

Software Engineering (HNDIT-4012)

Promoting Greenery Website – Technical Report

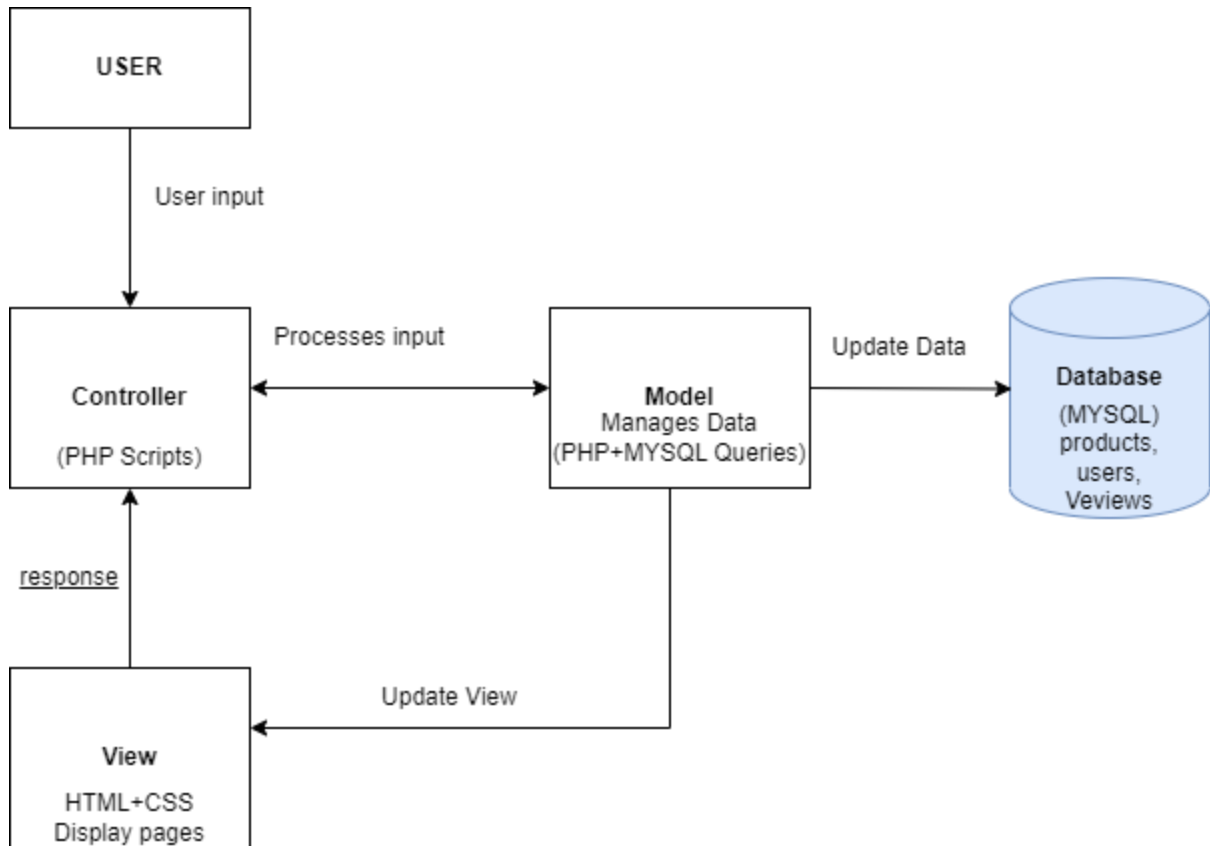
(Individual Assignment)

KEG/IT/2022/F/0064

Case Study 1 – MVC Model for Web Application

Model-View-Controller (MVC) Diagram:

- **Model:** Handles the data and business logic (e.g., MySQL + PHP code that manages user data, cart items, reviews).
- **View:** What the user sees (e.g., your index.html, beautyland.html, etc. styled with CSS).
- **Controller:** Handles user input and communicates between View and Model (e.g., PHP scripts that process form submissions, login, etc.).



- **Tools:** PHP, HTML/CSS/JS, MySQL, Draw.io
- **Model:** Database of plants, orders, users.
- **View:** UI elements showing products, checkout forms.
- **Controller:** Handles product searches, order placement, and user authentication.

1

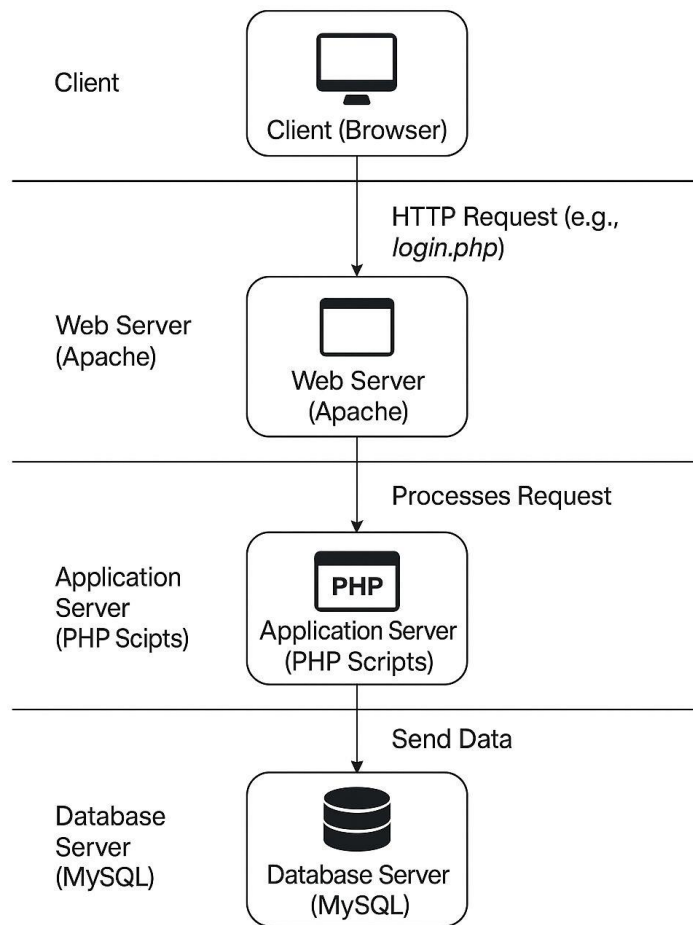
Case Study 2 – Client-Server Model

The CSM is It shows how your website works behind the scenes:

- The Client (browser) sends requests (like “login” or “view product”).

- The Server processes the request and sends back the response (like a page or data).

Client-Server Model for a Web-based Application



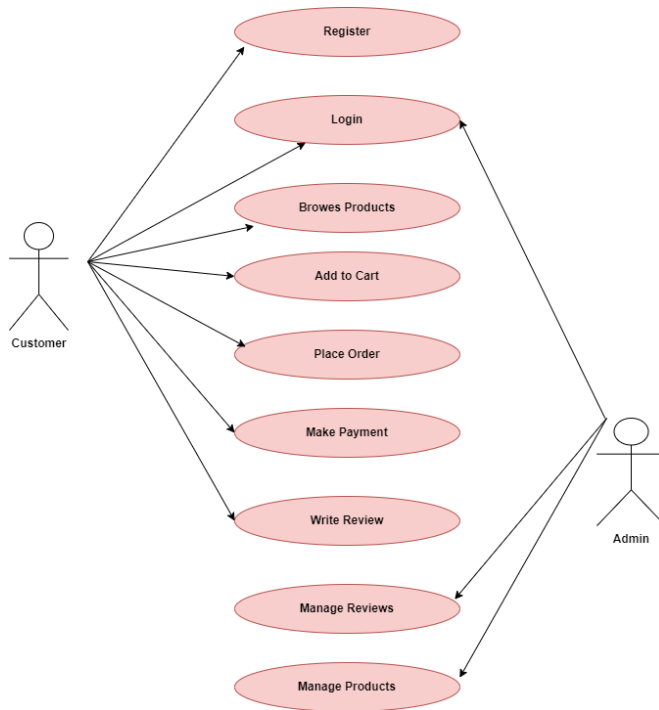
1. Client

- Server model is about the architecture:
 - Browser (Client) ↔ Server (PHP + MySQL)
 - MVC is about the design pattern inside the server:
 - How PHP (Controller) connects the database (Model) and shows results to the user (View)

Case Study 3 – Use Case and Class Diagram

Use Case Diagram

A Use Case Diagram represents the interaction between users and a system, outlining its key functionalities.

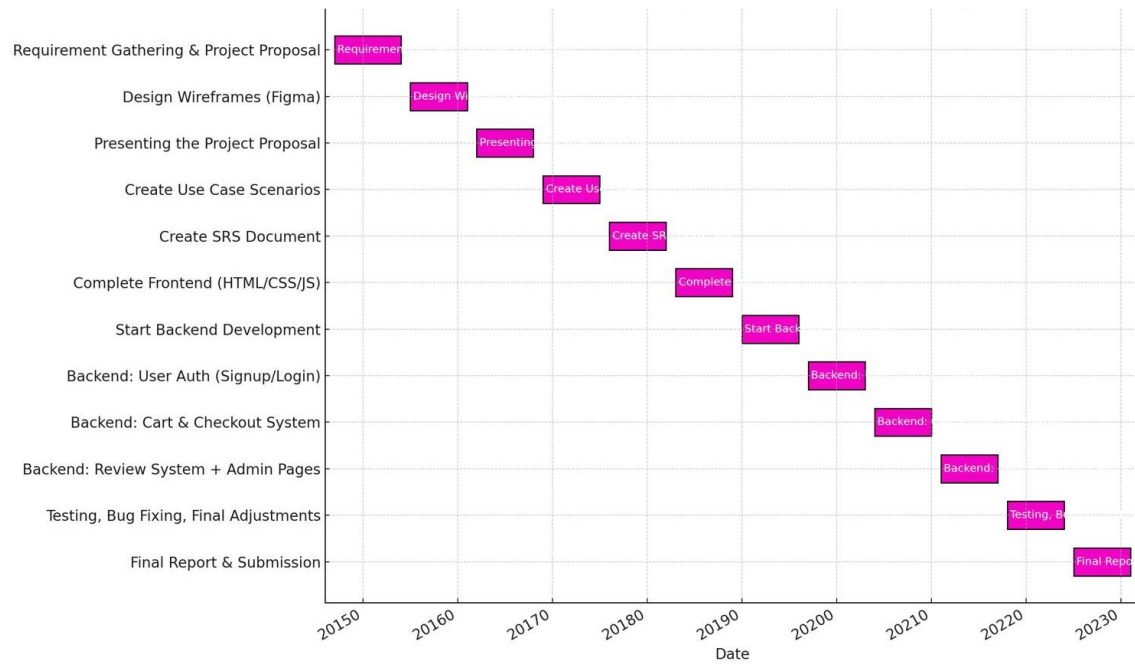


Class Diagram

A Class Diagram defines the structure of the system by showing objects, attributes,

and relationships.

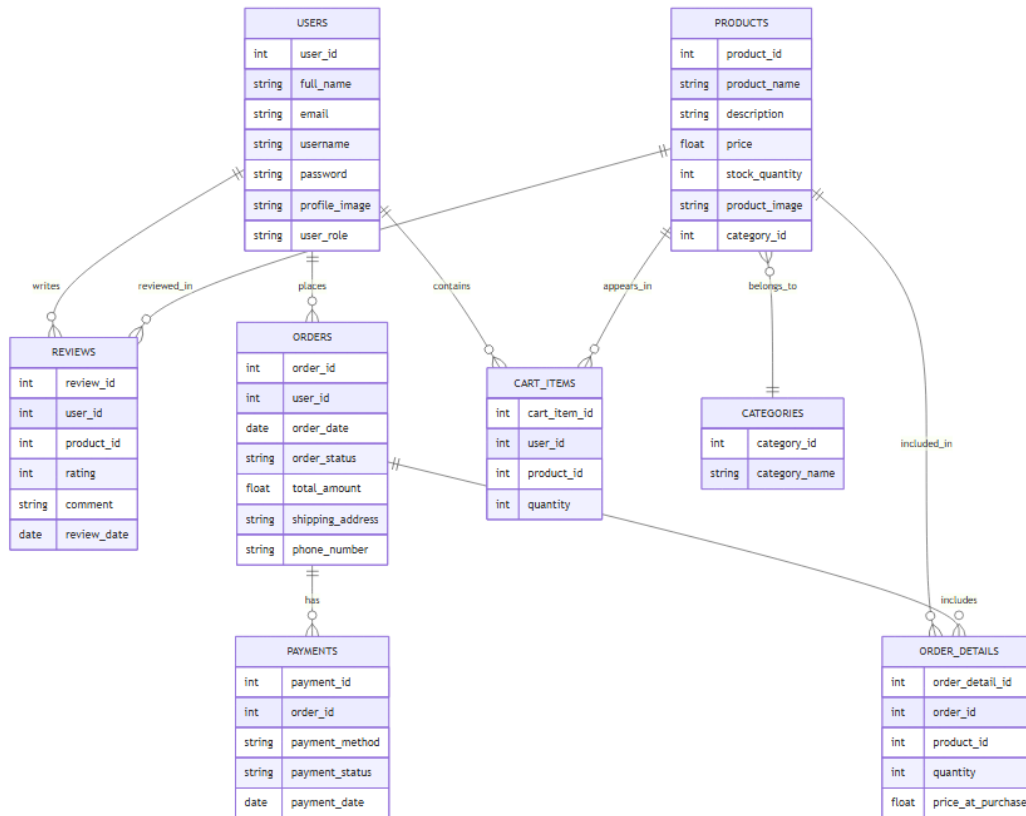
Tools: Draw.io



Tools: Microsoft Project (GanttProject)

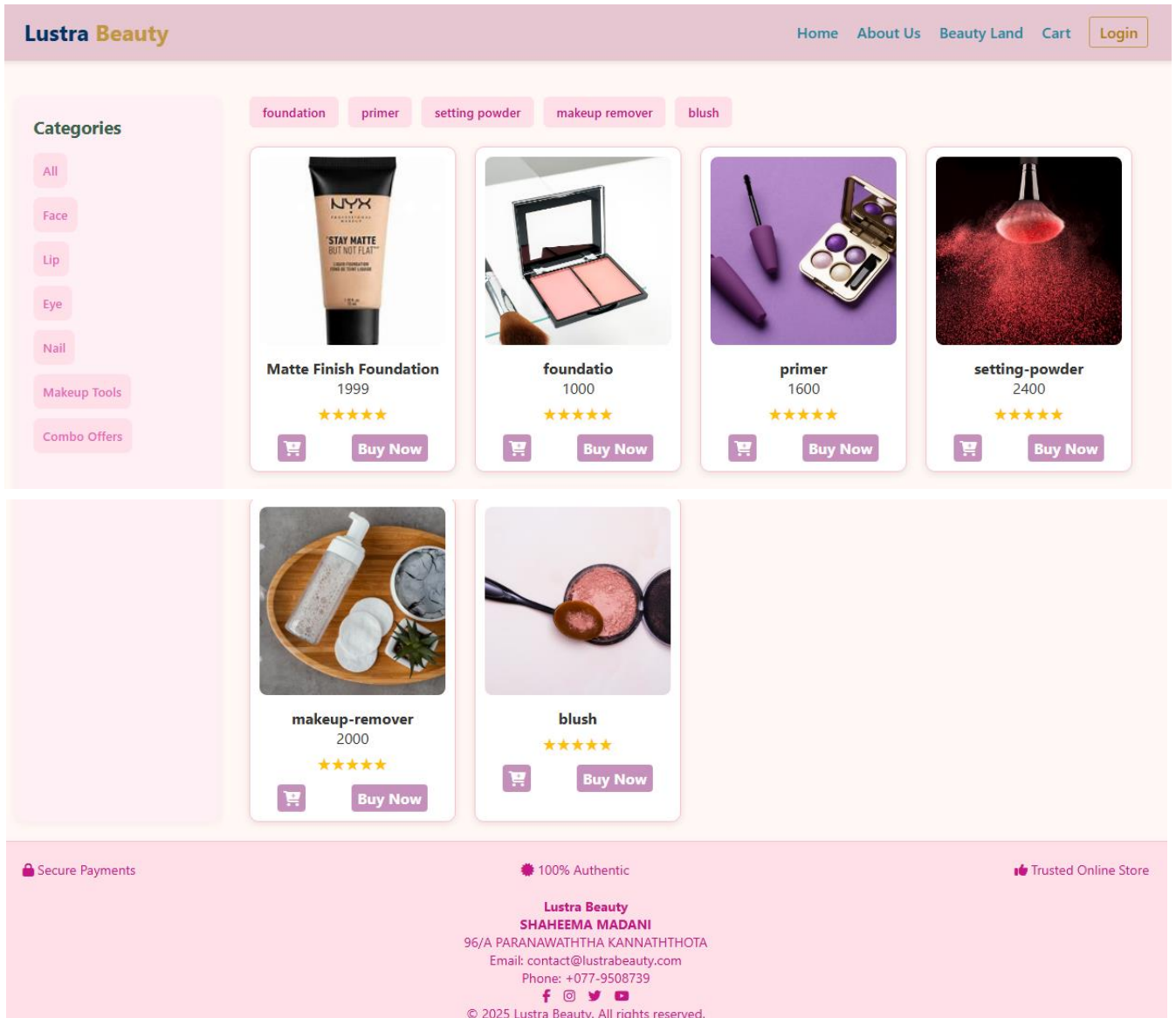
Case Study 6 – ER Diagram for DB

An Entity-Relationship (ER) diagram visually represents the structure of a database by illustrating entities, attributes, and relationships. It helps in designing the database before development begins.

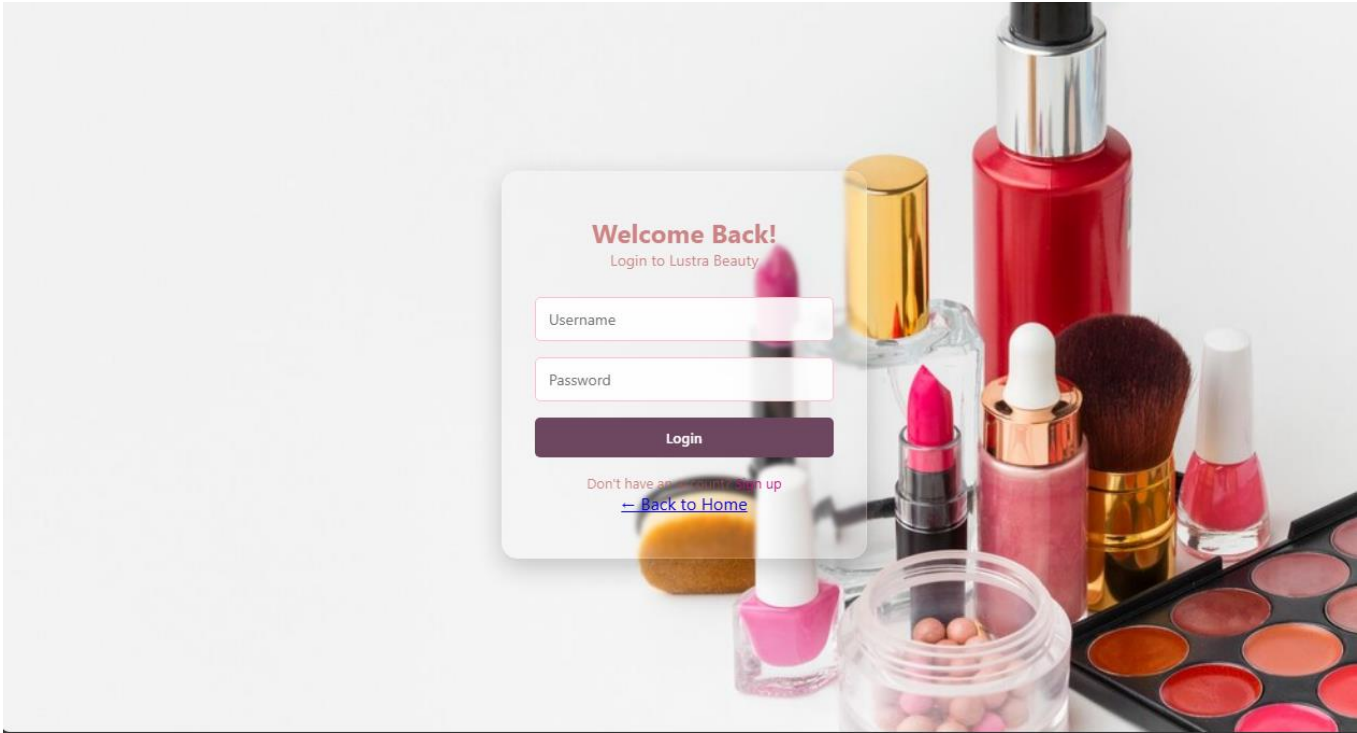


Case Study 7 – Interface Designs

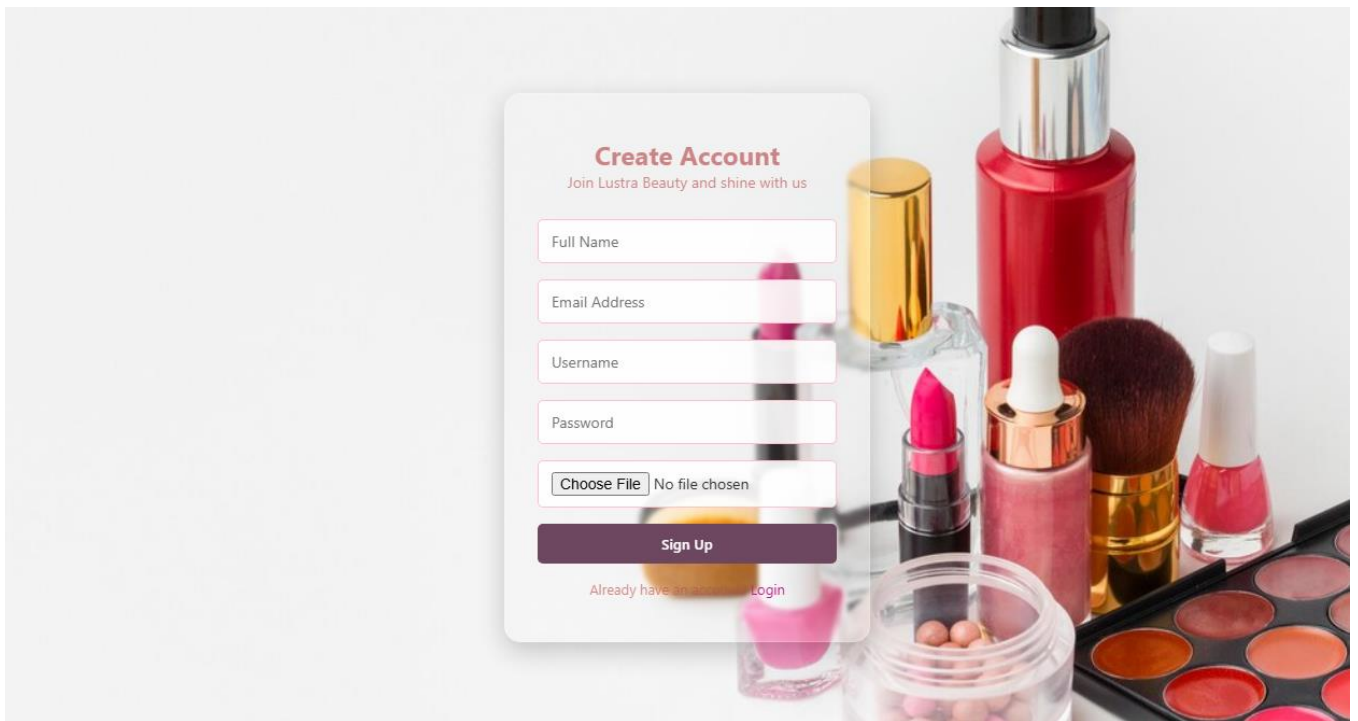
Home page



Login



Signup page



Create Account
Join Lustra Beauty and shine with us

Full Name

Email Address

Username

Password

No file chosen

[Already have an account? Login](#)

Review

What Our Customers Say



Danushi R.

Absolutely love these products! So gentle and effective.



Kaushalya P.

Quick delivery and the face cream smells amazing!



Tharindu M.

The serum really helped my dry skin. Highly recommend!

Write a Review

its relly goood

Submit Review

Secure Payments

100% Authentic

Trusted Online Store

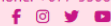
Lustra Beauty

SHAHEEMA MADANI

96/A PARANAWATHTHA KANNATHTHOTA

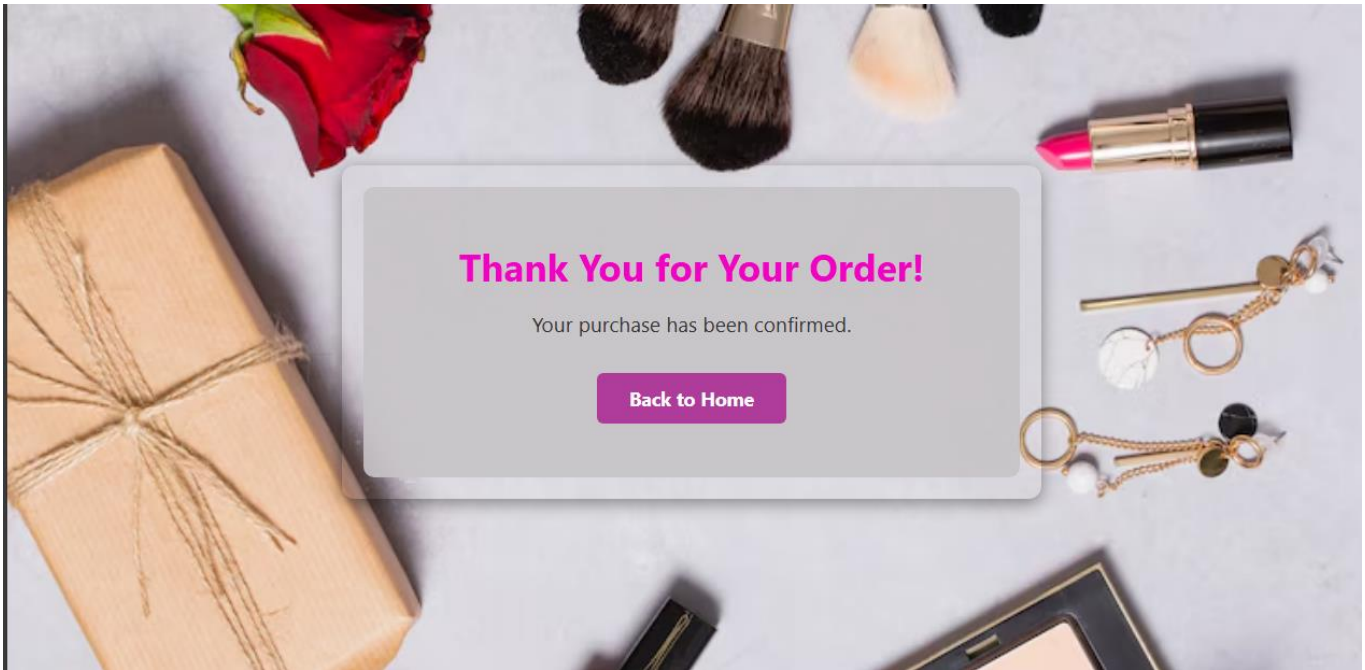
Email: contact@lustrabeauty.com

Phone: +077-9508739



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Thank page



Checkout Page

Lustra Beauty[Home](#)[About Us](#)[Beauty Land](#)[Cart](#)[Login](#)

Customer Information

Back

Next

Secure Payments

100% Authentic

Trusted Online Store

Lustra Beauty[Home](#)[About Us](#)[Beauty Land](#)[Cart](#)[Login](#)

Payment Method

☐ Cash on Delivery

☒ Credit or Debit Card

☐ Apple Pay

☐ PayPal

Back

Place Order

Desktop UI

Homepage with featured plants, menu bar, testimonials, cart icon.

Mobile UI

Simplified hamburger menu, card-based plant list, floating cart button.

Web UI (Responsive) Grid

layout shop items

Filter and search at the top

Add-to-cart & category filter buttons

Tools: Figma, Adobe XD, HTML/CSS (Bootstrap)

Case Study 8 – Test Case Sample

| Test Case ID | TC_001 |
|--------------|--|
| Description | Test Add-to-cart Functionality |
| Input | Click “Add-to-cart” on Product Click “Buy Now “ on products |
| Expected | Item appears in cart with qty |
| Status | Pass/Fail |

Lustra Beauty

[Home](#)
[About Us](#)
[Beauty Land](#)
[Cart](#)
[Login](#)

This page says

Matte Finish Foundation added to cart!

OK

Categories

All

Face


Lip

Eye

Nail


Makeup Tools

Combo Offers




Matte Finish Foundation
1999

★★★★★




Buy Now




mascara
2589

★★★★★




Buy Now

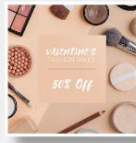


eye-lashes
2589

★★★★★




Buy Now





Combo Offers for
VALANTAIN
3999


★★★★★




Buy Now









Lustra Beauty

[Home](#)
[About Us](#)
[Beauty Land](#)
[Cart](#)
[Login](#)

Customer Information

Full Name

City

District

Street

Phone Number

Email

Back

Next

Please fill out this field.

The screenshot shows the Lustra Beauty checkout page. The header includes the brand name 'Lustra Beauty' and navigation links: Home, About Us, Beauty Land, Cart, and a Login button. The main content area is a light pink background. It features five payment method options, each with a radio button: 'Cash on Delivery' (with a camera icon), 'Credit or Debit Card' (selected, with a card icon), 'Apple Pay' (with an Apple logo), and 'PayPal' (with the PayPal logo). The 'Credit or Debit Card' section is expanded, showing input fields for 'Card Number' and 'Name on Card'. The 'Card Number' field has a validation error: a red border and a tooltip that says 'Please fill out this field.' Below the input fields are logos for VISA, Mastercard, AMEX, and DISCOVER. At the bottom of the form are two buttons: 'Back' and 'Place Order'.

Case Study 9 – GitHub Overview

What is GitHub?

GitHub is a platform where developers store and manage their code. It uses Git, a system to track changes in files.

✓ Main Activities

- Repository – Project folder to store code
- Commit – Save code changes with a message
- Push – Upload changes to GitHub

- Pull – Get updates from GitHub
- Branch – Work on a separate feature
- Merge – Combine changes
- Pull Request – Ask to merge your changes into the main project

12

Tools Used in Report:

- Draw.io – Diagrams (MVC, Client-Server, Use Case, Class, ER)
- MS Project / GanttProject – Gantt Chart
- Figma/Adobe XD – Interface designs
- MySQL Workbench – ER diagrams
- GitHub – Version control
- PHP, HTML, CSS, JS – Web Development

