

DESIGN AND IMPLEMENTATION OF A CLOTHING E-COMMERCE PLATFORM

A Project Report on RR FASHION WEBSITE

Element	Content
Project Name/Brand	RR FASHION (RICH & RUDRI FASHION)
Submitted To	Asha M. Tarsadia Institute of Computer Science and Technology
Project Guide	Prof. Urvashi Patel
Prepared By	Dharmi Bhadani (202403103510233)
Department	Computer Science and Engineering

RR fashion

CHAPTER: - 1

INTRODUCTION

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1.1 Overview: -

At RR Fashion (Rudri & Richa Fashion), we are dedicated to increasing sales and revenue and improving the customer shopping experience. Explore our detailed Home Page for the latest trends and navigate through Category Pages to browse clothing easily. To ensure the perfect fit, utilize our dedicated Size and Fit Guides. Browse our catalog, add items to your shopping cart, and complete your purchase through our secure Checkout process, which supports multiple payment options. Additionally, we ensure Real-Time Listing Updates to keep inventory accurate. Whether you are looking to browse new collections or complete a quick, secure purchase, RR Fashion is here to provide a convenient, accessible shopping experience.

1.2 Problem Definition :-

The problem for the “RR Fashion” E-commerce Website is to develop a functional, user-friendly “online clothing store” that allows customers to easily browse a product catalog, utilize features like “Add to Cart” and “Size/Fit Guides”, and complete purchases securely via a “secure checkout system” supporting “multiple payment options”. The core goal is to transition the business into a digital space to “increase sales and revenue” and “improve the overall customer experience” by offering convenient, 24/7 access to fashion shopping, with success measured by increased website visits, user engagement, and the volume of completed transactions.

1.3 Scope of Proposed System :-

The future enhancements for the “RR Fashion E-commerce Website” should focus on “personalization, immersive shopping, and customer support”; specifically, this involves adding “user accounts” that allow customers to track orders and save items to a “Wishlist”; integrating a “Virtual Try-On” feature or advanced sizing tools to reduce product returns; implementing a “live chat support system” for immediate assistance; collecting and displaying “customer reviews and testimonials” on product pages to build trust; developing a smart “recommendation engine” to suggest related styles and products; and finally, creating a dedicated “mobile app version” to improve accessibility and user retention through mobile-specific features like push notifications.

1.4 Contract Letter :-



RUDRI & RICHA FAISION

This is to certify and confirm the project agreement made on 20/08/25 between:

Company: RUDRI & RICHA FAISION

Company Address: Surat, Gujarat

AND

Student: Ms. Dharmi Bhadani

B.Tech CSE, Uka Tarsadia University – Asha M. Tarsadia Institute of Computer Science and

Engineering, Surat. Terms & Conditions:

1. The student will work on the project/assignment under the guidance of Bhadani Dharmi Bipinbhai & Company.
2. The project duration will be from 25/08/25 to 26/10/25.
3. The student agrees to follow company policies and maintain confidentiality of business information.
4. The company will provide necessary support, data, and guidance required for project completion.
5. The rights of the final project work will be jointly held by the student and Bhadani Dharmi & Company.
6. Any disputes arising shall fall under the jurisdiction of [City/State].

Acceptance:

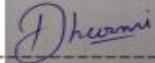
Both parties agree to the above terms and conditions and hereby sign this agreement:

For Manisha Mangukiya & Company Authorized

Signatory: 

Date: 21/08/25

Name: Dharmi Bhadani

Student Signature: 

Date: 21/08/25



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CHAPTER: - 2

REQUIREMENT GATHERING

2.1 Requirement Gathering:-

Questionnaires:

Our questionnaire will assess the importance of a user-friendly browsing experience, identify core services users want, such as product categorization, a secure shopping cart, and multiple payment options, and gather feedback on features like size and fit guides. This will enhance user experience and better meet the needs of customers and the business owner.

Brainstorming:

We will gather ideas on essential features to enhance user experience, improve product discovery through search and filters, and provide more engaging content in product descriptions and reviews, focusing on innovative ways to showcase clothing items (e.g., high-quality photos/videos) and streamline the checkout process.

Survey:

Surveys will be conducted to collect feedback from potential customers about their preferences for website sections, such as the Category Pages and the Wishlist feature, as well as desired functionalities in product filtering and shipping options. This feedback will help prioritize features that meet customer needs and drive sales.

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2.1.1 Question – Answering

1. Who are the stakeholders in the solution to the problem?

- Client (Mrs. Manisha Mangukiya)
- Administrator (Admin)
- Customer (User)
- Suppliers

2. What are the unknowns?

- User Feedback on the product selection and interface.
- Preferred Payment Methods (e.g., UPI, Cards, COD).
- Technical challenges related to real-time inventory and high traffic.

3. Can the problem be compartmentalized?

- ✓ Yes, my problem can be compartmentalized into three divisions:
- User Interface Design:
 - Purpose: To create an engaging and intuitive experience for users navigating the site and viewing products.
 - E-commerce Transaction Flow:
 - Purpose: To ensure a secure and reliable process from Add to Cart to Order Confirmation.
 - Content Management (Admin):
 - Purpose: To keep the product catalog, inventory, and discounts relevant, up-to-date, and aligned with market needs.

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4. Have you seen similar problem before?

- Yes, similar e-commerce website challenges have been experienced in developing other online shopping platforms (e.g., Flipkart, Amazon).

5. Can sub-problems be defined?

- Yes, sub problems can be defined as:
- Checkout Optimization: Ensuring the checkout process is quick and minimizes cart abandonment.
- Product Catalog Management: Keeping product listings, prices, and stock levels current and accurate.
- Inventory Integration: Ensuring real-time synchronization between the online store and physical stock (if applicable).

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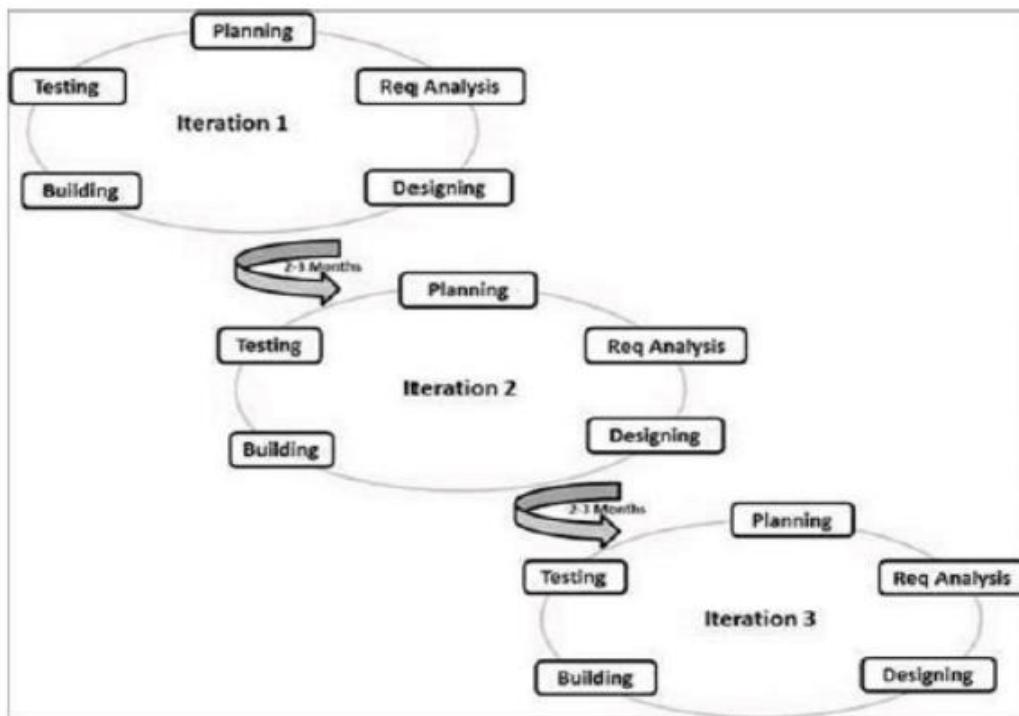
CHAPTER: - 3

SYSTEM PLANNING

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3.1 Project Life Cycle Model:-

The RR Fashion E-commerce Website project will be developed using the Agile Model. This methodology is chosen because it relies on an incremental and iterative process, focusing heavily on flexibility and achieving customer delight. By using Agile, the development team can quickly deliver functional components, such as the product catalog and the shopping cart, gather rapid feedback on the interface and payment options, and swiftly adapt to any changing requirements, ensuring a high-quality, market-responsive final product.



2.1 Project Life Cycle Model:

1. Iteration-Based Development:

Approach: The e-commerce website will be developed in iterative cycles or sprints, typically lasting 2-4 weeks each.

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2. Requirements Gathering:

Initial Phase: Begin with a high-level understanding of requirements from stakeholders, including features for the Home Page, Category Pages, Product Catalog, Shopping Cart, Secure Checkout, Size/Fit Guides, and Contact/Support sections.

3. Planning:

Planning: At the beginning of each sprint, plan the tasks and features to be developed, focusing on the highest priority items from the backlog, such as the Checkout Flow or Admin Product Management tools.

4. Development and Testing:

Development: Build and integrate features as planned for each sprint. Implement core functionalities such as the Shopping Cart logic, Payment Gateway integration, and the Product Display pages.

5. Review and Feedback:

Sprint Reviews: At the end of each sprint, review completed features with stakeholders (the client and potential users) and gather feedback on aspects like the browsing experience and the checkout process.

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6. Deployment:

Incremental Releases: Deploy features incrementally to ensure the website is functional and meets customer needs. Monitor performance and user transactions to address any issues in the ordering or payment systems.

7. Maintenance and Updates:

Ongoing Support: Provide continuous maintenance and updates based on customer feedback and evolving requirements. Address bugs, performance issues (especially during sales), and implement new features like Wishlists or product reviews as needed.

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3.2 Expected Modules :

➤ Home Page:

Provides an initial overview, showcases the latest collections and promotions, and offers main navigation links to attract and guide the user immediately.

➤ Category & Product Catalog:

This is the core sales engine, where users can browse products, apply filters (like size and price), view detailed descriptions, images, and prices, fulfilling the function of a physical store's display aisles.

➤ Shopping Cart & Checkout:

This critical module replaces property listings. The Shopping Cart holds selected items, and the Checkout guides the user through the secure transaction process, handling shipping details and multiple payment options to finalize the order.

➤ Size and Fit Guides:

This serves as the decision-support tool, replacing the Cost Calculator. It provides detailed sizing charts and fit information

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to help customers make informed purchasing choices and reduce the high rate of returns common in online fashion.

➤ Contact/Support Section:

Facilitates customer service and inquiries regarding orders, shipping, and returns, providing essential communication channels for the e-commerce operation.

➤ Admin Dashboard (Implicit Module):

This backend module is crucial for the business, allowing the Administrator to manage the entire operation, including adding/updating inventory, processing orders, and setting up discounts and promotions.

3.3 Functional Requirement :

- Registration
- Home Section
- About Us Section
- Project
- Property Listings
- Home Coast Calculator
- Contact Us Section

3.4 Non Functional Requirement :

- Usability
- Performance
- Security
- Accessibility
- Scalability

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3.5 TimeLine Chart :



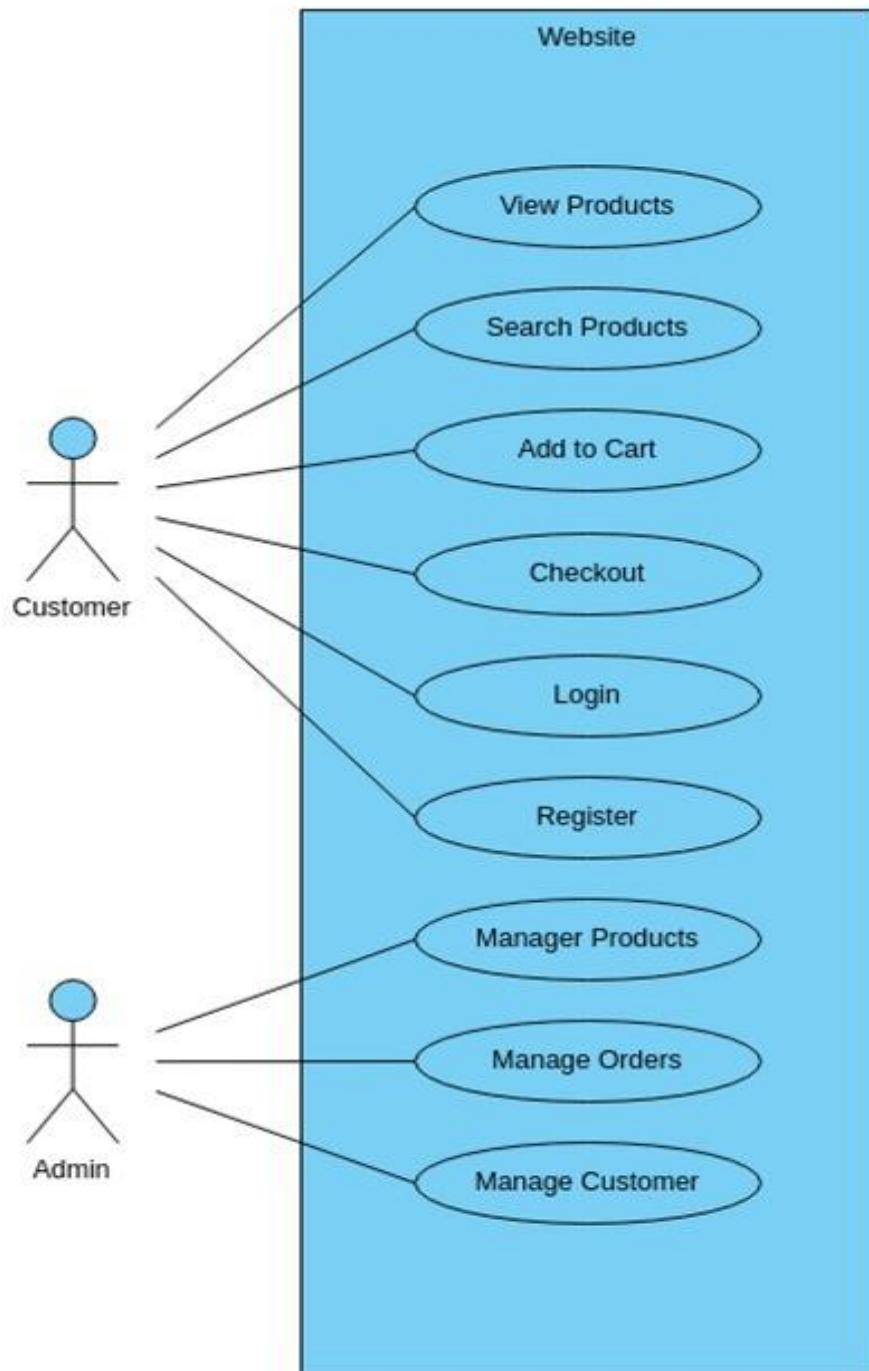
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CHAPTER: - 4

SYSTEM DESIGN

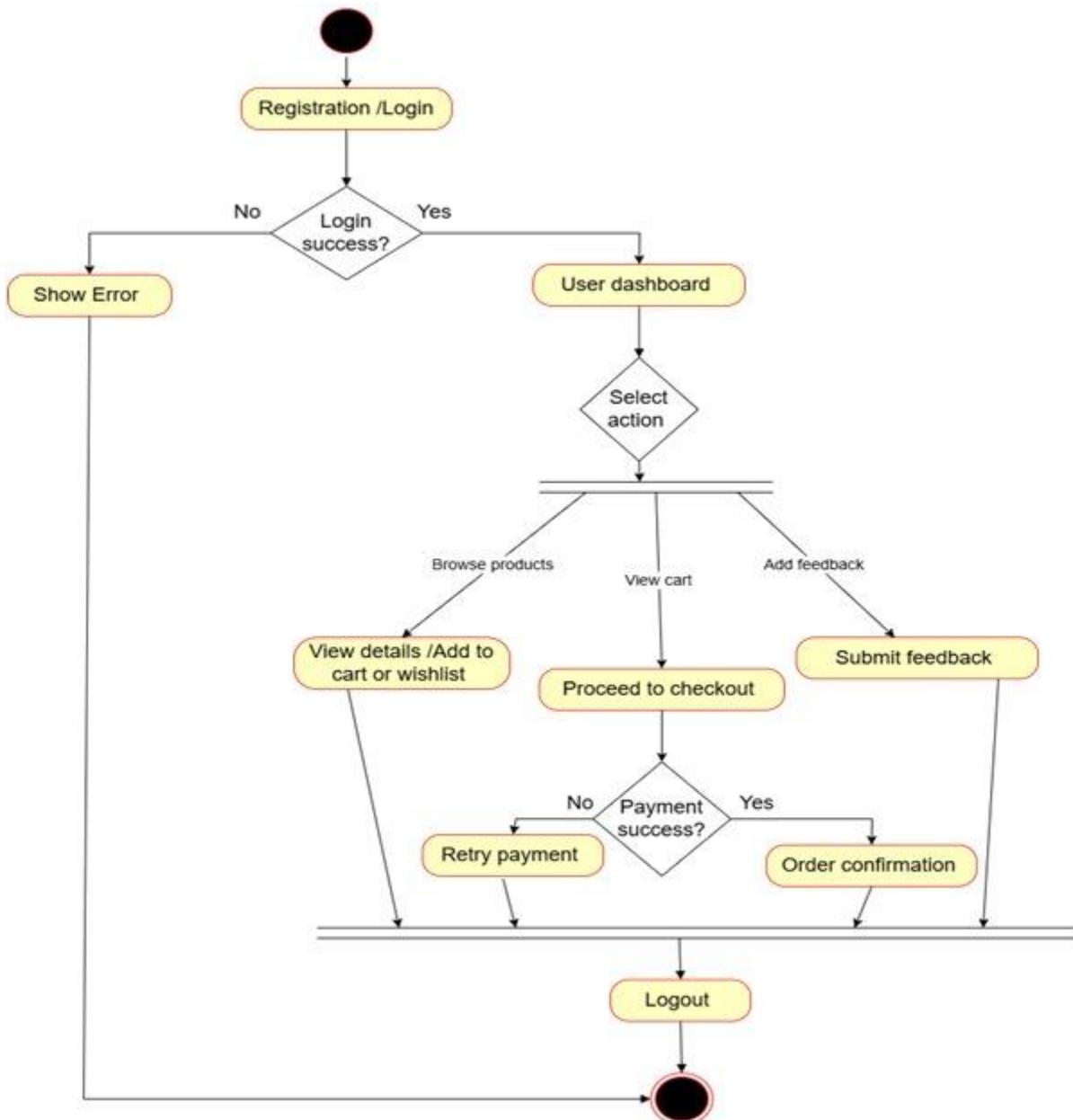
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4.1 UseCase Diagram



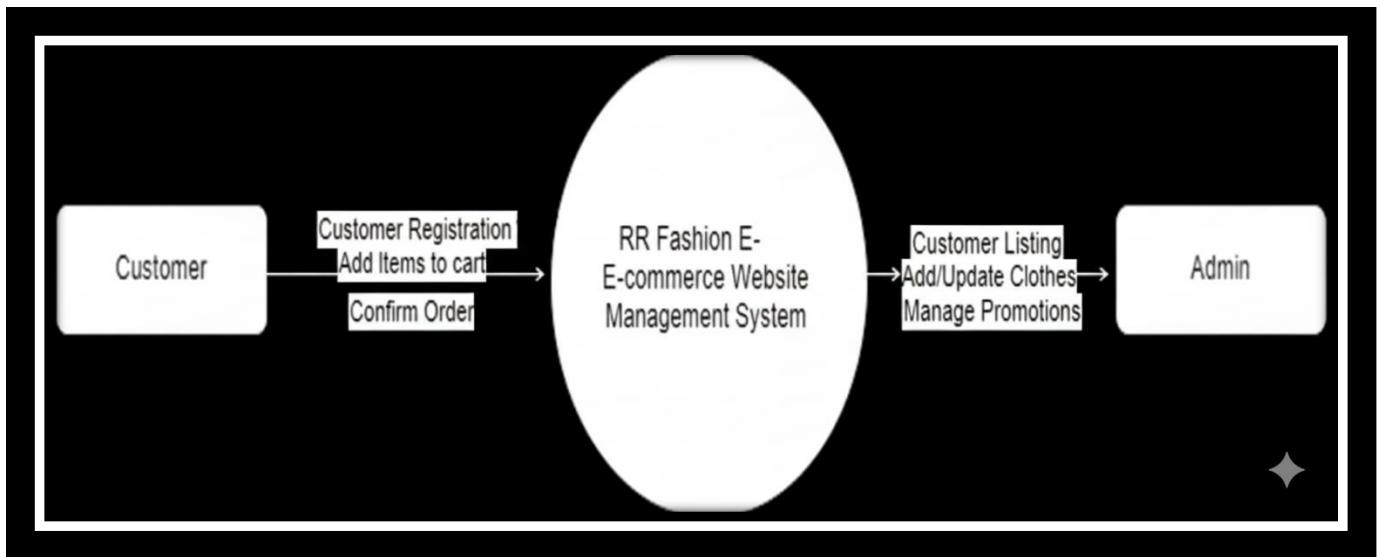
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4.2 Activity Diagram



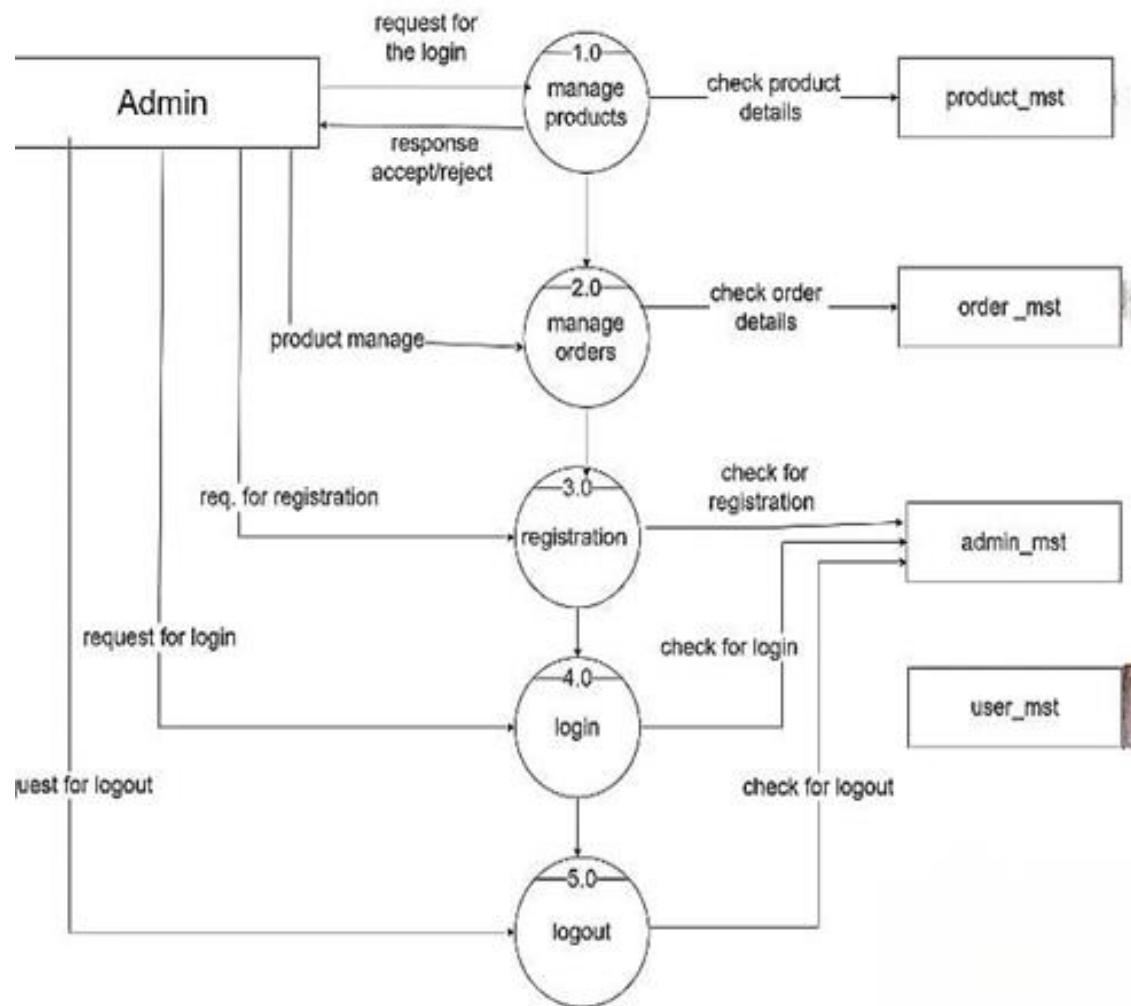
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4.3 DataFlow Daigram



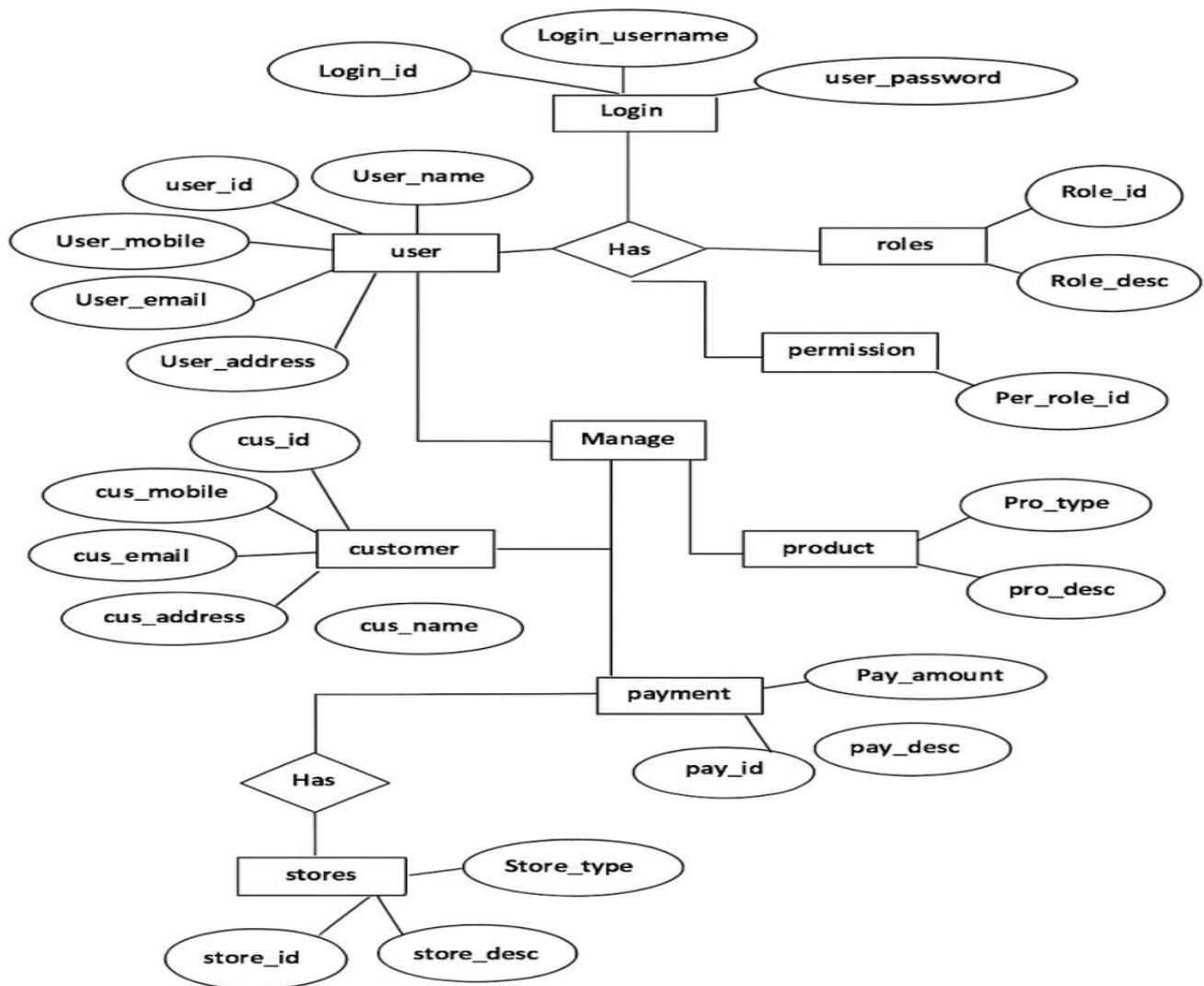
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Admin Level 1



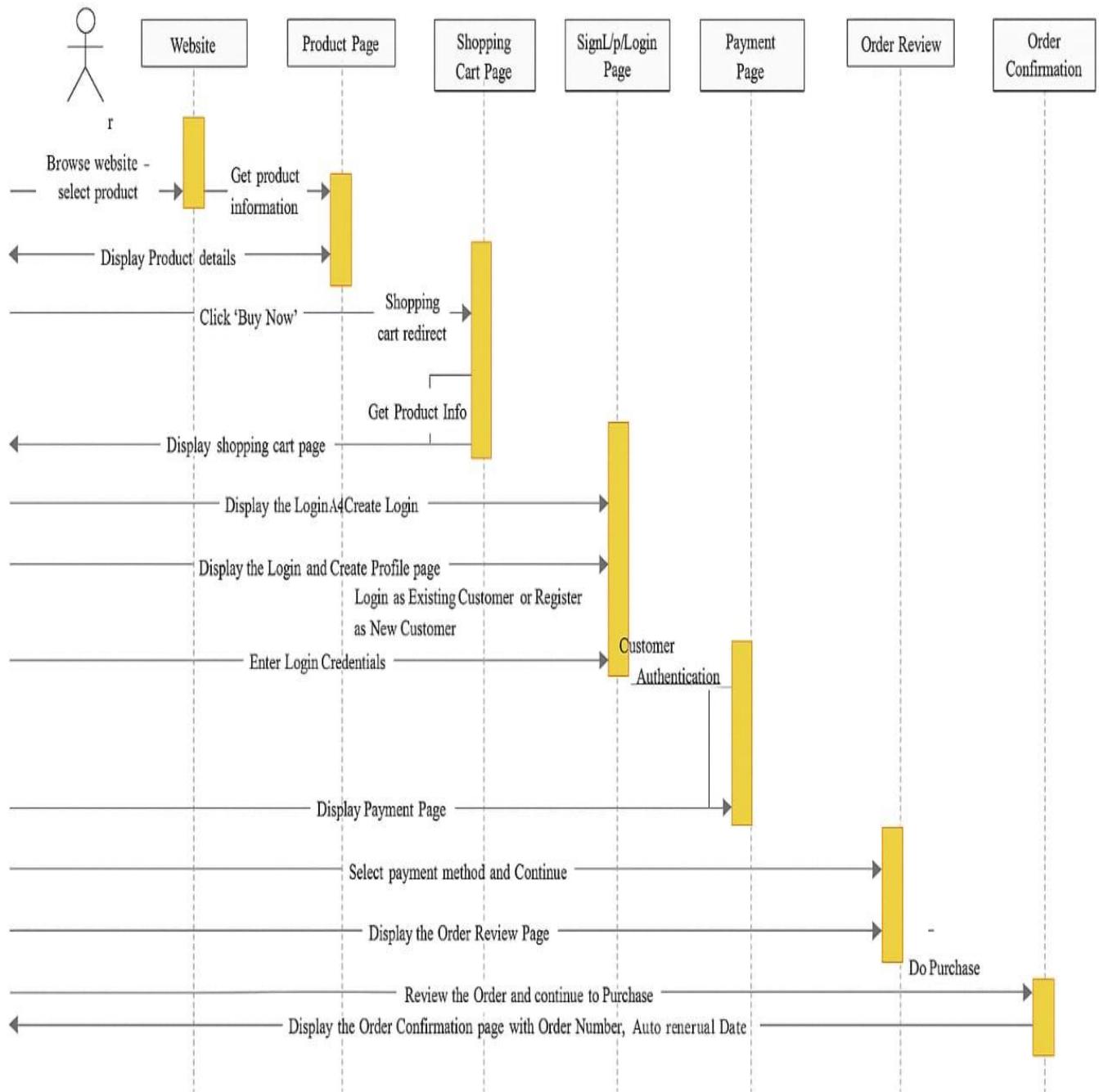
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4.4 ER(Entity Relation) Diagram



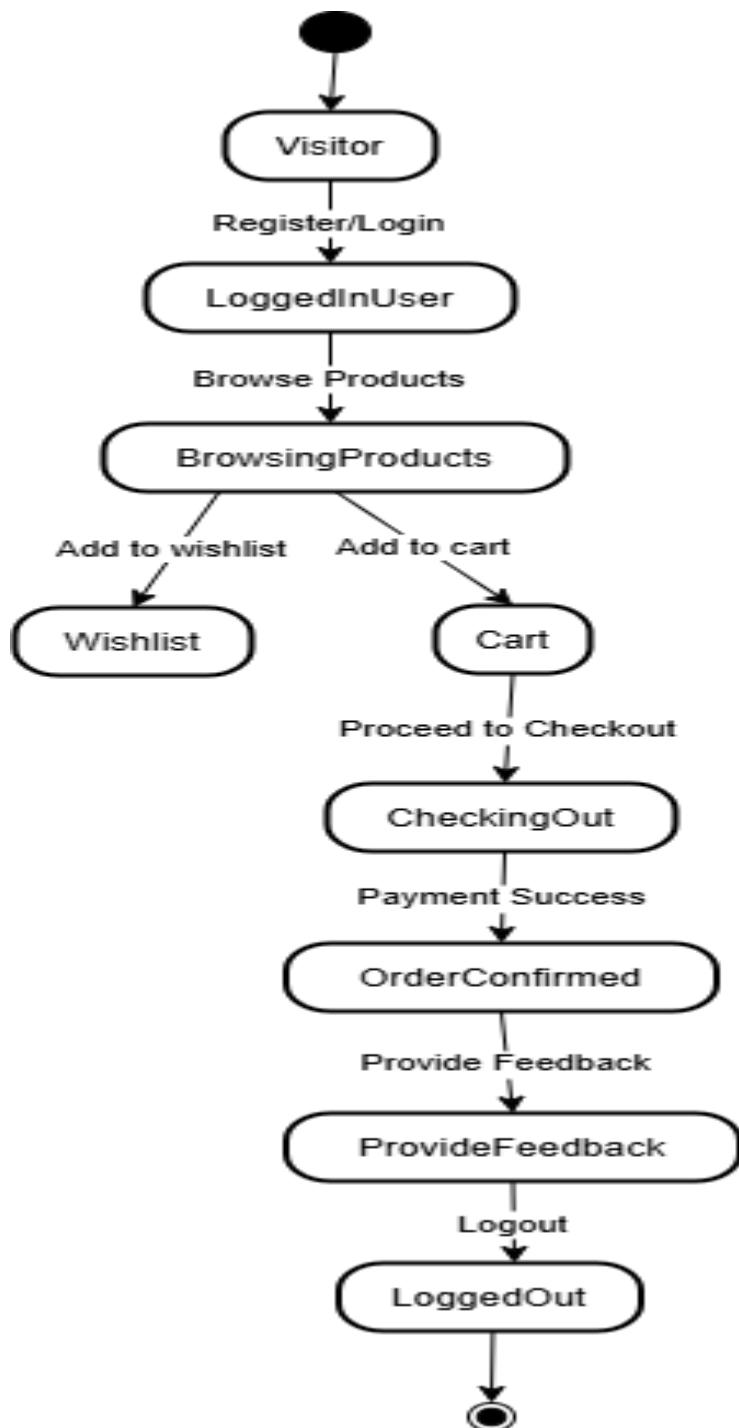
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4.5 Sequence Diagram



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4.6 State Diagram



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CHAPTER: - 5
IMPLEMENTATION

5.1 Hardware and Software Requirement

- Software requirement:**

Operating System: Windows 10 or higher version

Developing Language: html,css,js,php

Graphics software: Canva, Adobe Photoshop

Database: MYSQL

- Hardware requirement:**

Processor: Intel core i7 or Higher

RAM: 8 GB

Storage: 512 GB

Hardware requirement to use system:

RAM (Minimum): 1 GB

Storage (Minimum): 4000 MB

5.2 Snapshot

The screenshot shows a web browser window with the URL `C:/Users/Home/Desktop/RR%20FASHION/dj%20amtics.html`. The page has a light blue header with the logo "RR Fashion". A search bar with placeholder text "Search products..." and a magnifying glass icon is located at the top right. Below the header, there is a navigation menu with links to "Home", "Categories", "About", "Contact", and "Hi, Admin". On the far right of the header, there is a shopping cart icon with a red notification bubble showing the number "0". The main content area features a large, bold title "Shop the Latest Trends" in dark red. Below it is a subtitle "For Every Season - Discover Fashion for Boys & Girls". A prominent red button labeled "Start Shopping" is centered below the subtitle.

Shop by Season

The screenshot shows the same web browser window as the previous screenshot, but now displaying a "Shop by Season" section. The main title "Shop by Season" is centered above two rounded rectangular boxes. The left box, titled "Summer Collection", features a yellow sun icon and a description: "Light, comfortable clothing perfect for warm weather". It includes a blue button labeled "Shop Summer". The right box, titled "Winter Collection", features a blue snowflake icon and a description: "Cozy, warm clothing to keep you comfortable". It includes a blue button labeled "Shop Winter". The rest of the page layout is identical to the first screenshot, including the header, navigation menu, and shopping cart icon.

[Login](#) [Register](#)

Create Account

Join RR Fashion family today!

First Name **Last Name**

First name Last name

Email Address

Enter your email

Phone Number

Enter your phone number

Email Address

Enter your email

Phone Number

Enter your phone number

Password

Create a password

Confirm Password

Confirm your password

I agree to the [Terms & Conditions](#)

Create Account

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localhost/phpmyadmin/index.php?route=/database/structure&server=1&db=user&table=user

phpMyAdmin

Recent Favoured

New demo information_schema mobile mysql performance_schema phpmyadmin register test user New user

Table structure Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(11)	utf8mb4_general_ci	No	None				Change Drop More
2	username	varchar(100)	utf8mb4_general_ci	No	None				Change Drop More
3	email	varchar(100)	utf8mb4_general_ci	No	None				Change Drop More
4	password	varchar(255)	utf8mb4_general_ci	No	None				Change Drop More
5	full_name	varchar(100)	utf8mb4_general_ci	No	None				Change Drop More
6	phone_number	varchar(20)	utf8mb4_general_ci	Yes	NULL				Change Drop More
7	created_at	datetime		No	current_timestamp()				Change Drop More

Check all With selected: Browse Change Drop Primary Unique Index Spatial Fulltext

Add to central columns Remove from central columns

Print Propose table structure Track table Move columns Normalise

Add 1 column(s) after created_at Go

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Rename Drop	PRIMARY	BTREE	Yes	No	id	0	A	No	

Print Propose table structure Track table Move columns Normalise

Add 1 column(s) after created_at Go

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Rename Drop	PRIMARY	BTREE	Yes	No	id	0	A	No	
Edit Rename Drop	username	BTREE	Yes	No	username	0	A	No	
Edit Rename Drop	email	BTREE	Yes	No	email	0	A	No	

Create an index on 1 columns Go

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Login page:

Welcome Back!

Sign in to your RR Fashion account

Email Address

Password

Remember me [Forgot Password?](#)

Sign In

[Table structure](#) [Relation view](#)

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	<u>id</u>	int(11)			No	<u>None</u>	unique Id for each user		 Chang
2	<u>full_name</u>	varchar(100)	utf8mb4_general_ci		No	<u>None</u>	User's name		 Chang
3	<u>email</u>	varchar(100)	utf8mb4_general_ci		No	<u>None</u>	user email		 Chang
4	<u>password</u>	varchar(255)	utf8mb4_general_ci		No	<u>None</u>	user password		 Chang
5	<u>remember_token</u>	varchar(255)	utf8mb4_general_ci		No	<u>None</u>	stores "Remember Me" token		 Chang
6	<u>created_at</u>	timestamp			No	<u>current_timestamp()</u>	auto time when user created	ON UPDATE CURRENT_TIMESTAMP()	 Chang

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Search products... 

Home Categories About Contact Login 

About RR Fashion

Welcome to RR Fashion - Richa & Rudri Fashion

Founded with a passion for bringing the latest fashion trends to boys and girls of all ages, RR Fashion has become a trusted name in children's clothing. Our journey began with a simple vision: to create stylish, comfortable, and affordable clothing that makes every child feel confident and happy.



Richa
Co-Founder & Designer



Rudri
Co-Founder & Operations



Our Mission

To provide high-quality, trendy, and comfortable clothing for children that combines style with affordability, making fashion accessible to every family.



Our Vision

To become the leading online destination for children's fashion, known for our innovative designs, exceptional quality, and outstanding customer service.

Our Values



Quality First

We use only the finest materials and maintain strict quality control standards.



Sustainability

Committed to eco-friendly practices and sustainable fashion choices.



Customer Care

Your satisfaction is our priority with 24/7 customer support.



Innovation

Constantly evolving with the latest trends and technologies.

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The screenshot shows the homepage of RR Fashion. At the top, there's a navigation bar with links for Home, Categories, About, Contact, and Login. A shopping cart icon with a '0' is also present. Below the navigation is a section titled "Our Journey So Far" featuring four red boxes with white text: "10,000+" Happy Customers, "500+" Products, "50+" Cities Served, and "99%" Satisfaction Rate. The main content area includes a "RR Fashion" summary, "Quick Links" (Home, Categories, About Us, Contact), "Categories" (Summer Collection, Winter Collection, Boys Fashion, Girls Fashion), and "Contact Info" (Phone: +91 98765 43210, Email: info@rrfashion.com, Address: Mumbai, Maharashtra).

This screenshot shows the T-Shirts Collection page. It features a large heading "T-Shirts Collection (2)". Below the heading are several filter buttons: "All Categories", "T-Shirts" (selected), "All Styles", "Boys" (selected), and "Newest First". There are also buttons for "Jeans", "Shorts", "+ Add Random", and "Admin".

The screenshot shows the Admin Dashboard under the heading "Admin Dashboard - Full Item Management". It has tabs for "Products", "Add Item", "Users", "Orders", and "Analytics". The "Products" tab is selected, showing "Product Management (166 items)" with a "+ Add New Item" button and a "Refresh" button. Below this, there's a list of products with icons, names, descriptions, and stock levels. Each item has "Edit" and "Delete" buttons.

Product	Description	Stock
Bboy Jack Shorts	spring • shorts • jack	₹901 • Stock: 26
Ggirl Leo Shorts	winter • shorts • leo	₹1057 • Stock: 43
Bboy Long Sleeve Baby-romper	summer • baby-romper • long-sleeve	

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Admin Dashboard - Full Item Management

[Products](#) [+ Add Item](#) [Users](#) [Orders](#) [Analytics](#)

+ Add New Product to Inventory

Product Details

Product Name *
e.g., Boys Summer T-Shirt

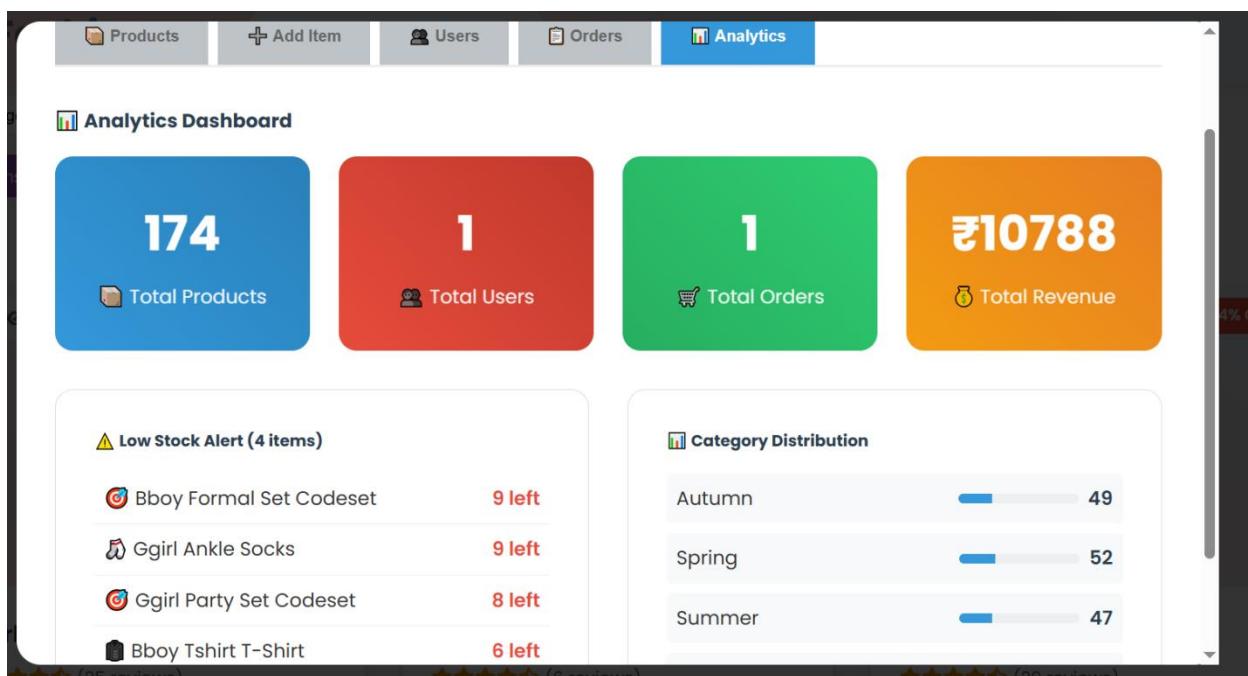
Price (₹) * 999 **Stock Qty *** 50

Category *

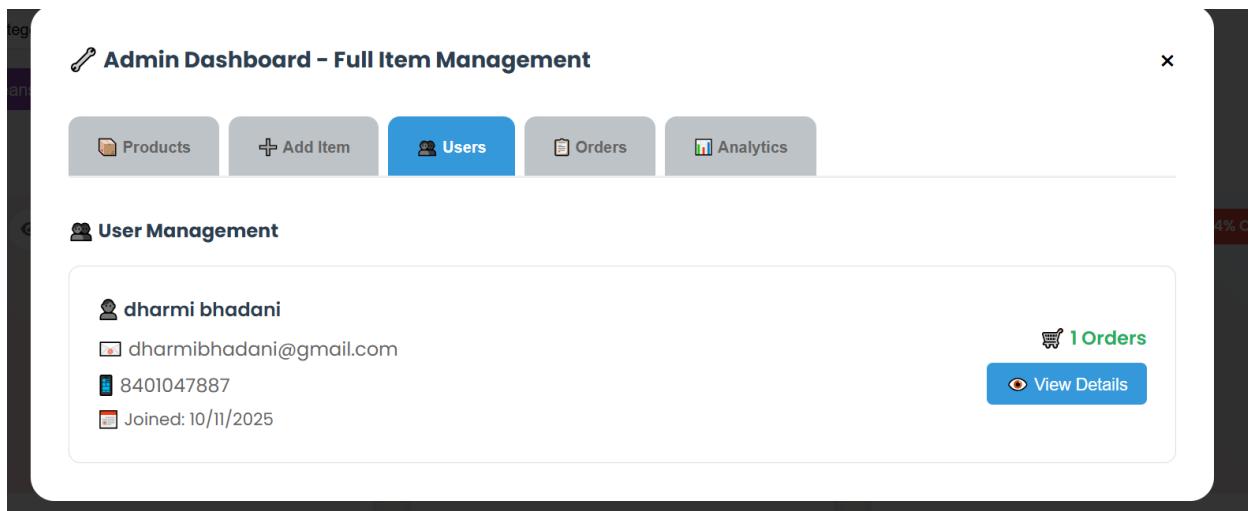
Product Image

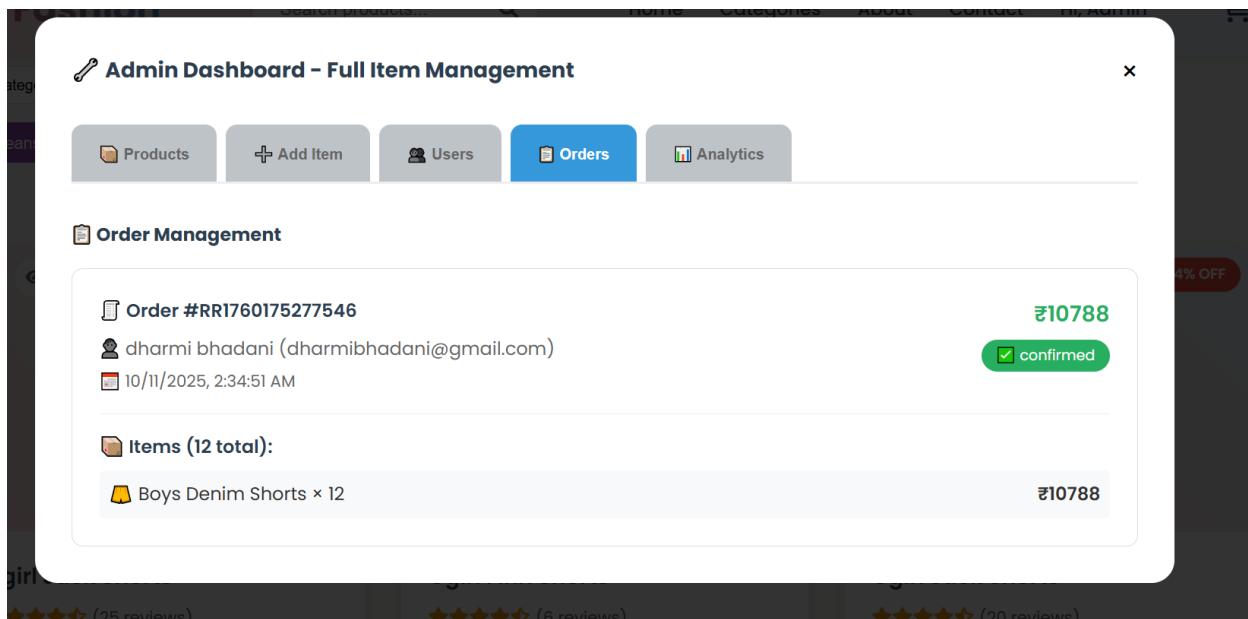
Choose Image Type:

Upload File Image URL



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A screenshot of the Admin Dashboard showing User Management. The dashboard has a header with 'Admin Dashboard - Full Item Management' and tabs for Products, Add Item, Users (selected), Orders, and Analytics. A user profile for 'dharmi bhadani' is displayed, showing an email (dharmibhadani@gmail.com), phone number (8401047887), and joining date (10/11/2025). A button for 'View Details' is shown next to a '1 Orders' badge.

A screenshot of the Admin Dashboard showing Order Management. The dashboard has a header with 'Admin Dashboard - Full Item Management' and tabs for Products, Add Item, Users, Orders (selected), and Analytics. An order for 'Order #RR1760175277546' is listed, placed by 'dharmi bhadani' on '10/11/2025, 2:34:51 AM'. The order total is ₹10788 and it is marked as 'confirmed'. The order details show 12 items: 'Boys Denim Shorts x 12'.

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15% OFF

Boys Skinny jeans

★★★★★ (47 reviews)

₹1399 ₹818

53 in stock

Add to Cart Buy Now



25% OFF

Boys Narrow jeans

★★★★★ (26 reviews)

₹1499 ₹940

38 in stock

Add to Cart Buy Now



25% OFF

Boys Relaxed jeans

★★★★★ (15 reviews)

₹1599 ₹2070

23 in stock

Add to Cart Buy Now



22% OFF

Bboy jacket tshirt

★★★★★ (54 reviews)

₹1013 ₹316

12 in stock

Add to Cart Buy Now



21% OFF

BOYS POLO SHIRTS

★★★★★ (6 reviews)

₹949 ₹1233

13 in stock

Add to Cart Buy Now



19% OFF

BOYS TANK TOP

★★★★★ (45 reviews)

₹499 ₹640

12 in stock

Add to Cart Buy Now

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17% OFF

BOYS SHIRTS

★★★★★ (17 reviews)

₹999 ₹1299

14 in stock

Add to Cart Buy Now



32% OFF

BOYS HODDIE

★★★★★ (47 reviews)

₹1249 ₹1629

19 in stock

Add to Cart Buy Now



21% OFF

BOYS JACKET

★★★★★ (19 reviews)

₹1399 ₹1818

11 in stock

Add to Cart Buy Now



17% OFF



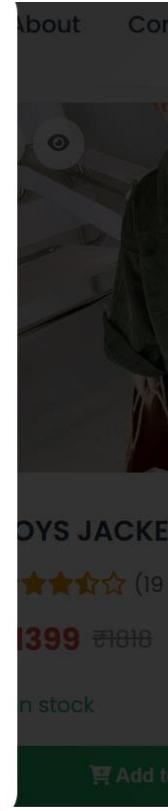
BOYS JACKET

★★★★★ (19 reviews)

₹1399

Stock: 11 available

Add to Cart Buy Now



About Contact

BOYS JACKET

★★★★★ (19 reviews)

₹1399 ₹1818

11 in stock

Add to Cart

RR fashion



Ggirl luck short

★★★★★ (13 reviews)

₹450 ₹585

10 in stock

Add to Cart

Buy Now



Ggirl Nnoch shorts

★★★★★ (10 reviews)

₹399 ₹518

14 in stock

Add to Cart

Buy Now



Ggirls adam shorts

★★★★★ (26 reviews)

₹399 ₹518

15 in stock

Add to Cart

Buy Now



Unisex hoodie t shirt

★★★★★ (10 reviews)

₹559 ₹726

12 in stock

Add to Cart

Buy Now



unisex jacket tshirts

★★★★★ (40 reviews)

₹942 ₹1224

11 in stock

Add to Cart

Buy Now

This page says

Order Confirmation - RR1761990019845

Items: 9

Subtotal: ₹9015

Total: ₹9015

Thank you for shopping with RR Fashion!

Your order will be delivered in 3-5 business days.

OK

Bboy Polo Shirts T-Shirt

★★★★★ (31 reviews)

₹1296 ₹1063

10 in stock

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CHAPTER: - 6

TESTING

Software Testing and Validation

Software Testing and Validation are critical processes that ensure the developed RR Fashion system meets the defined user needs and technical specifications.

The main objectives of information system testing are:-

- Verification & Validation (V&V):** To confirm the system is built **correctly** (Verification) and that it is the **right product** (Validation) that meets user needs.
- Defect Detection:** To actively **find errors (bugs)** and correct them before the system is deployed.
- Quality Assurance:** To ensure the system meets all quality standards for **performance, security, and usability**.
- Risk Reduction:** To identify potential failures (e.g., payment errors, slow loading) and **mitigate risks** to the business and users.

● Types of Testing:

1. Manual Testing
2. Automation Testing

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1. Manual Testing :- the RR Fashion E-commerce Website is

the process where a human tester manually executes test cases, acting as both a potential customer and an administrator, without the aid of automated scripts. This approach is essential for rigorously validating the **usability and user experience (UX)** by physically navigating the entire customer journey, which includes checking product display and visual elements, confirming the accuracy of size charts, validating form inputs during registration and checkout, and ensuring administrative functions (like adding inventory) work as intended, ultimately guaranteeing the site is both functionally correct and intuitive for the end-user.

- **Types of Manual Testing:**

1. Functional Manual Testing

- **System testing**
- **Regression testing**
- **Admin functionality testing**
- **Exploratory testing**

2. Non-Functional Manual Testing

- **Usability Testing**
- **Compatibility Testing**
- **Security Testing**

3. white box testing

4. black box testing

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2.Automation Testing - the RR Fashion E-commerce Website is the use of specialized tools and scripts to execute test cases automatically, primarily to **accelerate regression testing**—ensuring that every code update doesn't break core features like the full **Checkout workflow** and **User Login**. This method is crucial for running **high-volume performance tests** (simulating many concurrent users) and quickly verifying that **Real-Time Listing Updates** and the site's functionality remain correct across multiple web browsers, guaranteeing the platform's speed, security, and reliability.

6.2 Test Case:

ID	Name	Test Steps	Test Data	Expected Output	Actual Output	Status (Pass/Fail)
1	Launch Website	Open the website URL in a web browser	N/A	Homepage displaying clothing categories and banners successfully .	Homepage display successfully	Pass
2	Sign Up User	Click on the "Sign Up" button and fill out the form.	Email: lerisa@gmail.com, Password: 123456	User Profile page (or dashboard) is created and displayed.	User profile page is created	Pass
3	Login User	Click on the "Login"	Email: lerisa@gmail.com,	Home page opens; if	Home page opens; if	Pass

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ID	Name	Test Steps	Test Data	Expected Output	Actual Output	Status (Pass/Fail)
		button and enter credentials.	Password: 123456	failed, show " email and password incorrect " message.	failed, shows error message	
4	View Product Listings	Navigate to the Clothing Category or search results page.	N/A	Display of products available for purchase (e.g., shirts, dresses) with images and details.	List of products available	Pass
5	Use Cart Total Calculator	Add multiple items to the cart and access the cart summary.	Ex: Item 1 Price: 3000, Item 2 Price: 1000, Quantity: 2	Detailed cart summary showing itemized costs, taxes, and a final total before checkout.	Detailed cart breakdown	Pass
6	View Portfolio/Collections	Navigate to the New Arrivals or Featured	N/A	Display of featured clothing lines with images and description	Display of past projects	Pass

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ID	Name	Test Steps	Test Data	Expected Output	Actual Output	Status (Pass/Fail)
		Collections section.		ns.		
7	Contact Us Form	Fill out and submit the customer inquiry form.	Ex: Name: Lerisa, Email: lerisa@gmail.com, Message: Inquiry about a size guide.	Confirmation message of inquiry submission displayed to the user.	Confirmation message	Pass

6.3 White Box Testing:

- **White Box Testing** focuses on the **internal structure, design, and coding** of the RR Fashion application. The tester must have knowledge of the website's source code (HTML, CSS, PHP), its database structure (SQL), and its internal logic.

White Box Method	Focus	Specific RR Fashion Example
Path Testing	Testing every possible logical path within a module.	Checking the code logic within the Login function (PHP) to ensure that the code handles both successful login and every possible failure path (e.g., incorrect password, invalid email, banned account).
Data Flow Testing	Tracking how data variables are defined and used.	Checking the PHP and SQL code to ensure that the Inventory Level of a product is correctly decremented immediately after a successful

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White Box Method	Focus	Specific RR Fashion Example
		purchase, and not before or after, maintaining Real-Time Listing Updates .
Security Testing (Code)	Examining the source code for vulnerabilities.	Reviewing the PHP code used in the User Registration form to ensure it properly sanitizes user input and prevents common attacks like SQL Injection when interacting with the database.

6.4 Black Box Testing:

➤ **Black Box Testing** focuses on the **external behavior** of the RR Fashion application. The tester interacts only with the user interface (UI) and has **no knowledge** of the underlying code or database structure. The test is based solely on the specified requirements.

Black Box Method	Focus	Specific RR Fashion Example
Equivalence Partitioning	Dividing input data into partitions and testing one value from each partition.	Testing the ' Discount Code ' field during checkout with three inputs: a valid code, an expired code, and a code with the wrong format, to ensure all logic paths are covered.
Boundary Value Analysis	Testing the boundary (limit) values of input fields.	Testing the ' Quantity ' field on a product page with the minimum value (1), the maximum stock limit (e.g., 99), and values just outside the limit (0 and 100) to check system response.
User Acceptance Testing (UAT)	Confirming the system meets the user's business needs.	The RR Fashion team is given the final website and manually confirms that the Multiple Payment Options function as promised and the design looks correct.

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CHAPTER: - 7

CONCLUSION AND FUTURE SCOPE

7.1 Conclusion:-

- In conclusion, the **RR Fashion E-commerce Website** successfully provides a robust and user-friendly online platform for shopping for clothes. The project met its core objective of developing a digital store that makes shopping **easy, fast, and convenient** by allowing users to browse different categories, compare prices, view reviews, and purchase items anytime and anywhere.
- The implementation of key functional requirements, including **User Registration, Secure Checkout, and an Admin Product Management System**, ensures a smooth experience for both customers and the business. The website's design, backed by a robust technology stack of **HTML, CSS, JavaScript, PHP, and SQL**, is capable of handling the demands of online retail and is poised to help RR Fashion **increase sales and revenue** and **improve the overall customer experience**.

7.2 Future Scope

- To further enhance the RR Fashion e-commerce platform and maintain a competitive edge, the following future enhancements are recommended:
 - **Virtual Try-On Feature:** Integration of augmented reality (AR) or AI-powered tools to allow users to virtually try on clothing, reducing returns and enhancing the online shopping experience.
 - **Personalized Recommendation Engine:** Implementing a sophisticated algorithm that uses customer purchase history and browsing data to offer highly personalized product suggestions, similar to the suggested styles in the presentation.

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- **Live Chat Support System:** Integrating a real-time chat feature or a chat box to provide instant customer support, answer product inquiries, and manage order tracking.
- **Mobile Application Development:** Creating a dedicated mobile app version of the RR Fashion store to enhance accessibility, leverage mobile-specific features like push notifications, and improve user convenience.
- **Advanced Analytics Dashboard:** Expanding the Admin panel with deeper analytics on sales trends, popular products, and customer demographics to enable more informed business decisions.
- **User Review and Photo Uploads:** Allowing customers to upload photos of themselves wearing the purchased items alongside their reviews to build greater trust and engagement.

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