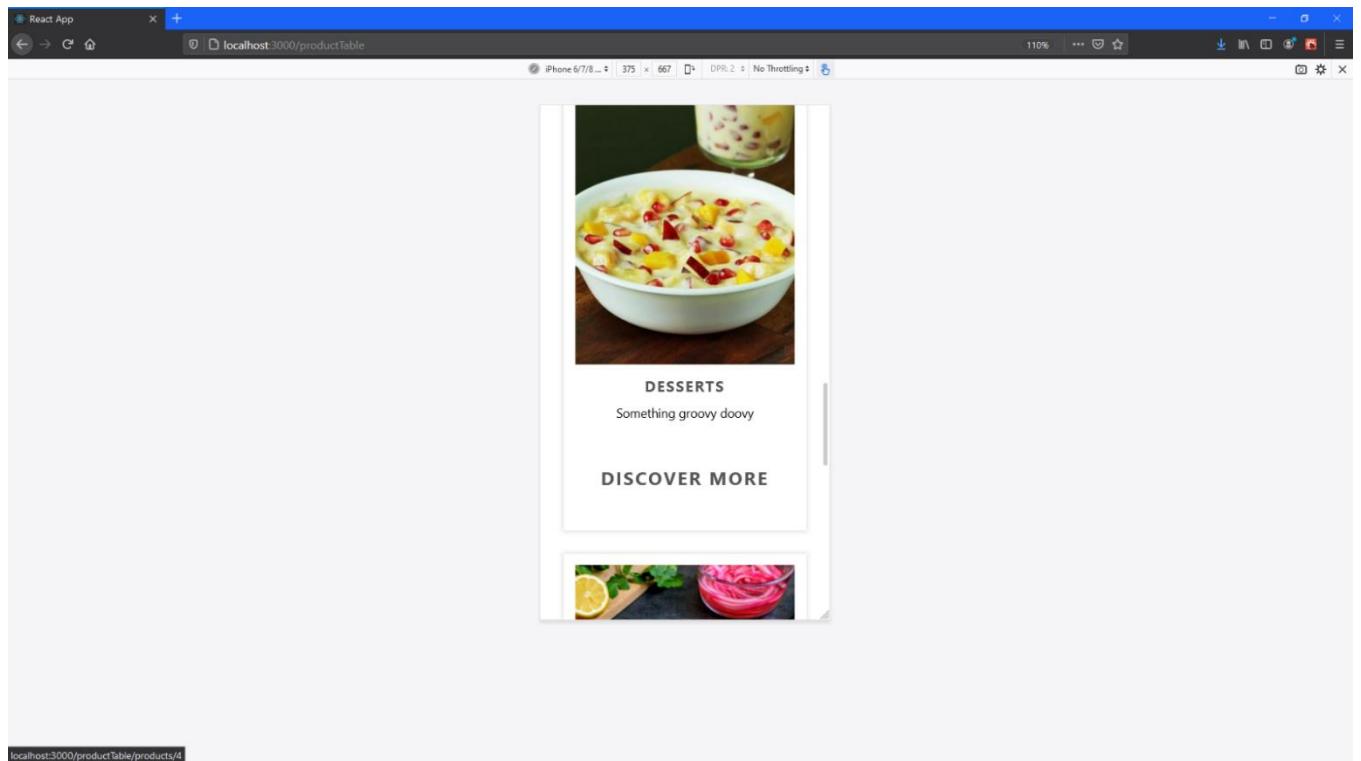


localhost:3000/productTable/products/2

Responsive (16) Category Menu

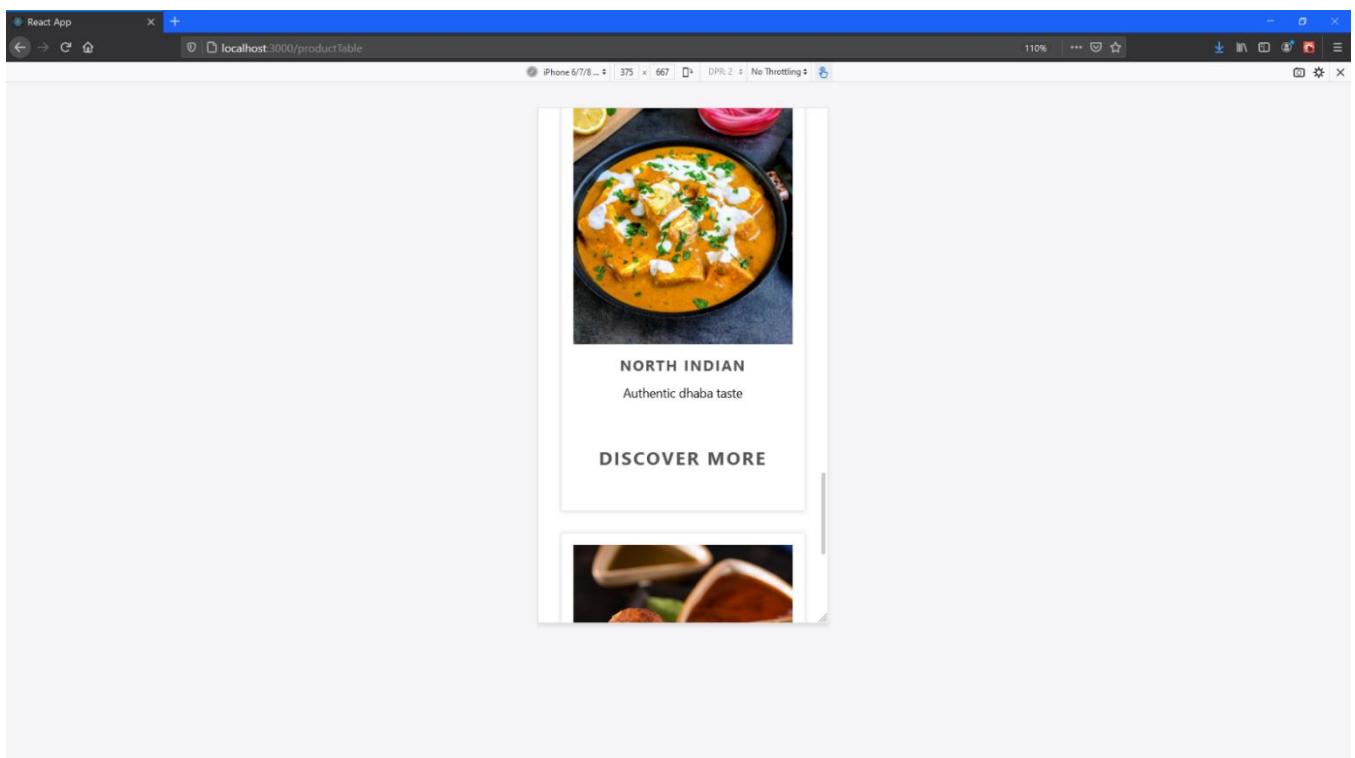


Responsive (17) Category Menu

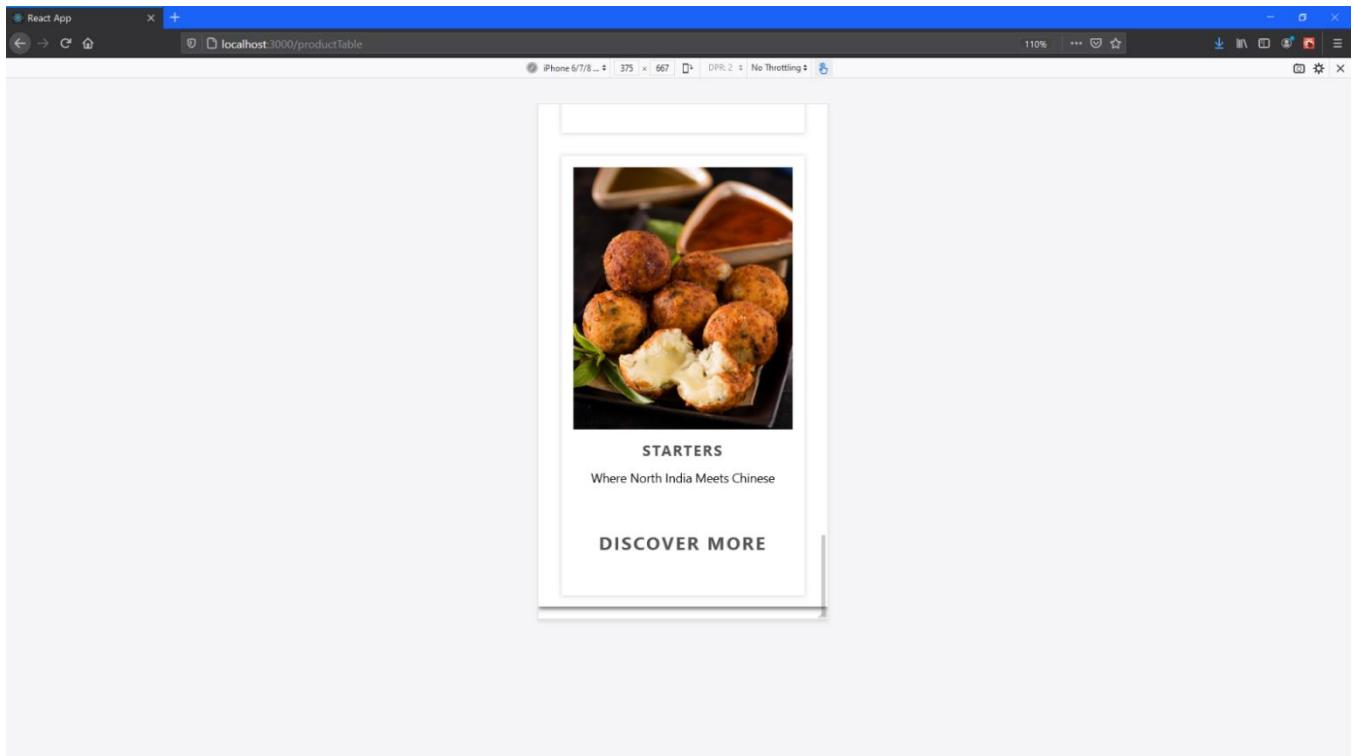


localhost:3000/productTable/products/4

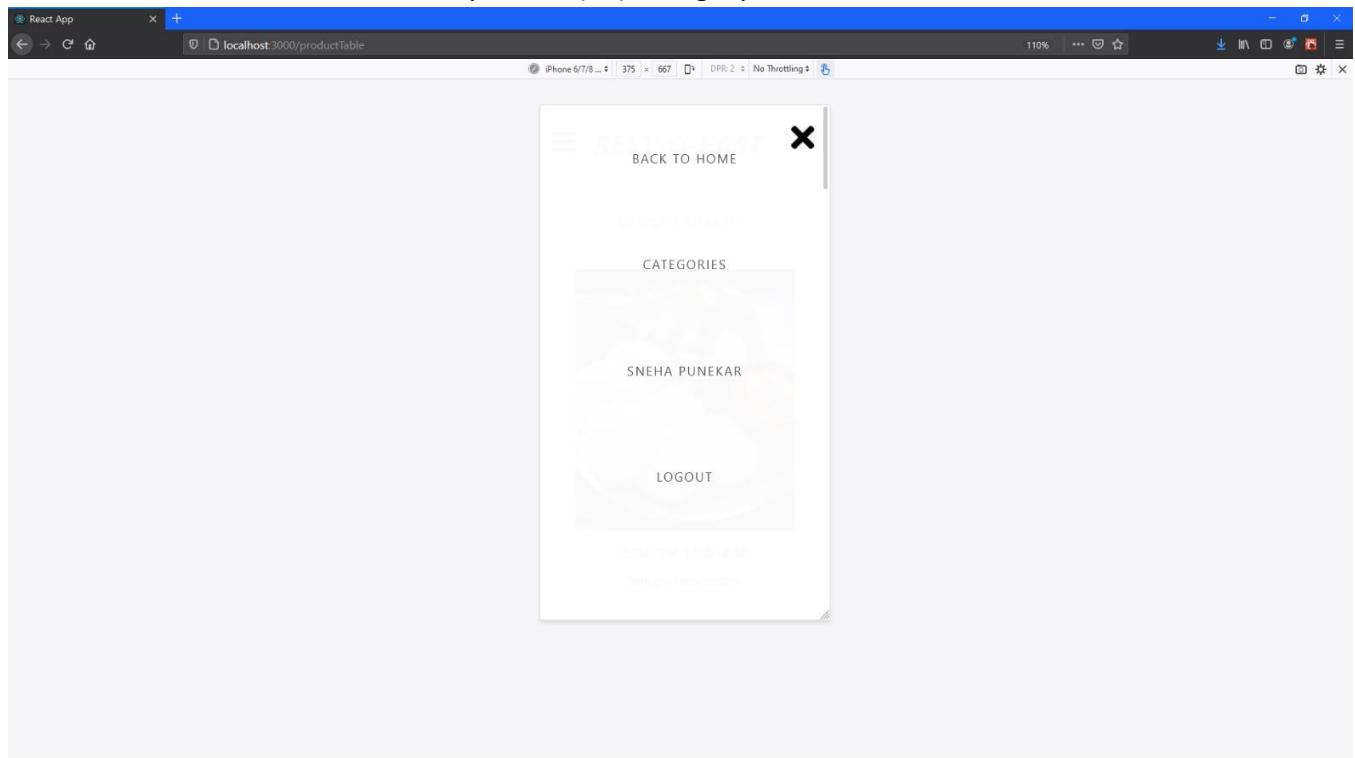
Responsive (18) Category Menu



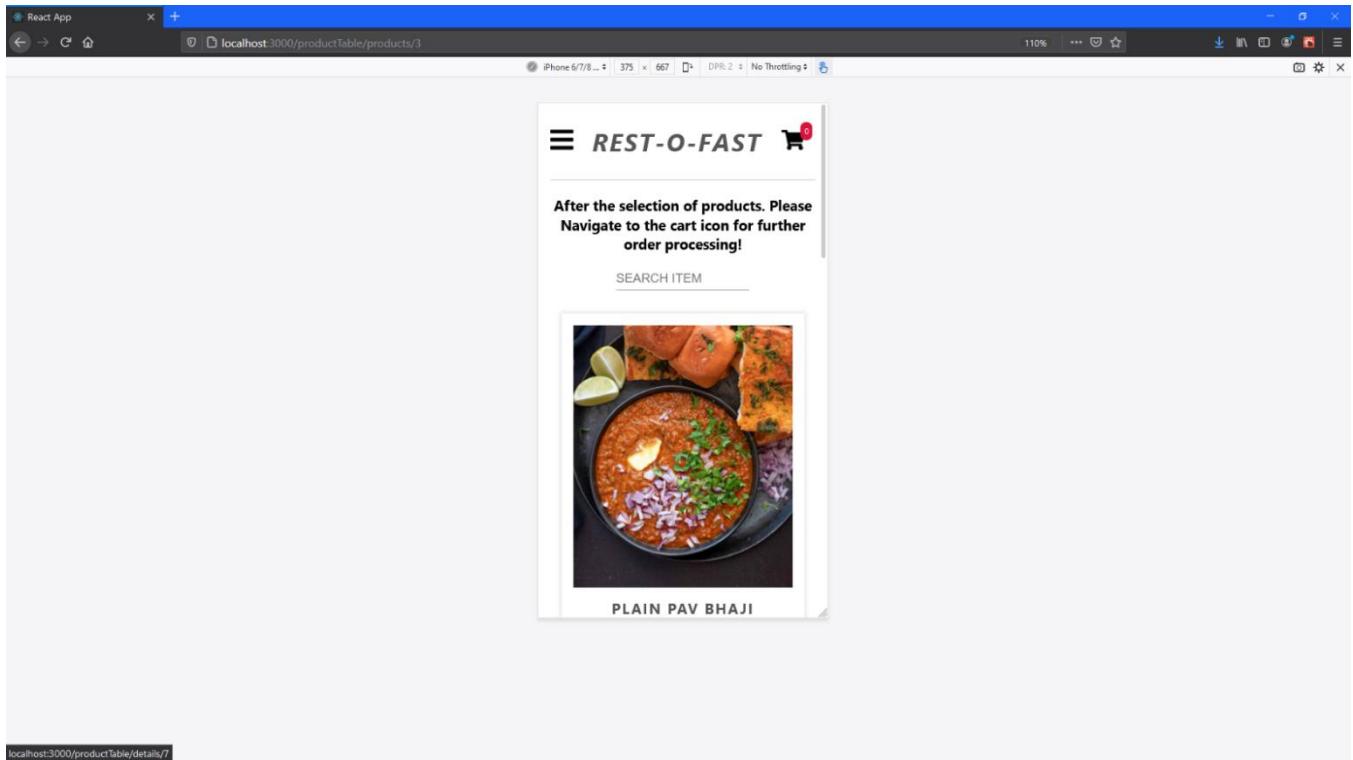
Responsive (19) Category Menu



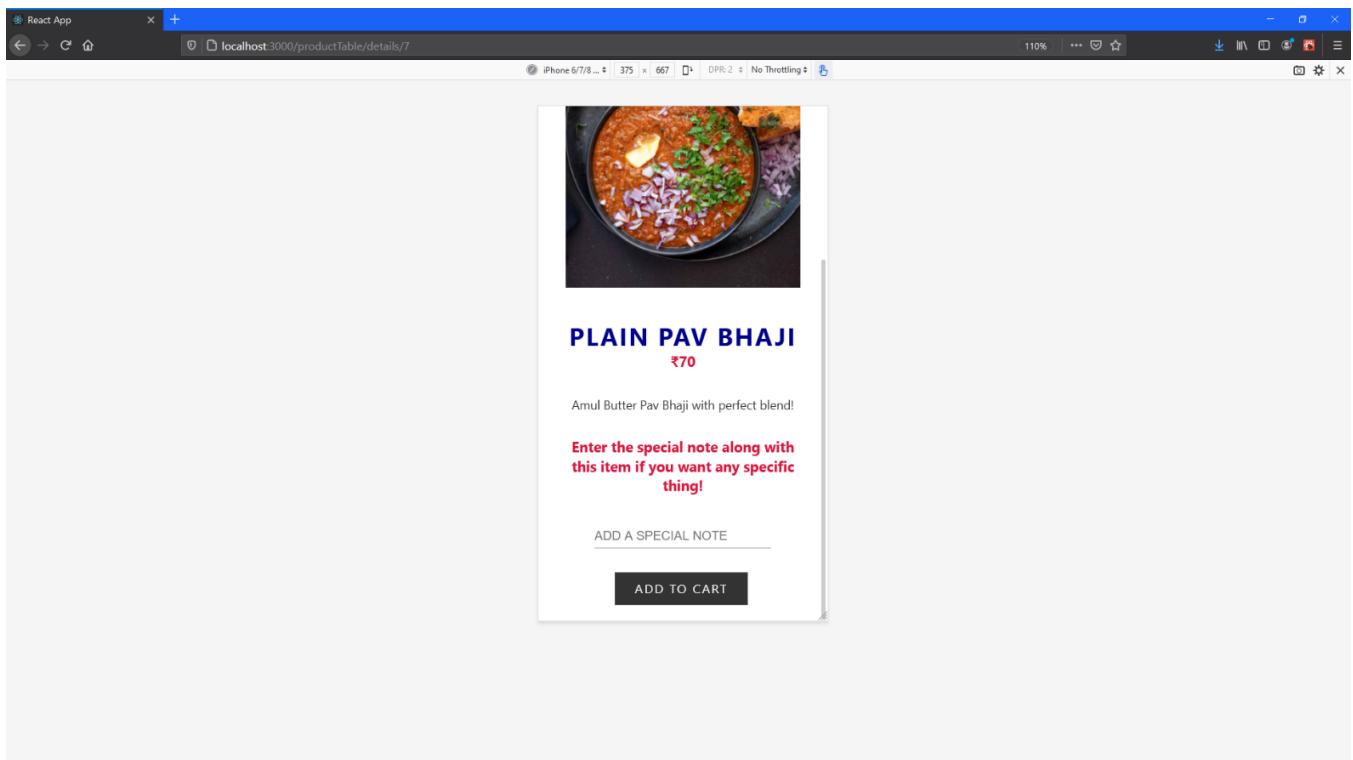
Responsive (20) Category Menu



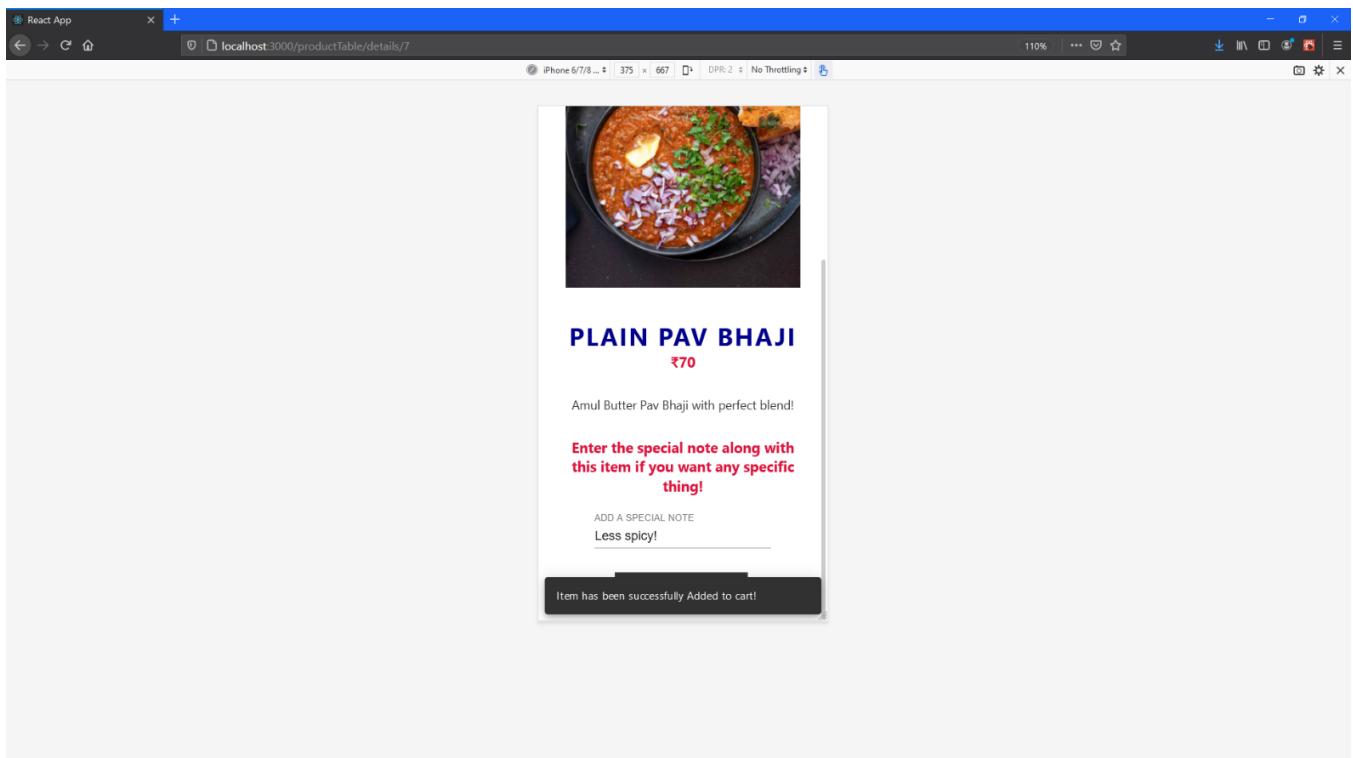
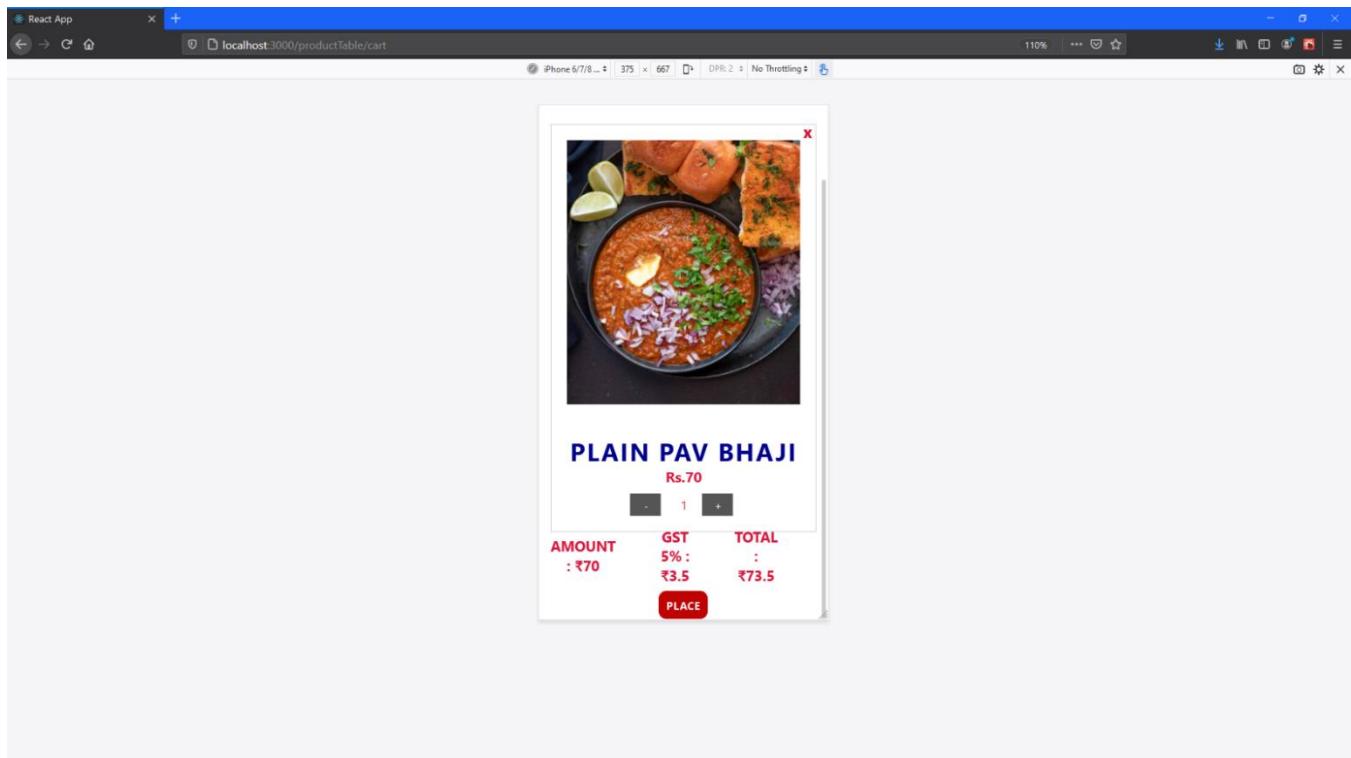
Responsive (21) Menu

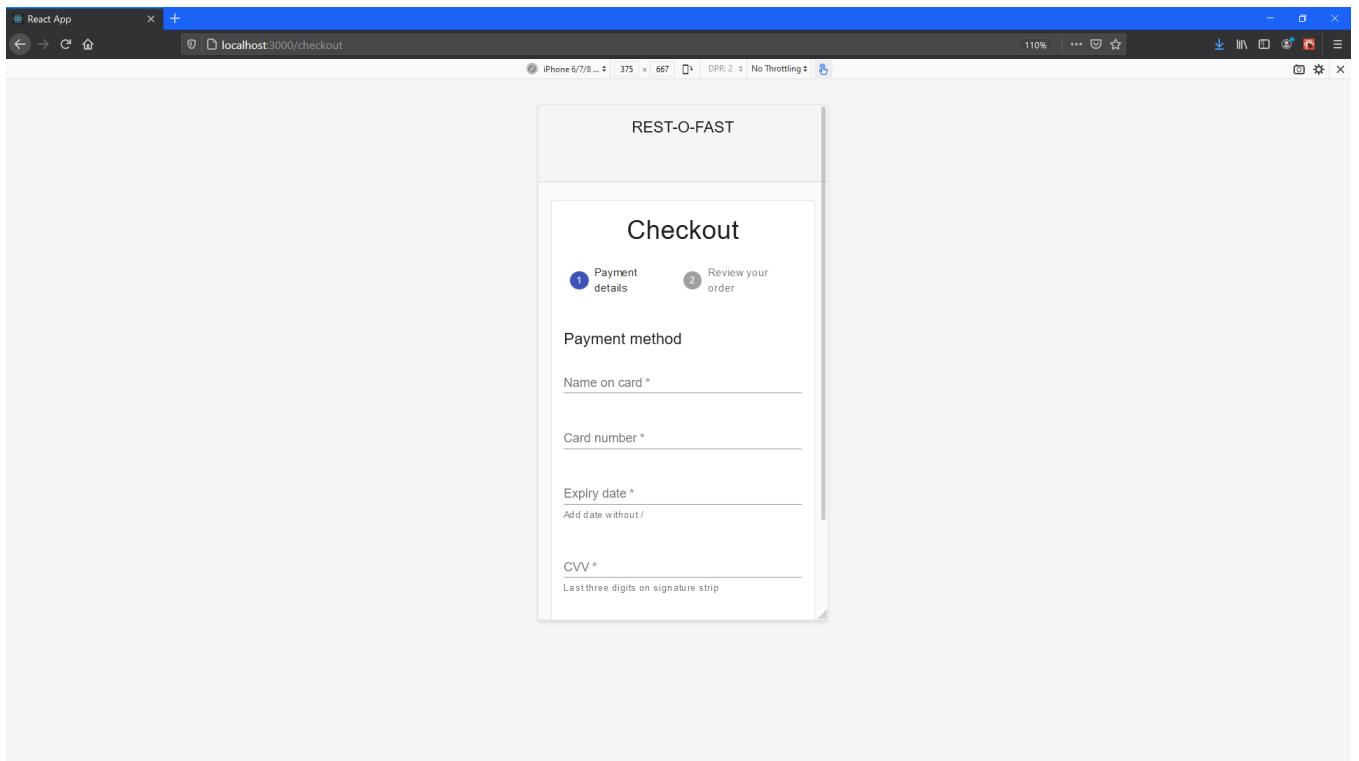


Responsive (22) Category Pav Bhaji Selected

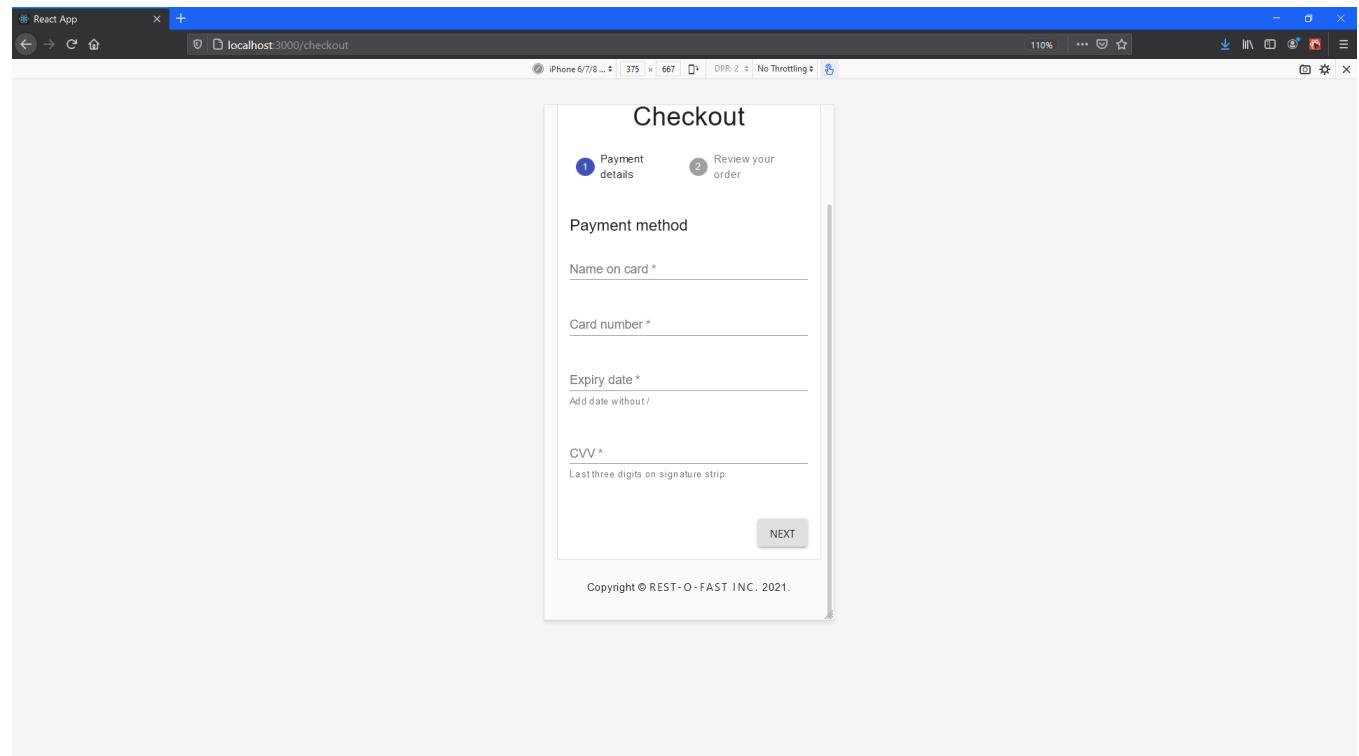


Responsive (23)

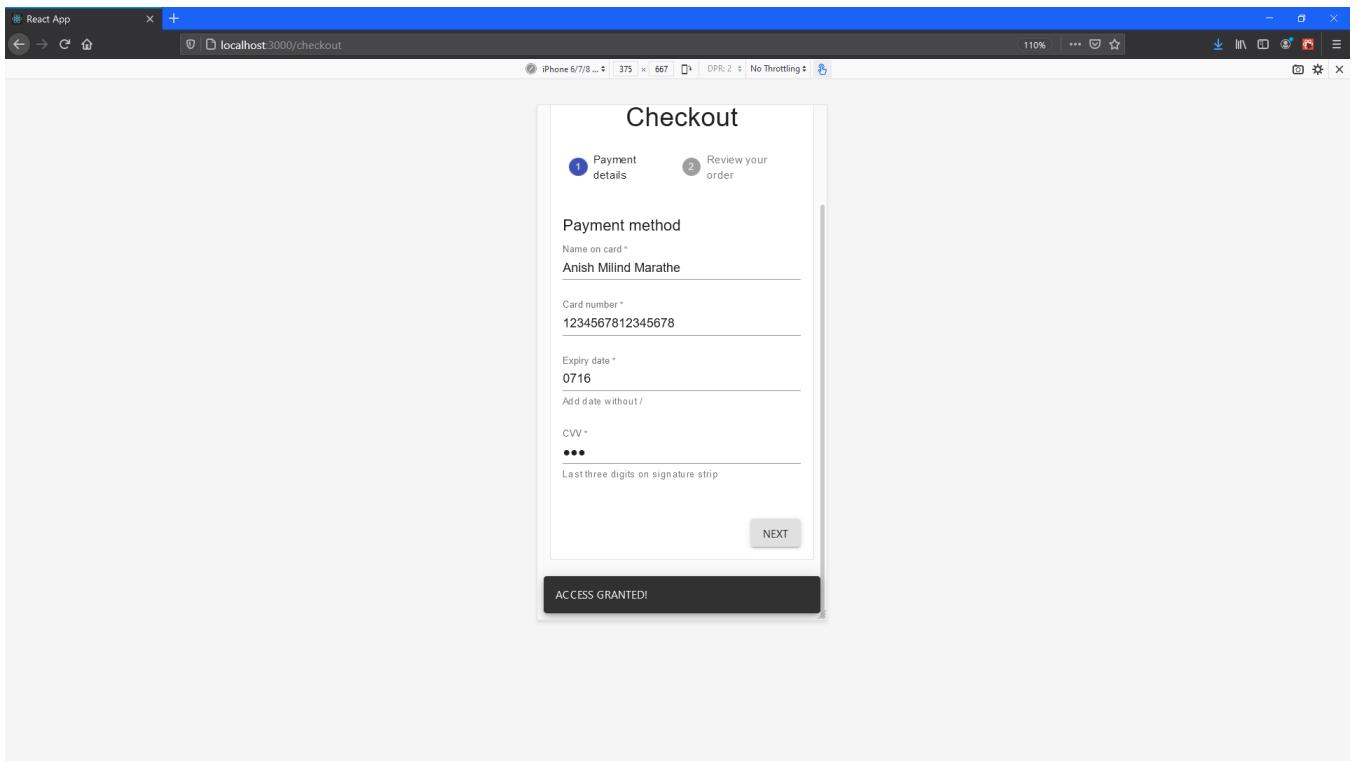
**Responsive (24)****Responsive (25) GST and Total Amount**



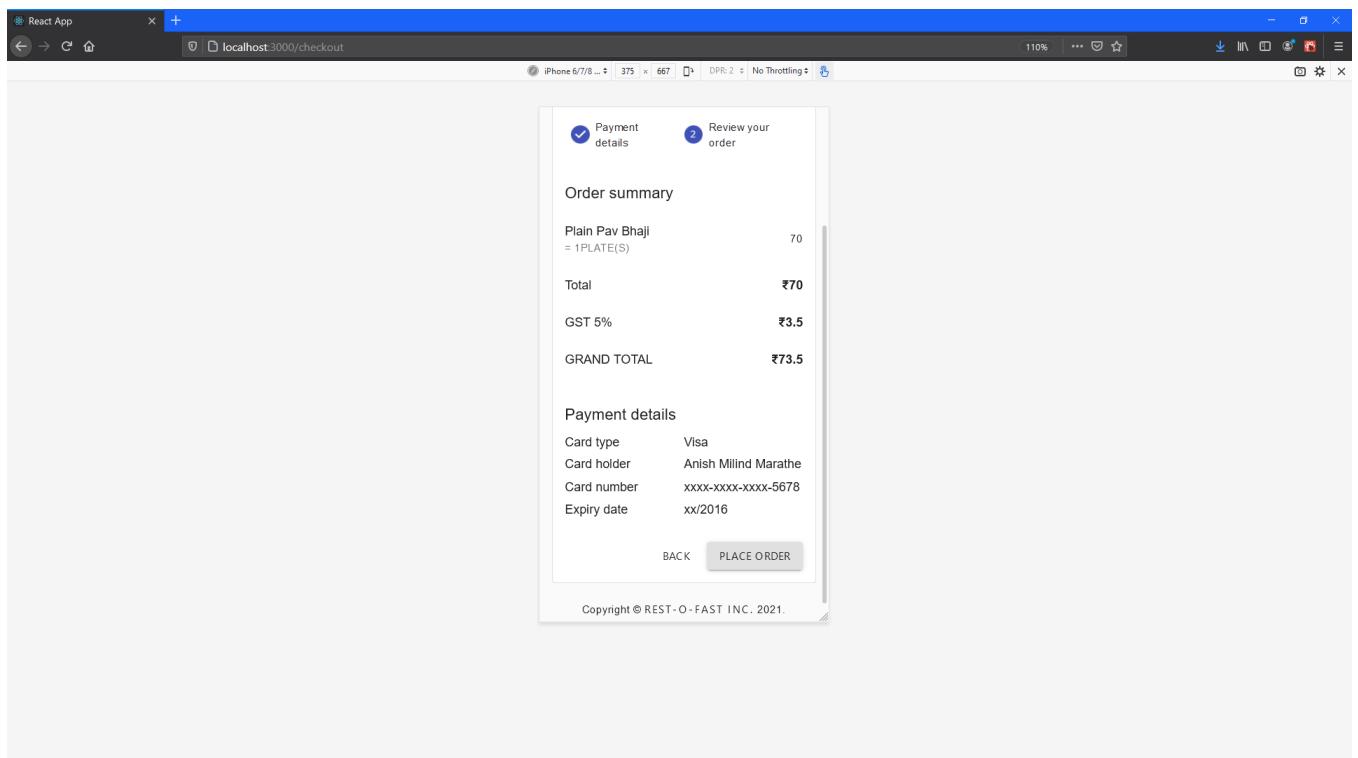
Responsive (26) Checkout Window



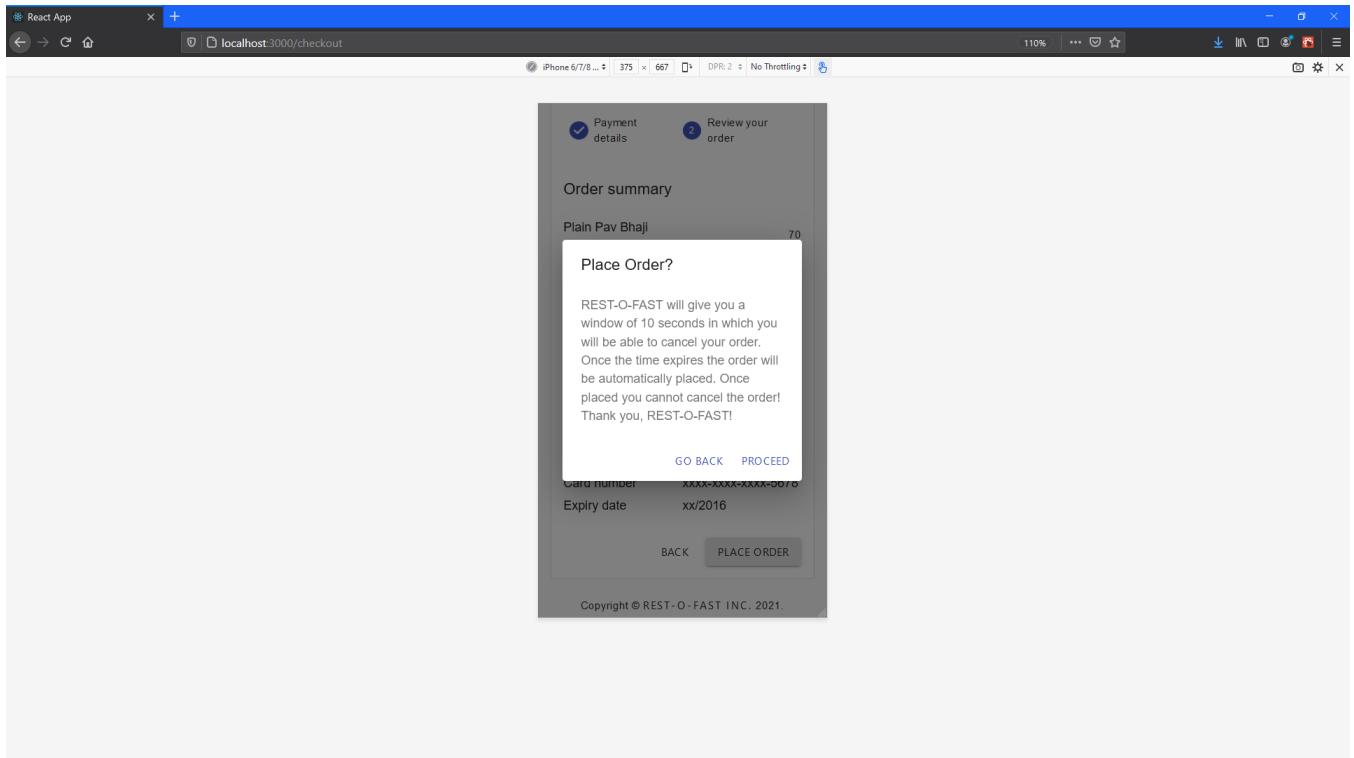
Responsive (27) Checkout Window



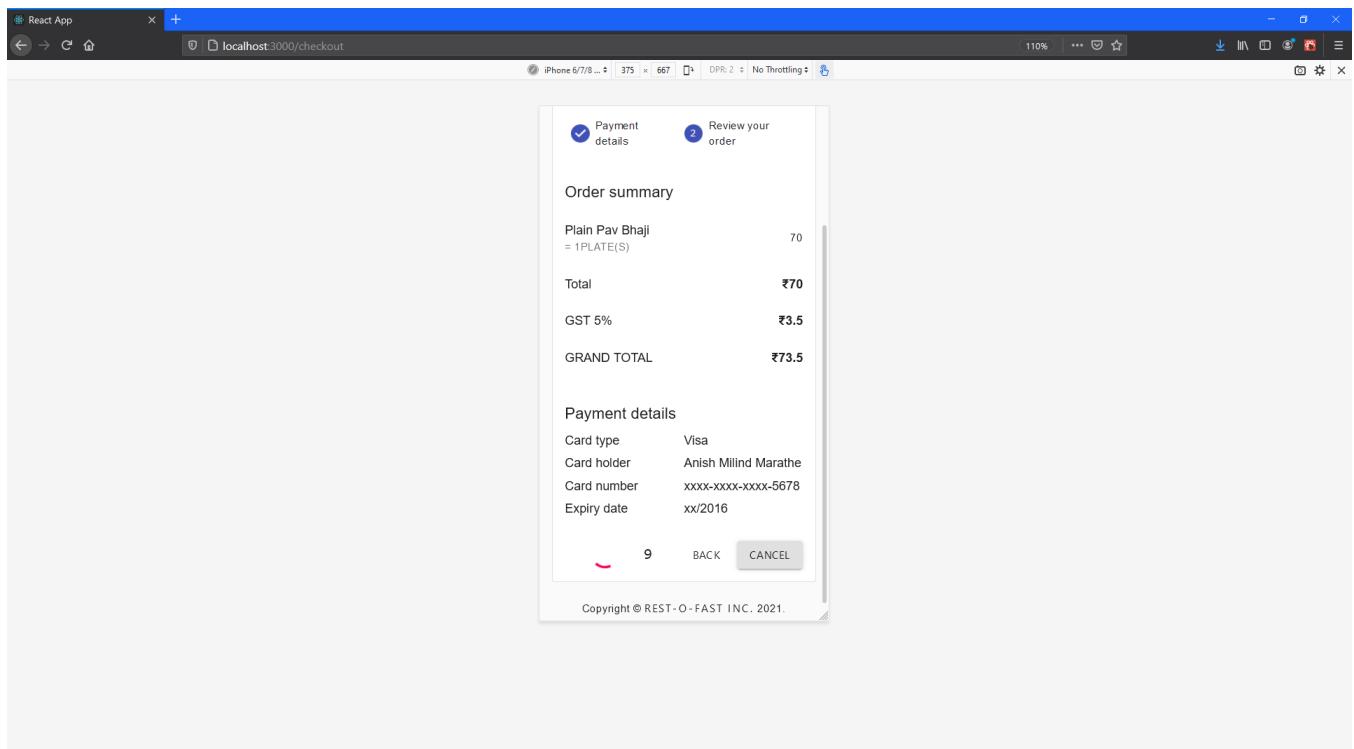
Responsive (28) Checkout Window



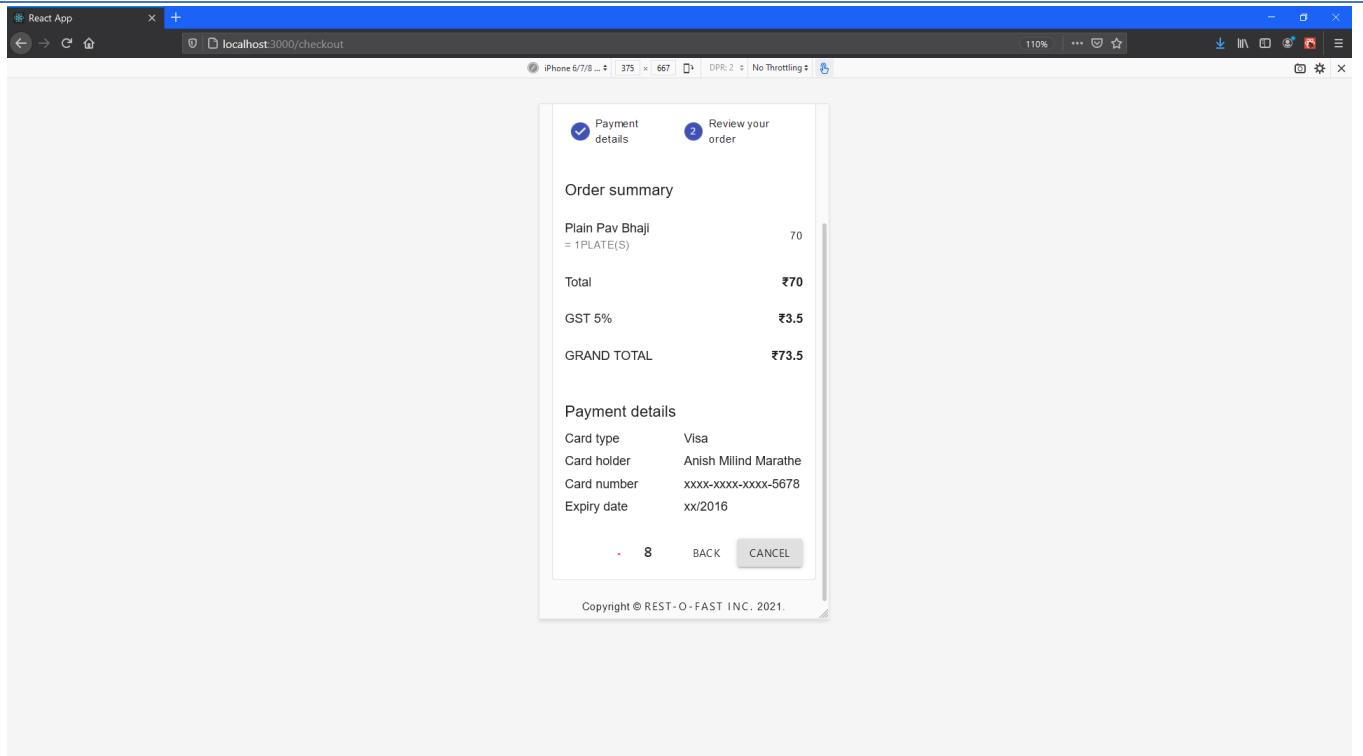
Responsive (29) Order Summary



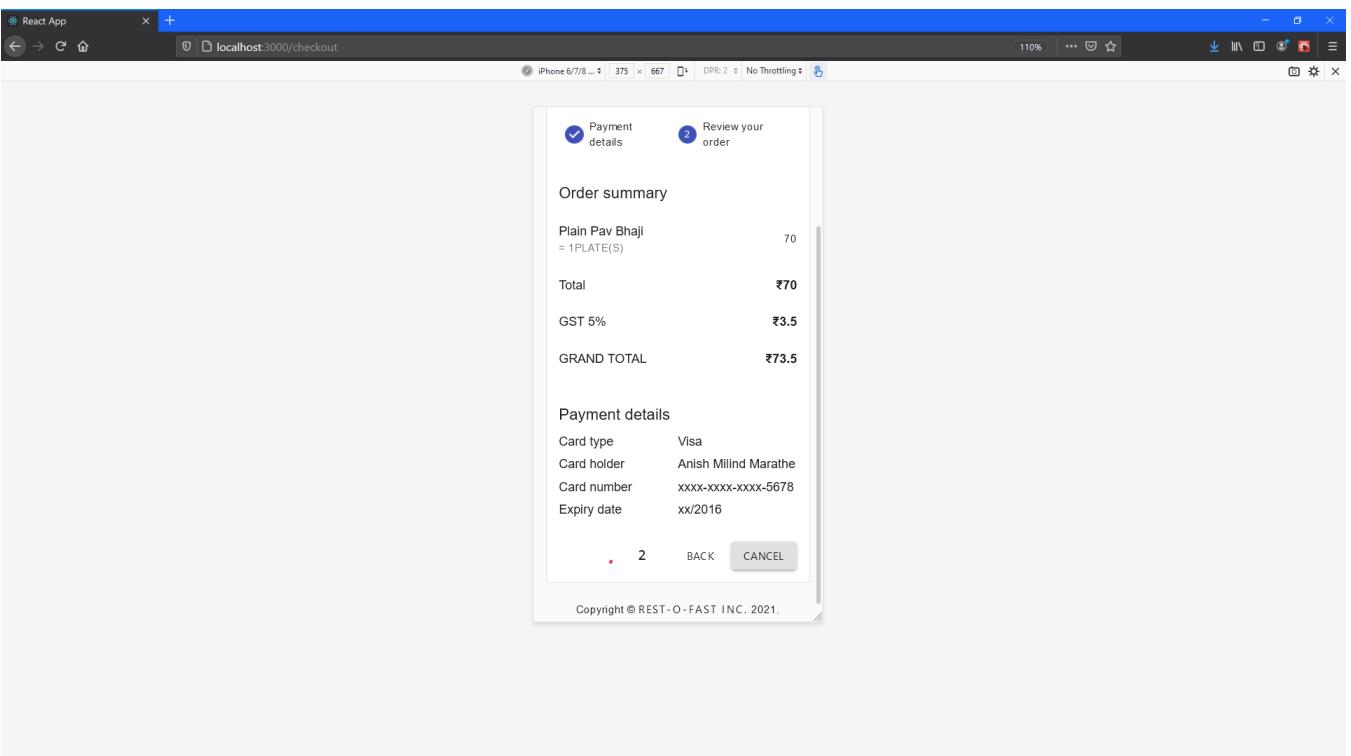
Responsive (30)



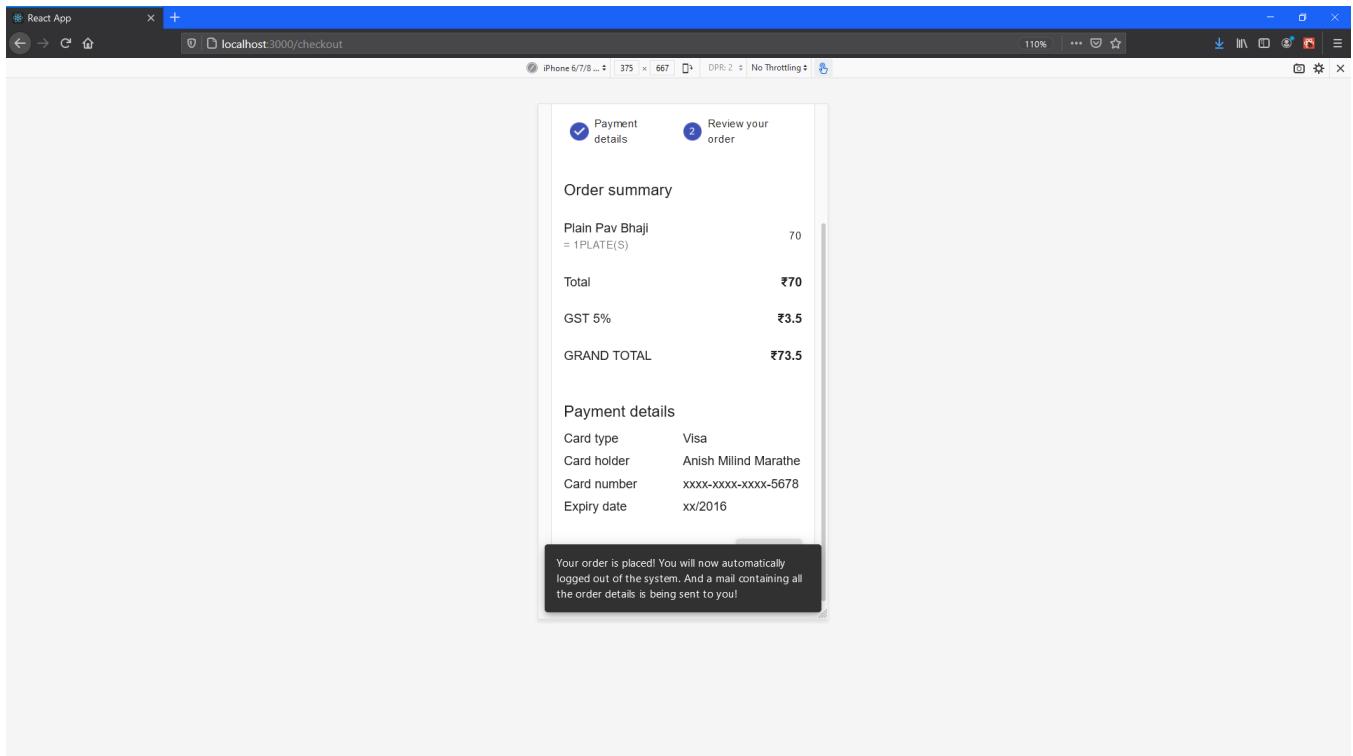
Responsive (31)



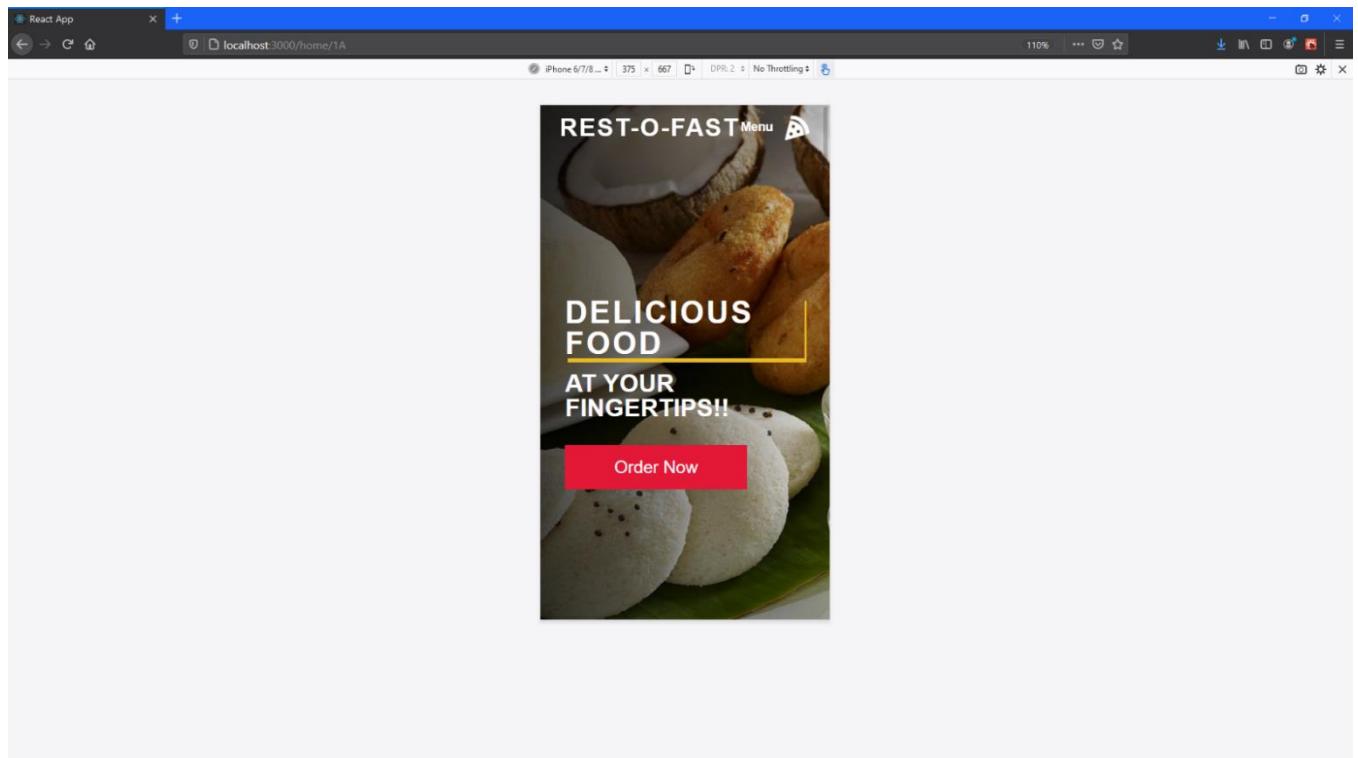
Responsive (32)



Responsive (33)



Responsive (34)



Responsive (35) Back to home page

1:18



Search in emails

S

PRIMARY

F

food.restofast
REST-O-FAST Food Invoice
PFA an invoice of the food which is on its wa...

1:16 pm



PDF

8

B

Balaji Devi Singh
Tata Consultancy Services

D

Dinesh Kumar
Tata Consultancy Services

S

Shivam Patel
Tata Consultancy Services

S

Shivam Patel
Tata Consultancy ServicesShivam Patel
Tata Consultancy Services99+
Mail

Meet

<

-

Invoice mail received on a smart phone!

1:18

4G



REST-O-FAST Food Invoice

Inbox



food.restofast@gmail.com 1:16 pm

to me ▾

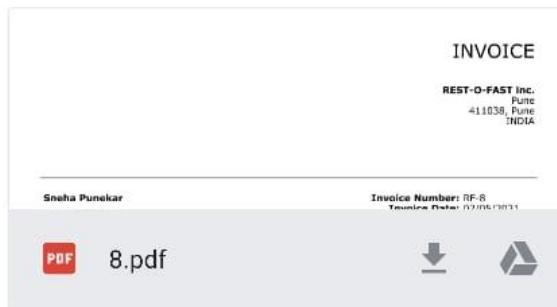


PFA an invoice of the food which is on its way to you!

Thank you

REST-O-FAST

EAT,SHARE,CELEBRATE



Reply

Reply all

Forward



Opened Mail in Mobile

INVOICE

REST-O-FAST inc.
Pune
411038, Pune
INDIA

Sneha Punekar
, Pune
INDIA

Invoice Number: RF-8
Invoice Date: 02/05/2021

Products	Quantity	Price	Total
Plain Pav Bhaji	1	₹ 70.00	₹ 70.00

Subtotal: ₹ 70.00
GST 5%: ₹ 3.50
Total: ₹ 73.50

This is a system generated invoice and you have already paid the bill! Thank You, REST-O-FAST.

Invoice in pdf form



Each QR code represents a seat. E.g., Table Number 1 has A and B seats, so above 2 QR codes are table number 1A and 1B respectively! And below mentioned are the two codes 2A and 2B respectively!



4. Testing

4.1 Importance of Testing

† Software Testing Saves Money:

Testing has many benefits and one of the most important ones is cost-effectiveness. Having testing in your project can save money in the long run. Software development consists of many stages and if bugs are caught in the earlier stages it costs much less to fix them. That is why it's important to get testing done as soon as possible. Getting testers or QA's who are technically educated and experienced for a software project is just like an investment and your project will benefit budget-wise.

† Security:

Another important point to add is security. This is probably the most sensitive and yet most vulnerable part. There have been many situations where user information has been stolen or hackers have gotten to it and used it for their benefit. That is the reason people are looking for trusted products that they can rely on. As a user of many products and apps, I am always looking for products that I would give my information to with confidence and know that it will be safe; perhaps so do you. Our personal information and what we do with it should stay as private as possible, especially using services where it is a vulnerability to us, for example, banking information, security details etc.

How testing can help your product security:

- The user gets a trustworthy product.
- Keeps user's personal information and data safe.
- Vulnerability free products.
- Problems and risks are eliminated beforehand.
- Saves a lot of troubles later on.

† Product Quality:

In order to make your product vision come to life, it has to work as planned. Following product requirements is imperative, to an extent, because it helps you get the wanted end results. Products always serve users in some ways, so it's very important that it brings the value it promises, hence it should work properly to ensure great customer experience. Development of an app, for example, has many processes included and testing gets a glimpse of every bit – it checks if the app's graphics are aligned properly, tests the main functionality, checks if menus are intuitive, etc. After developers' fix issues, sometimes another issue may appear unexpectedly somewhere else, that's just how testing goes sometimes, so it's great to find those issues to be resolved and be a part of quality product being delivered to marketplace.

† Customer Satisfaction:

The ultimate goal for a product owner is to give the best customer satisfaction. Reasons why apps and software should be tested is to bring the best user experience possible. Being the best product in this saturated market will help you gain trustworthy clients which will have great long-term effects. Once users will have amazing customer experience they will, without a doubt, tell their friends and word to mouth will make it advertise itself, but this works both ways. Customer trust is not easy to earn, especially if your product is glitching and functioning only 60% of the time. You are a user of many products and perhaps have had horrible experiences that made you delete the app and tell others not to use it. These days the market is so saturated that first impression is important, otherwise users will find another product that meets his needs.

4.2 Types of Testing

- **Smoke Testing:** is the process of initial testing in which tester looks for the availability of all the functionality of the application in order to perform detailed testing on them. (Main check is for available forms)

- **Sanity Testing:** is a type of testing that is conducted on an application initially to check for the proper behaviour of an application that is to check all the functionality are available before the detailed testing is conducted by on them.
 - **Regression Testing:** is one of the best and important testing. Regression testing is the process in which the functionality, which is already tested before, is once again tested whenever some new change is added in order to check whether the existing functionality remains same.
 - **Re-Testing:** is the process in which testing is performed on some functionality which is already tested before to make sure that the defects are reproducible and to rule out the environments issues if at all any defects are there.
 - **Static Testing:** is the testing, which is performed on an application when it is not been executed.
Ex: GUI, Document Testing.
 - **Dynamic Testing:** is the testing which is performed on an application when it is being executed.
ex: Functional testing.
 - **Alpha Testing:** it is a type of user acceptance testing, which is conducted on an application when it is just before released to the customer.
 - **Monkey Testing:** is the process in which abnormal operations, beyond capacity operations are done on the application to check the stability of it in spite of the users abnormal behavior.

- **Compatibility testing:** it is the testing process in which usually the products are tested on the environments with different combinations of databases (application servers, browsers...etc.) In order to check how far the product is compatible with all these environments platform combination.

- **Installation Testing:** it is the process of testing in which the tester tries to install or try to deploy the module into the corresponding environment by following the guidelines produced in the deployment document and check whether the installation is successful or not.

- **Adhoc Testing:** Adhoc Testing is the process of testing in which unlike the formal testing where in test case document is used, without that test case document testing can be done of an application, to cover that testing of the future which are not covered in that test case document. Also it is intended to perform GUI testing which may involve the cosmetic issues.

4.3 Test Cases

1. Login Screen.
2. Registration Screen.
3. OTP
4. Payment Option (Debit-card)

	Description	Process.	Input Data	Expected Result.
ROF_1	Logging in the System	1] Enter username 2] Enter password 3] Click on login	username = " xyz " and password = " abc "	User is logged in successfully.
ROF_2	Registering in the Rest-O-Fast system.	1] Enter user's Name 2] Enter email id 3] Enter password 4] Retype the password. 5] Click on REGISTER.	Name = " abc " Email = " abcdef99@g mail.com " and username = " abcd " and password = " abcdef "	User is registered.
ROF_3	Successfully Logged in the System Rest-O-Fast after Registration.	1] Enter the OTP received on the Email.	OTP = "*****" (Correct)	User registered Successfully.
ROF_4	User is not logged in.	1] Enter username 2] Enter password 3] Click on login	username = " xyz " and password = " " " OR username = " " " and password = " abc " OR	User is not logged in.

ROF_4			username = " " and password = " "	User is not logged in.
ROF_5	User is not Registered.	1] Enter user's Name 2] Enter email id 3] Enter password 4] Retype the password. 5] Click on REGISTER	Name = " " Username = " " Email = " " Password = " "	User is not Logged in.
ROF_6	User is not Registered.	1] Enter OTP	OTP = "*****" (Incorrect)	User is not Registered.
ROF_7	Payment is Procced.	1]Enter Name on Card 2]Enter Number on Card 3]Enter Expiry Date & CVV	Name = "abc" Card No. = "xxxx-xxxx-xxxx-xxxx" Expiry Date = "***/****" CVV = "***"	Payment is Proceed.
ROF_8	Payment is not getting Proceed.	1]Enter Name on Card 2]Enter Number on Card 3]Enter Expiry Date & CVV	One of the fields is empty or One of the field information is incorrect.	Payment is not getting Proceed.

5. Reports

The system is designed in such a way that future modifications can be done easily.

The following points can be deduced from the development of the project.

- ❖ Automation of the entire system improves the efficiency.
- ❖ It provides a friendly graphical user interface which proves to be better when compared to the existing system.
- ❖ Selecting Food items become easier.
- ❖ System security, data security and reliability are the striking features.
- ❖ The System has adequate scope for modification in future if it is necessary.

6. Drawbacks and Limitations

“No system at a time can provide every aspect in a right way at right time” having said this, Rest-O-Fast System also have some drawbacks and limitations.

1. Right now there is no direct communication between Kitchen Interface and Customer.
2. With use of current System we still cannot handle each and every activity going on in Restaurant.
3. For the customers who are visiting more than one time, no order history and Payment history is provided.
4. Bill Invoice can be sent to a mobile number instead of sending it on EMAIL after the bill payment.
5. Right now user gets logged out directly by System. If you have to order something after the bill payment, you have to login again.
6. We had not handled the scenarios such as if all of a sudden there is more rush in the restaurant than its capacity.

7. Future Enhancements and Conclusion

Future Enhancements:

1. Current system is a web-application, can be further implemented as native Apps.
2. Functionality of Admin can be added to the System, Admin can add and modify product details, also govern the system.
3. The way system is sending OTP and Bill Invoice through email it can be also sent through Mobile Number.

Conclusion:

All Said and Done, Rest-O-Fast is the System developed with the approach to minimize the Contact with Stuff, it is very well suited in this pandemic situation.

This is online food ordering service which features interactive menus allowing customers to place order right without waiting for the waiter to come and take his/her order. They can automatically place an order through the REST-O-FAST web application. People also prefer easy, quick and safe access to everything. This project is designed to meet the requirements of the restaurant as well as keeping the check on security majors which everyone should follow in these days of pandemic.

The online food ordering system provides a simple way to store the details of the customer, food items available to generate the bill. It is an interface that allows the customer to order the desired food which he/she can relish with minimum span of time.

With this platform we are hoping to reduce time wasting avoid, misunderstandings, provide easy data flow, customer pleasure and less hard work. We believe we have accomplished our goals and satisfied with the code we developed.

8.Bibliography

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