



INSTITUTE FOR ADVANCED COMPUTING AND SOFTWARE DEVELOPMENT AKURDI, PUNE

Documentation On

"HealthyMeal – Online Food Ordering System" e-DAC May 2021

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ABSTRACT

Online HealthyMeal System is a part of e-commerce. E-commerce or business through net means distributing, buying, selling, marketing, and servicing of products or services over electronic systems such as the Internet and other computer networks. Thus if we own a restaurant we need to upload menu online to attract potential customers. The Online HealthyMeal ordering system gives the ability to increase sales and expand their business by giving customers the facility to order food online. Thus it is a simple, fast and convenient HealthyMeal ordering system giving an edge over the competition at an affordable price.

The recent COVID-19 outbreak has underlined the importance of the e-banking services due to quarantine and lockdown restrictions imposed by the various government authorities. The HealthyMeal(food) services helped the customers to order a yummy food without any need to visit HealthyMeal physically.

Internet has seen a tremendous growth in terms of coverage and awareness. So giving the business an online presence has become very crucial and important.

With [Online Ordering System], we can set up we HealthyMeal menu online and the customers can easily place order with a simple mouse click. Also with a HealthyMeal menu online we can easily track the orders, maintain customer's database and improve the food delivery service. We can receive order through e-mails directly view on internet.

We can even customize online HealthyMeal menu and upload images easily. Having HealthyMeal menu on internet, potential customers can easily access it and place order at their convenience.

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1.INTRODUCTION TO PROJECT

The web based "HealthyMeal" project is an attempt to stimulate the basicconcepts of online HealthyMeal system. The system enables the customer to dothe things such as search for various products and choose a product based on the available products of HealthyMeal.

The **system provides** you **Quick Search** facility that provides you details about various **Products without login**. But if user want to purchase some products then it must require login into your account.

1.2 Objective:

The main objective of this project is to develop an application which gives provision to the restaurant owners to flourish their business by uploading menus at no cost and will invariably lead to higher customer retention and acquisition rates.

1.3 Features:

- Online menus (original and searchable format)
- Provision of restaurant owners to register themselves with their menu.
- Easy lookup of restaurants in your area
- Simple, fast and convenient ordering of food
- ◆ Availability of the menu online 24*7*365 no need to recite the complete menu over the phone. An online menu is ready to be viewed and printed by people worldwide.

- ◆ Accurate no more spelling out the dishes' names.
- Menu with the actual pictures of the product thereby adding to the uniqueness of your online presence.
- Prior knowledge of time for delivery helps prepare and provide better service.

1.4 Advantages:

- Reduce time-consuming phone orders and eliminate illegible fax orders.
- No more busy phones or the requirement for extra phone lines.
- An edge over the competition at an affordable price.
- Broader customer reach across regions.
- Builds a customer database.
- Provides a channel for marketing and promotion lowering your advertising cost.
- Helps in improved service.
- Greater customer satisfaction!!!

2.1 FUNCTIONAL REQUIREMENTS

The major functionality of this website is divided into four categories.

- Customer Functions
- Administrative Functions
- Employee Functions
- Delivery Person Functions

In this application each and every user i.e Admin, Employee, Delivery Person, Customer must having their own Email ID and Password only they can directly enter into their corresponding Login Forms.

2.2 Customer Functions

The customer, who will henceforth be called the 'user', will be presented with various functionalities for the HealthyMeal system, as the firststep is to View Available Products. Further, customer can view all productsbased on various categories which are available in the HealthyMeal shop. If he wants to make an order then he have to register himself/herself and if he/she is already registered with the web application then he/she can do login to process further.

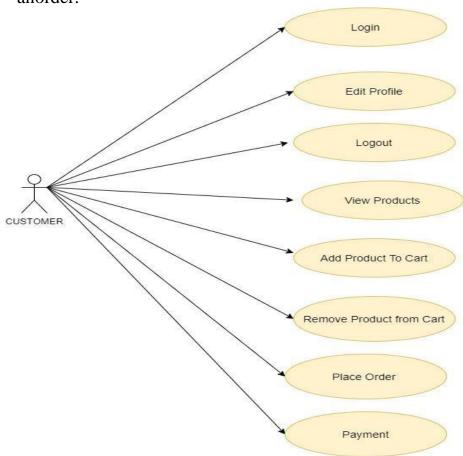
While Registering we have to fill up details about name, email, password, phone and while signing user have to fill its appropriate email and password and then he can add items to the cart according to his liking and then user can place order and while placing order user have to fill the

address details and choose the payment mode from which you want to do the payment.

A user who has logged-in can check his order details ordered by the HealthyMeal Website earlier. This 'order details' would be available to user login when he logged-in into the system.

Anyone(User) can check the availability of products but User cannot buy products without registering or logged into the system/website.

- Edit Profile: The user must be able to Edit name, address, mobile, email.
- **View Menu :-** The user must be able to View a list of available items.
- **Cart (CRUD Operation) :-** The user must be able to delete product from anorder.



The user must be able to see the total price of an order.

The user must be able to clear the current order to start a new one.

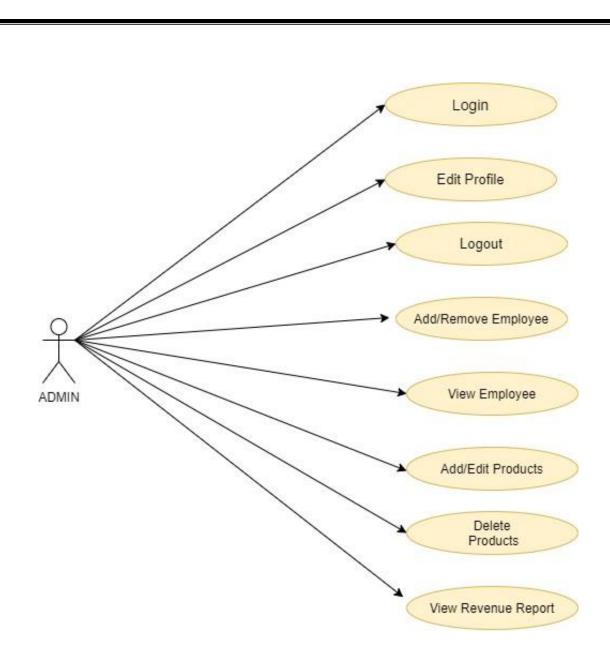
- Checkout:-
- The user must be able to confirm the order
- The user must be able to choose payment option.
- The user must be able to choose a delivery date and time.

2.3 Administrator Functions

The system shall require a Admin to handle the management of all managerial tasks like <u>Add/remove products</u>, view Revenue Reports, <u>Add</u> <u>Employees</u>, View Products List, <u>Update Profile</u>,. The task of Admin is to add various products based on various categories, to add Employees which can perform various tasks regarding customers and their orders. So, Here Admin is the super user of our system/website.

Admin:

- Edit Profile:- The Admin can edit his own profile like password, phone
- Add Employee:- The admin must be able to change/Add Employee
- Remove Employee:- The admin can able to Remove Employee
- View Menu/Products: The admin must be able to view/delete/edit product.
- Add Product :- The admin must be able to add new product.
- View Revenue Report:- The admin must be able to view status report.

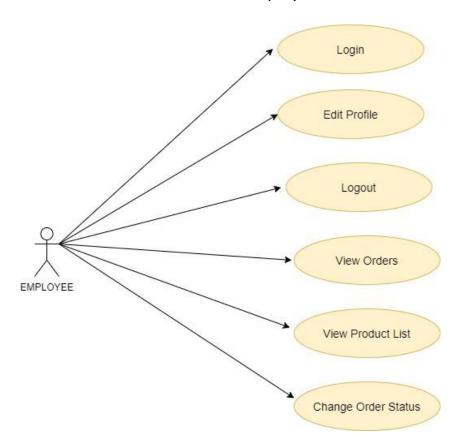


2.4 Employee Functions

Employee is the actor which has order managing functionality to manage all orders and update its status i.e. Order is Pending or Not , View all orders list and make changes edit or delete orders , view product list according to its categories ,Employee can make edit his profile and can change various parameters of profile.

Employee:

- View Orders:- The employee must be able to view a list of available orders
- Change Status:- The employee must be able to mark order as "delivered.
- Show Menu:- The employee must be able to view list of products.
- Edit Profile:- The employee must be able to change phone, password.
- Edit or Delete orders:- Employee can edit or delete his/her orders.

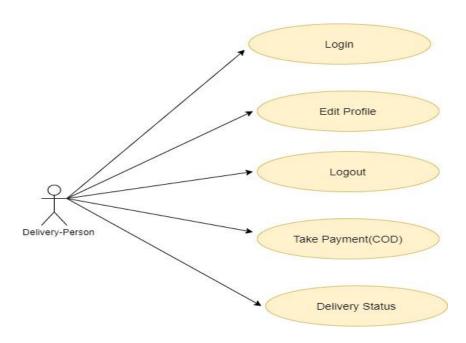


2.5 Delivery-Person Functions

The main purpose of the Delivery-person is to deliver the product to desired customer's location. The Delivery Person is allotted to specific orders by an Employee. The Order payment through Cash On Delivery(COD). So, Delivery-Person can take the offline payment from customer and collect it to the Employee which will added into the income of the HealthyMeal shop.

DELIVERY-PERSON:

- ➤ Edit profile: Delivery Person can edit his profile i.e password , phone,etc.
- ➤ **Update Order Status:-** Delivery Person can deliver the ordered products and he can update his Order status as "DELIVERED".
- ➤ **Take Payment:-** Delivery Person can take payments which has to be done by Cash On Delivery(COD).



3. PROJECT DESIGN

3.1 Class-Diagram

Class diagram is UML structure diagram which shows structure of the designed system at the level of classes and interfaces, shows their features, constraints and relationships - associations, generalizations, dependencies, etc







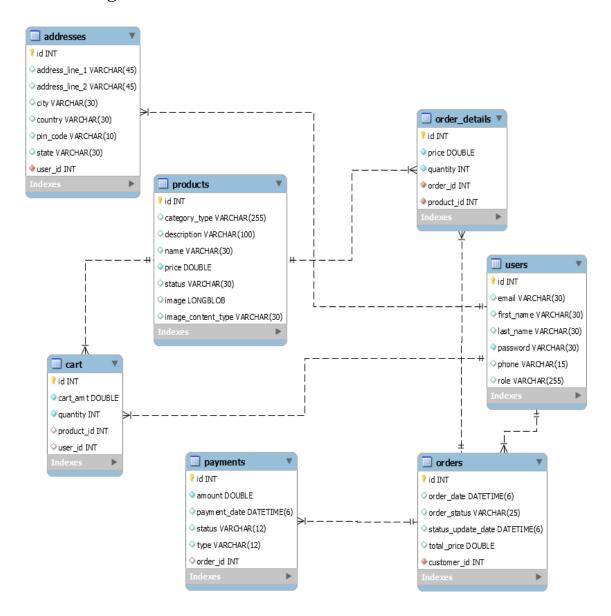








3.2 ER-Diagram:



3.3 Database Design

The following table structures depict the database design.

<u>3.3.1</u> <u>Users</u>

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	auto_increment
email	varchar(30)	NO	UNI	NULL	
first_name	varchar(30)	NO		NULL	
last_name	varchar(30)	NO		NULL	
password	varchar(30)	NO		NULL	
phone	varchar(15)	NO		NULL	
role	varchar(255	NO		NULL	

<u>3.3.2</u> <u>Cart</u>

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	
cart_amt	double	NO		NULL	
quantity	int	NO		NULL	
product_id	int	NO	MUL	NULL	
user_id	int	NO	MUL	NULL	

3.3.3 Addresses

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	auto_increment
address_line_1	varchar(45)	YES		NULL	
address_line_2	varchar(45)	YES		NULL	
city	varchar(30)	YES		NULL	
country	varchar(30)	YES		NULL	
pin_code	varchar(10)	YES		NULL	
state	Varchar(30)	YES		NULL	
user_id	int	NO		NULL	

3.3.4 Order-details

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	
price	double	NO		NULL	
quantity	int	NO		NULL	
order_id	int	NO	MUL	NULL	
product_id	int	NO	MUL	NULL	

3.3.5: Products

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	auto_increment
category_type	varchar(255)	YES		NULL	
description	varchar(100)	YES		NULL	
name	varchar(30)	YES		NULL	
price	double	YES		NULL	
status	varchar(30)	YES		NULL	
image	longblob	YES		NULL	
Image_content _type	Varchar(30)	YES		NULL	

3.3.6 Payments

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	
amount	double	NO		NULL	
payment_date	datetime(6)	NO		NULL	
status	varchar(12)	NO		NULL	
type	varchar(12)	NO		NULL	
order_id	int	NO	MUL	NULL	

3.3.7 Orders

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	
order_date	datetime(6)	YES		NULL	
order_status	datetime(25)	YES		NULL	
status_update_ date	datetime(6)	YES		NULL	
Total_price	double	YES		NULL	
Customer_id	int	NO	MUL	NULL	

4. CODING STANDARDS IMPLEMENTED

Naming and Capitalization

Below summarizes the naming recommendations for identifiers in Pascal casing is used mainly (i.e. capitalize first letter of each word) with camel casing (capitalize each word except forthe first one) being used in certain circumstances.

Identifier	Case	Examples	Additional Notes
			Class names should be based on "objects" or
Class	Pascal	Users,Orders,Pro	"real things" and should generally be nouns .
		d	No'_' signs allowed. Do not use type
		ucts,Payments,et	prefixes like 'C' for class.
		c	
		getCustomerDeta	
Method	Camel	il	Methods should use verbs or verb phrases.
		s(),getOrderDetai	
		ls(),etc	
			Use descriptive parameter names.
Parameter	Camel	userId,	Parameter names should be descriptive
		orderStatus,etc	enough that the name of the parameter and
			its type can be used to determine its meaning
			in most scenarios.
	Pascal	ICartService,ICu	
Interface	with"I"	sto	Do not use the '_' sign
	prefix	merService,etc.	
Property	Pascal	ForeColor,	Use a noun or noun phrase to name
Порену	ascar	BackColor	properties.

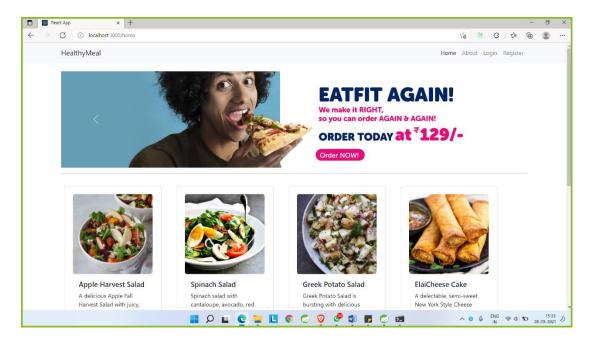
Associated private member variable	_camelCase	_backColor	Use underscore camel casing for the private member variables
Exception Class	"Exception"	CustomerHandellin gException,	

Comments

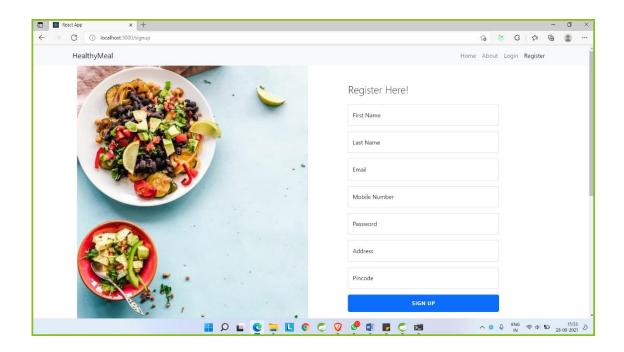
- Comment each type, each non-public type member, and each region declaration.
- Use end-line comments only on variable declaration lines. End-line comments are comments that follow code on a single line.
- Separate comments from comment delimiters (apostrophe) or // with one space.
- Begin the comment text with an uppercase letter.
- End the comment with a period.
- Explain the code; do not repeat it.

5. Project screen Shots

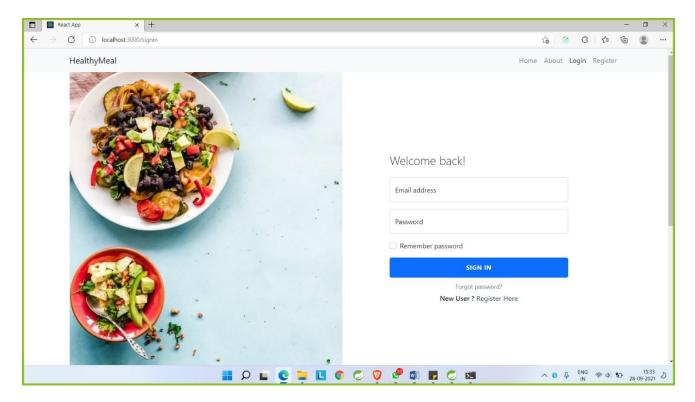
1.Home Screen



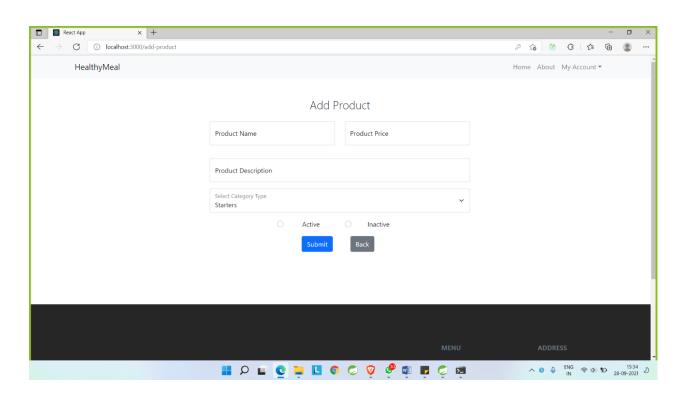
2. Register Screen



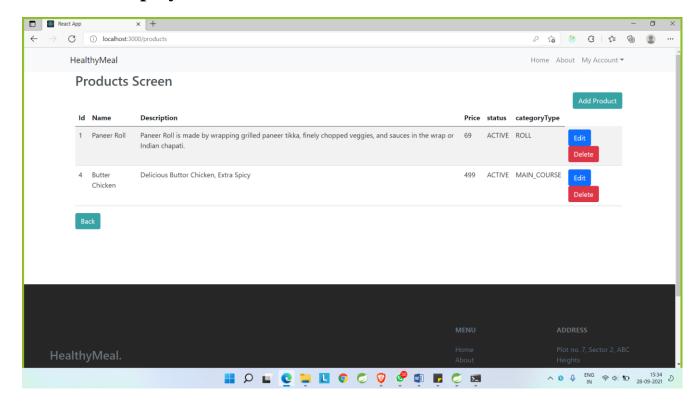
3. Login Screen



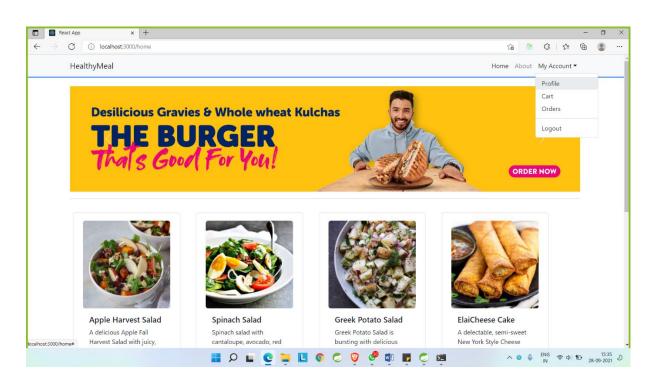
4. Add Products Screen



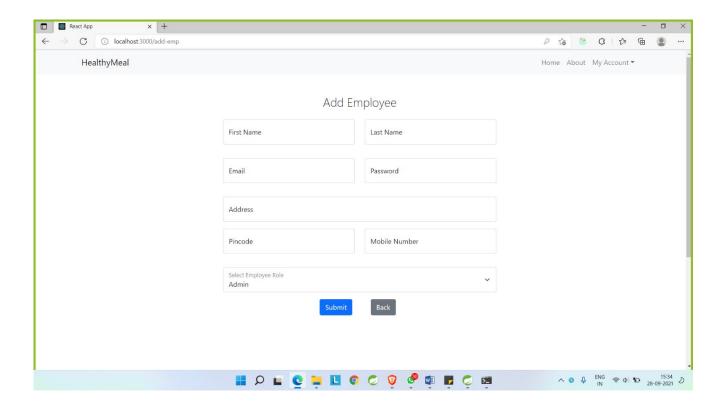
5. Display Products Screen - Admin



6. User Screen After Login



7. Admin Screen Adding Employee



7. Conclusion:

HealthyMeal is a system that will provide online food ordering service to users. With HealthyMeal, users can explore and order nutritious food and track their calories as per their order history. In this web application user, employee, admin have their login, where user can browse products, add it to cart and order food and do checkout. The admin can add, edit and remove product, can view reports through this application.

8. References:

- "Spring Boot Reference Guide", *Spring Boot Reference Guide*, [online] Available: docs.spring.io/spring-boot/docs/current/reference/htmlsingle.
- "Representational State Transfer", *Wikipedia Wikimedia Foundation*, 16 Oct 2018, [online] Available: en.wikipedia.org/wiki/Representational_state_transfer.
- "Optimizing Performance", ReactJS Docs reactjs.org/docs.
- "Web Workers API", MDN Docs developer.mozilla.com.