Design Report

Project Title: SliceMeUp - A web application for ordering authentic Italian pizza.

Summary of Project:

This project focuses on the development of a user-friendly web application tailored for pizza catering service. The core objective is to provide an efficient and convenient platform for customers to order pizzas online.

Upon visiting the website, clear and engaging photos are shown on the homepage to introduce the pizza restaurant, encouraging users to explore further. On the menu tab, customers will have access to a visually appealing menu showcasing a variety of pizza options. Users will have to sign up and login before they can add an item to cart. They can then browse through these options and place orders effortlessly through the intuitive interface. Once an order is finalised, the user will be prompted to check out, and the web application will promptly acknowledge the order, following which, customers will receive automatic confirmation via email.

Additionally, our portal will feature a customer feedback mechanism. This will enable customers to share their experience and provide valuable suggestions for improvement.

In summary, this project aims to enhance the pizza catering experience by offering a streamlined online ordering system and a platform for customer engagement and feedback.

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1. Application Requirements and Specifications

R1: Users should be able to sign up for an account.

R2: Users should be able to login to their account.

R3: The web application should have a platform that allows users to submit their orders online.

R4: There should be a menu page where users are able to select order items.

R5: There should be the option for users to choose the quantity of their individual orders.

R6: There should be a function to track the users' collated order input.

R7: The shopping cart function should calculate the total cost, inclusive of delivery fee, of the order.

R8: There should be the option for users to add and remove options from their cart.

R9: Users should be able to check out and make payment.

R10: Users should receive confirmation of their order via email.

R11: The web application should be able to allow users to track the status of their orders.

R12: The web application should have a platform for users to submit their queries or feedback.

2. Functional Requirements and Specifications

F1: The sign-up page allows users to input their information to register for an account.

F2: The login page allows users to input their account information to login.

F3: Users can select their items using the menu page and check out using the shopping cart.

F4: The menu page allows the individual menu items picked to display an item page, where the user can view the item description, as well as let them select the quantity of that item if they were to order it.

F5: Each item page has an addition and subtraction clicker to adjust the quantity of the selected item. The display box for the quantity can also be changed manually by typing.

F6: There should be a shopping cart function that tracks the orders, accessible on the top right corner of the website.

F7: The total cost should be displayed on the cart page and check out page by addition of the individual items.

F8: The cart page should have addition and subtraction clickers to adjust the quantity.

F9: Upon checkout, users should enter personal contact details (name, E-mail address, contact number), delivery details (address, postal code) and payment details (name on card, credit card number, CCV, date of expiry), as well as the 'Place Order' button to proceed to make payment.

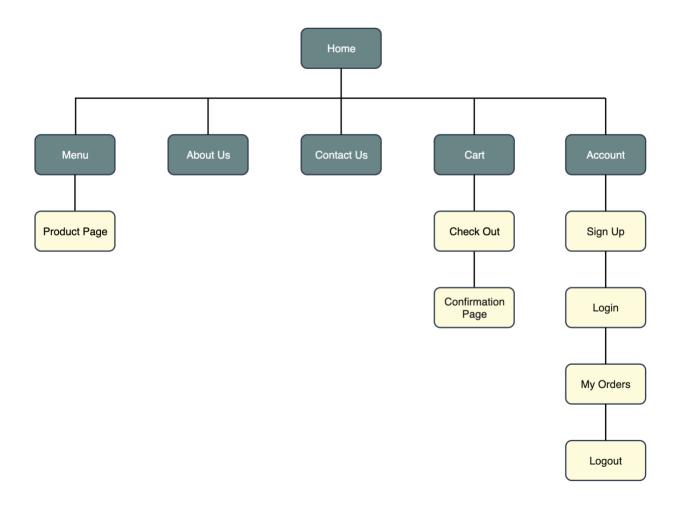
F10: There should be an automated email containing the users' name and order number to be automatically sent to the user, addressed to the email that the user had input in the prompt for delivery details.

F11: There should be a "My Order" page for users to see the status of their orders.

F12: The 'Contact Us' page will contain text boxes for the user to input their personal details (name, E-mail address) as well as the subject and message text box for the user to input their query or feedback.

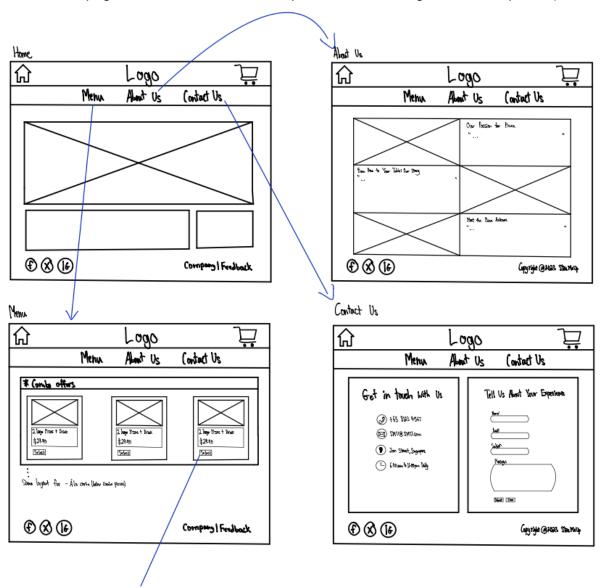
3. Design of web application

a. Site Map

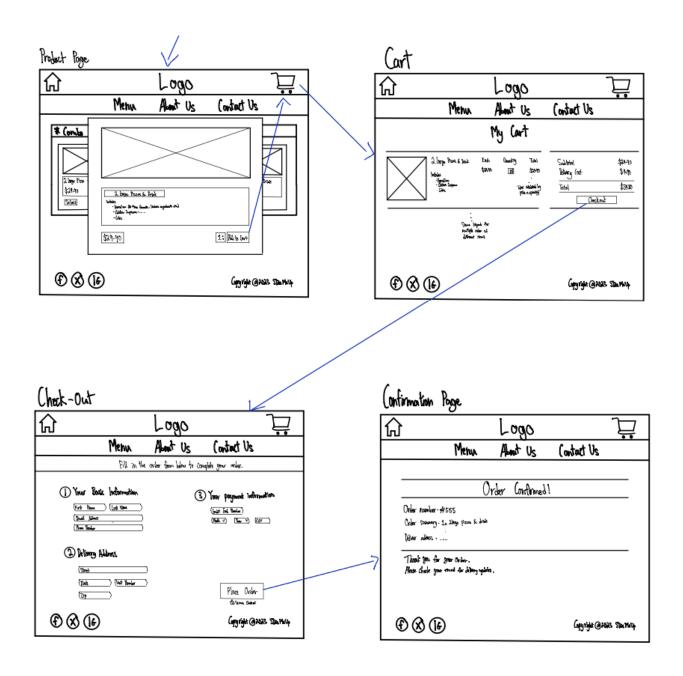


b. Storyboard

(Note that the storyboard does not include Sign up, Login, My Orders and Logout pages and differs from the final product as the design has been updated)



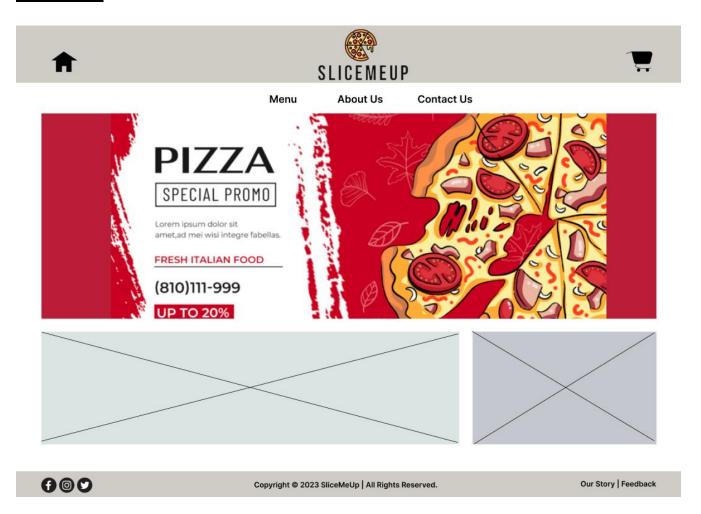
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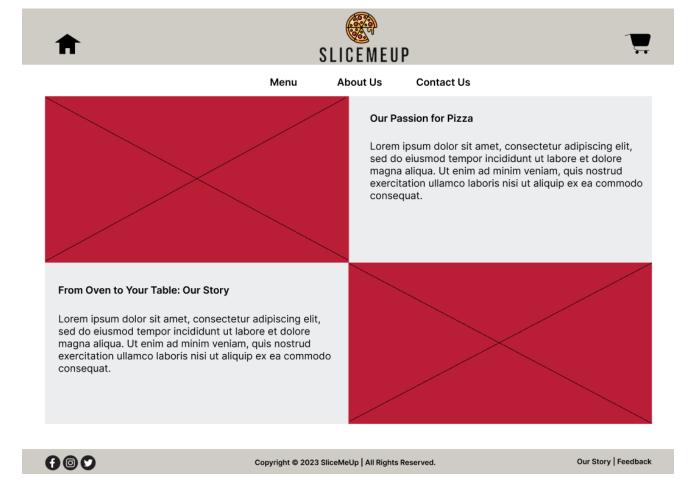
c. Wireframes

(Note that the wireframes do not include Sign up, Login, My Orders and Logout pages and differs from the final product as the design has been updated)

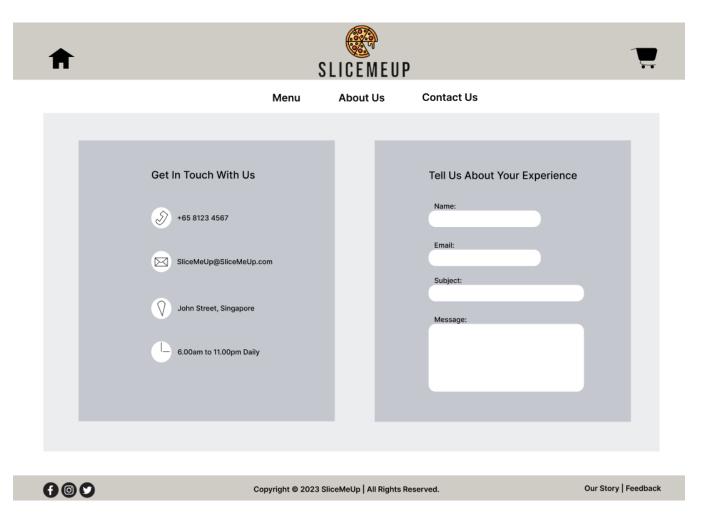
Home Page



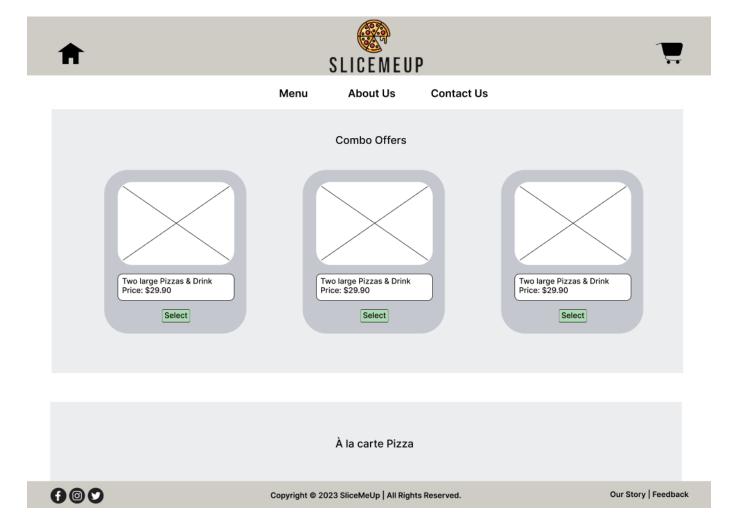
About Us Page



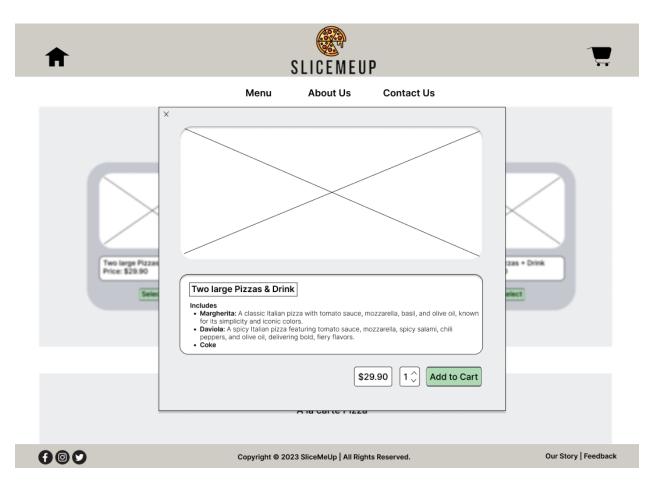
Contact Us Page



Menu Page

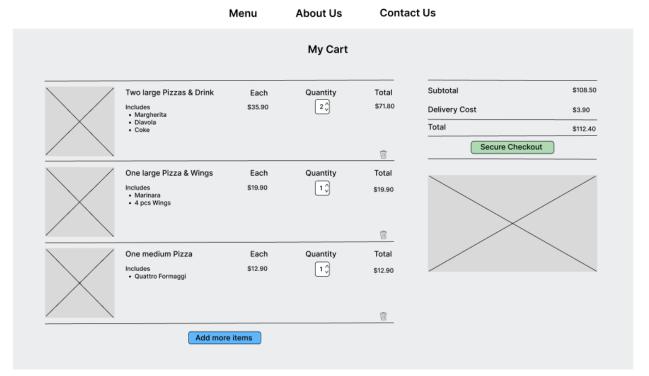


Product Page

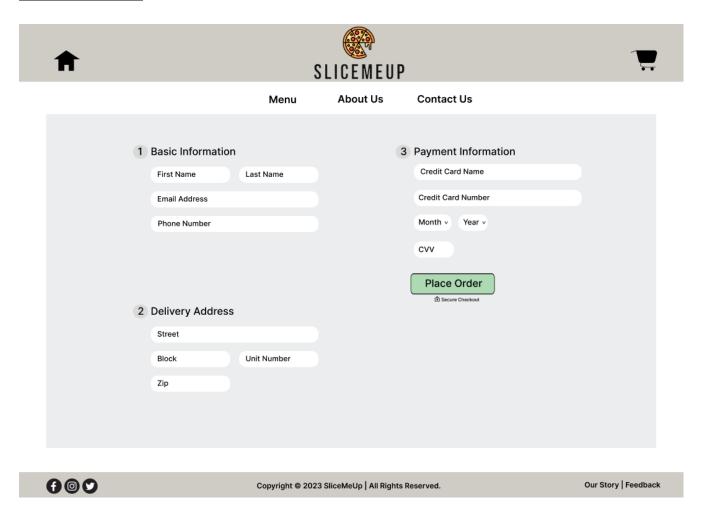


Cart Page





Check-Out Page



Confirmation Page



Order Confirmed

Order Number: #5559203201
Order Summary: 2x Two large Pizzas & Drink
1x One large Pizza & Wings
1x One Medium Pizza

Order Number: Jonson Street 75
Block 730 #09-09
S690730, Singapore

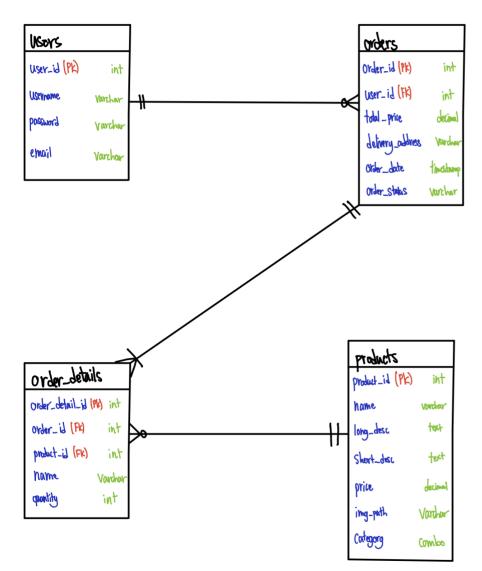
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d. Database Design





Tables

user: The users table contains the user_id (PK), username, password (secure hash) and email. Data will be inserted to this table when users sign up with his/her details. Login function will retrieve the data from this table as well.

products: The products table contains the product_id (PK), name, long_desc, short_desc, price, img_path, category. These data will be retrieved on the menu page, product page, as well as the cart page.

orders: The orders table contains the order_id (PK), user_id (FK), total_price, delivery_address, order_date, order_status. Data will be inserted into this table when a user confirms his/her order.

order_details: The order_details table contains the order_detail_id (PK), order_id (FK), product_id (FK), name, quantity. Data will be inserted into this table when a user confirms his/her order as well.

feedback: The feedback table contains the feedback_id (PK), name, email, subject, comment, feedback_date. Data will be inserted to this table when a user submits the feedback form.

Relationship

users - order: A user has **Zero-to-Many** orders while an order belongs to **One-and-Only-One** user.

order - order_details: An order has **One-to-Many** order_details while an order_details belong to **One-and-Only-One** order. In general, order contains the overall information of an order while each order_details contain an individual product with reference to a particular order.

order_details - products: An order_detail has **One-and-Only-One** product while products have **Zero-to-Many** order_details.

feedback: feedback is a standalone table without any relationship.