

DATABASE MANAGEMENT SYSTEMS FINAL EVALUATION PROJECT: ECOMMERCE WEBSITE

MEMBERS-

AAYUSH	20JE0010
NAMAN MUNIYA	20JE0600
NEELANSH BANSIWAL	20JE0608
RAJNEESH MAURYA	20JE0762

Project Statement

Traditionally, customers are used to buying the products from shops, which requires the customers to show up in the shops in person, and walk around different shopping shelves, and travelling cost. It takes labour, time and space to process these operations.

Furthermore, the spread of the Covid-19 pandemic has caused a lot of changes in our lifestyle, people fearing to get outside their homes, transportation almost shut down and social distancing becoming all the more important. Big to small scale business that relied on the traditional methods which incur a lot of consequence due to the lockdown issues.

Solution

Best Buy Store is an Online shopping system provides a solution to reduce and optimize these expenses. Authorized Customers do not need to go to the factual shops to choose, and bring the products they need by hands. They simply browse their Personal computers to access shops, and evaluate the products description, pictures on the screen to choose products. In addition, the owners of the shop do not need to arrange or exhibit their stocks products.

They just input the description, prices of products, and upload their pictures. Simply, both customers and shop owners do not need to touch the real products in the whole process of shopping, and management. In the end the logistic centre will distribute the products required by customers, or products ordered by shop owners to their locations. The payment and products' quantity will be saved in database through the data flow. These shopping, management and distribution processes greatly simplify and optimize the retail business.

Project Objective

- An online shop that will allow online shoppers to buy products from formal and informal merchants.
- To design an online shopping store.
- To provides a solution to reduce and optimize the expenses of customer order management
- To create an avenue where people can shop for products online.
- To develop a database to store information on products and services.
- To provide user friendly environment and secure authentication to avoid frauds.

System Requirements

There are two types of users in the system:

- 1) Admin
- 2) Customer

Admin performs following tasks:

- •Customer Management.
- Product Management
- •Generate Report
- Updating and Removing Content.

Customer performs following tasks:

- View Products.
- Add to Wishlist/Cart.
- Purchase the Product.
- •Edit his/her Profile.
- View his/her Order History.

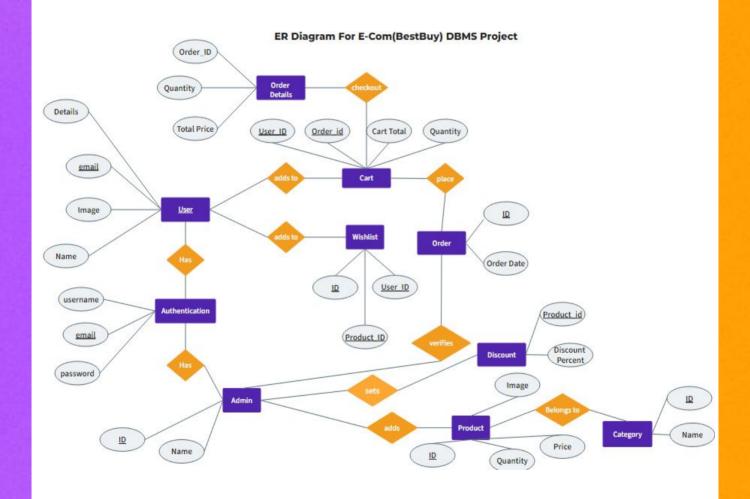
Features for Customers:

- •A customer can access any features only after he signs up and login to the system.
- •Customer can also add/remove product to cart (if customer try to add same product in cart. It will add only one).
- If customer click on checkout button, then their payment will be successful and their order will be placed.
- Customer can check their order details by clicking on My Orders button.
- •Customer can add a product either to cart or wishlist, from wishlist he can also add the product to the cart in order to buy.
- •A customer can edit/view his profile whenever required.

Features for Admin

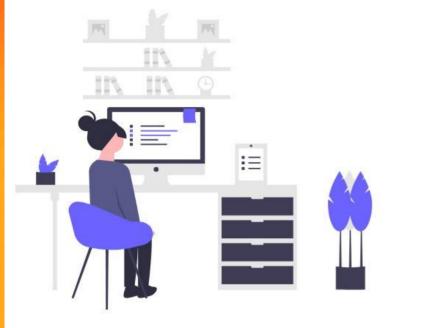
After login, there is an Admin Panel where the admin can do the following:

- Admin can add/delete/view/edit the Products.
- Admin can view/edit/delete Customer details.
- Admin can view Order details.
- Admin can view/edit/delete Categories.
- Admin can view/edit/delete Discounts on Products.
- Admin can view/edit/delete List of Locations and their respective delivery fees.
- Admin can Generate Report of Orders Placed.



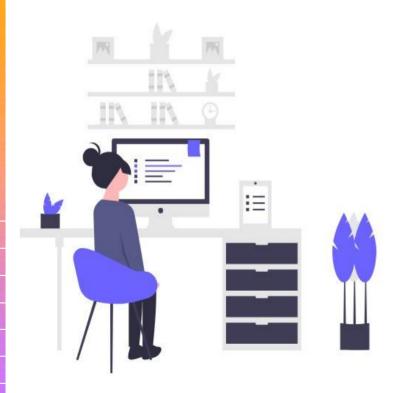
Design of Site

REGISTER PAGE: New users can register here



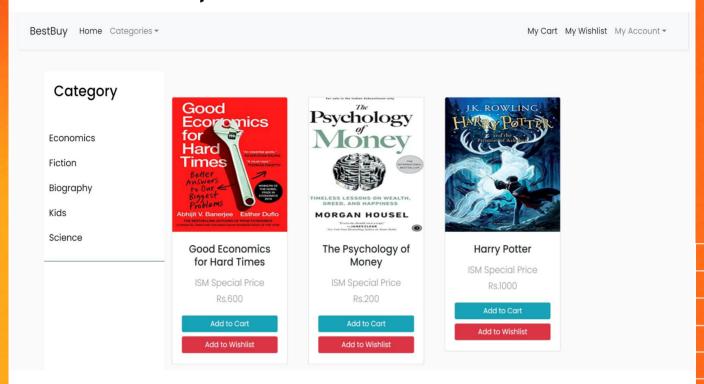
Sign Up Welcome To our BestBuy Store. Sign Up to Enjoy the website Email Name Password Already Have an Account? Sign-In

Login Page: After registering You can login

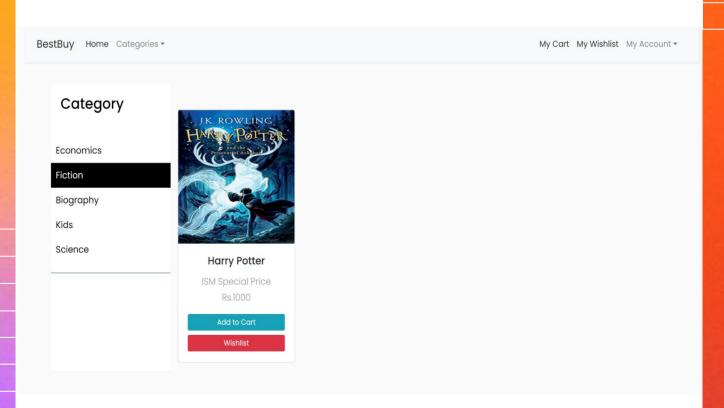


Log In Welcome To o Enjoy the web	ur BestBuy Store. Sign In below site
Name	
Password	
	Don't Have an Account? Sign-Up
	Let Me in!

HOMEPAGE: The Home Screen will consist of screen were one can browse through the the products which we have on our website



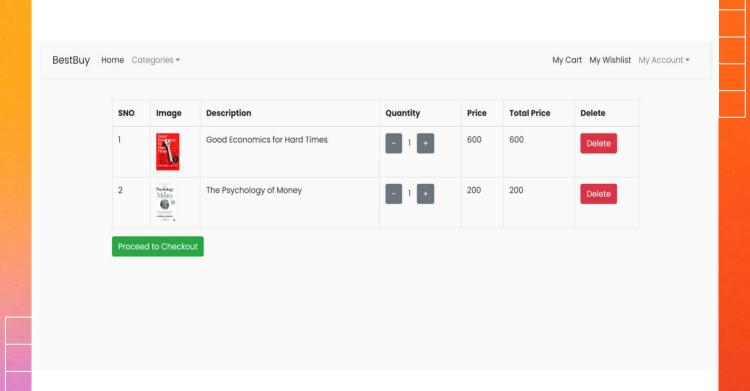
Categories Sidebar : Browse through Products of Specific Category.



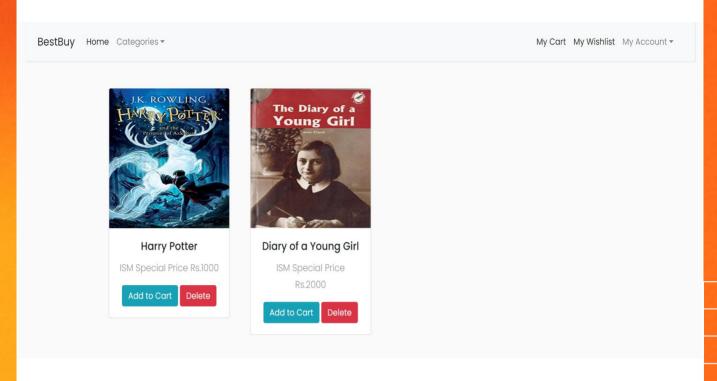
Drop Bar for User: Facilitates features for logged in users.



My Cart: Shows Products in your cart



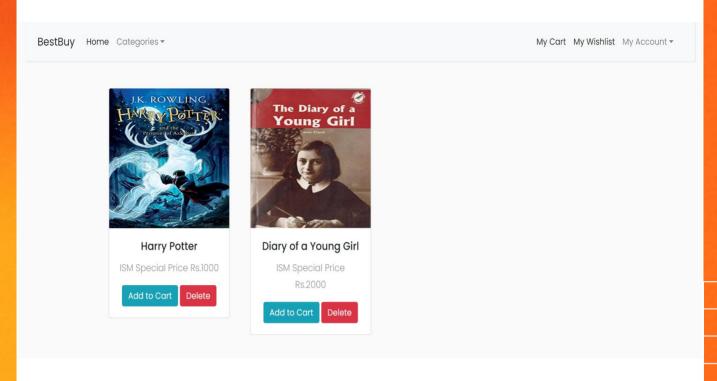
Wishlist: Shows Products in your Wishlist



Edit Profile Page: Provides user to edit his/her Profile.

Edit Your Profile Name: Rajneesh Email: mrajneesh723@gmail.com Password: Image: Choose File No file chosen Details: null View User Submit

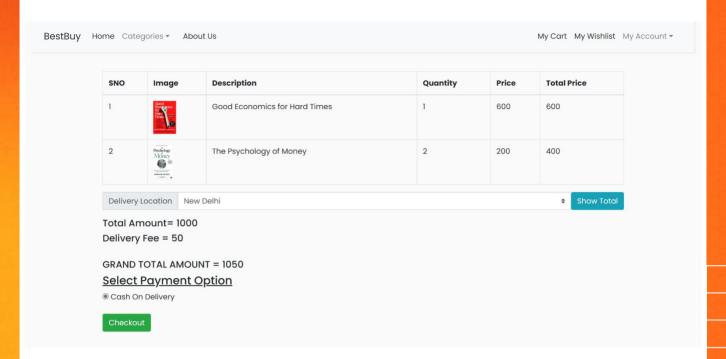
Wishlist: Shows Products in your Wishlist



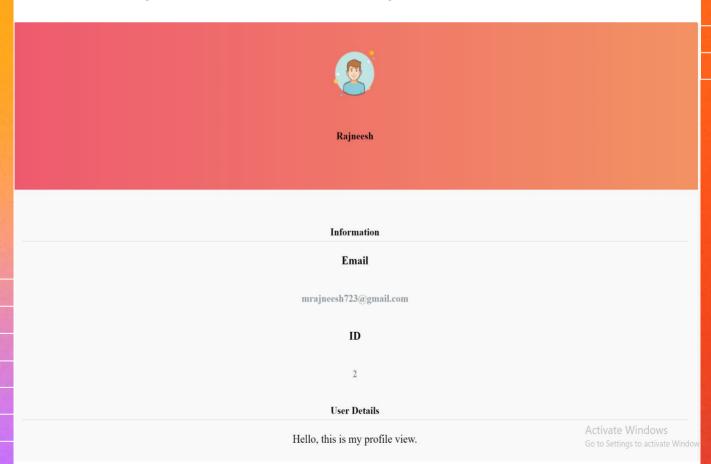
Edit Profile Page: Provides user to edit his/her Profile.

Edit Your Profile Name: Rajneesh Email: mrajneesh723@gmail.com Password: Image: Choose File No file chosen Details: null View User Submit

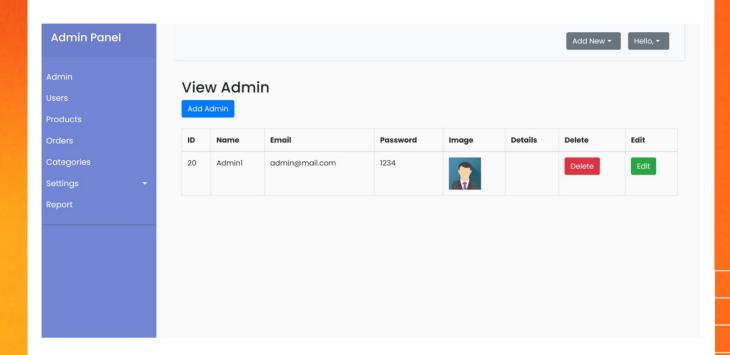
Checkout Page: Shows information of orders for Payment.



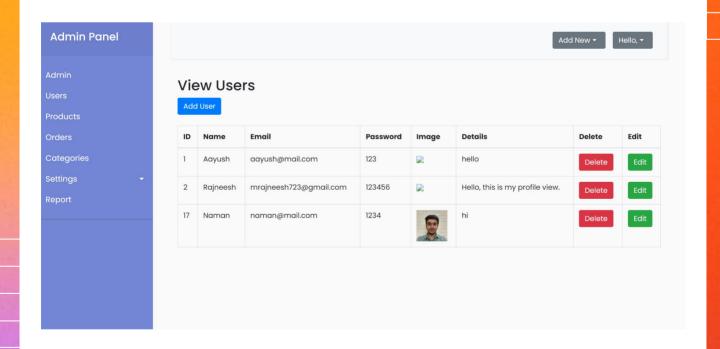
Profile Page: Views Profile Page of user.



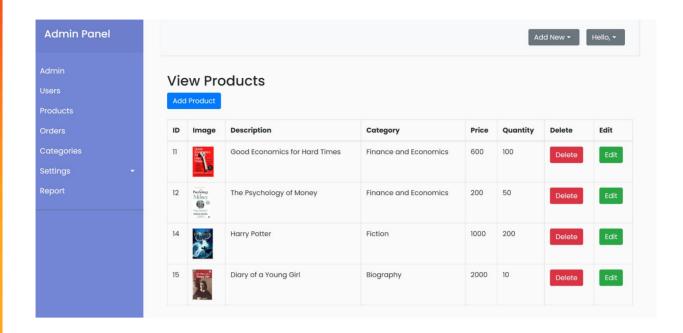
Admin Panel: Manage Admin Users



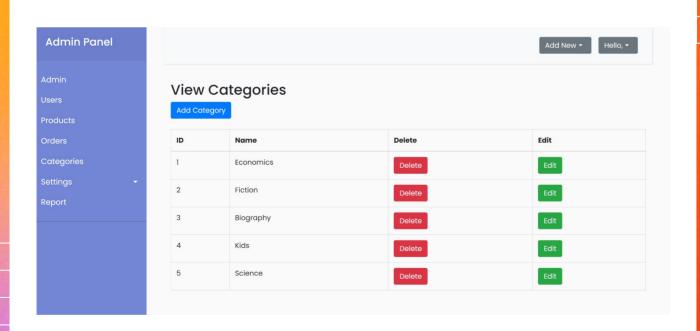
Admin Panel: Manage Customer Records



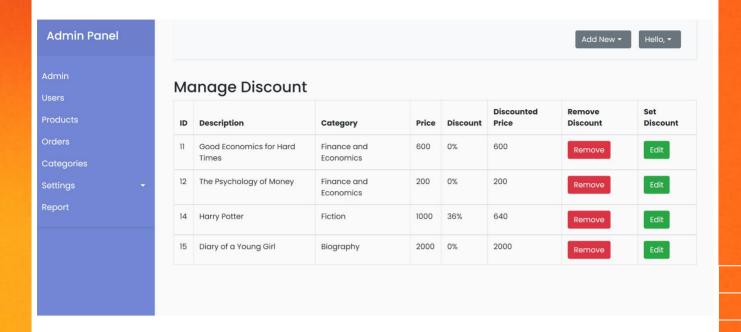
Admin Panel: Manage Products



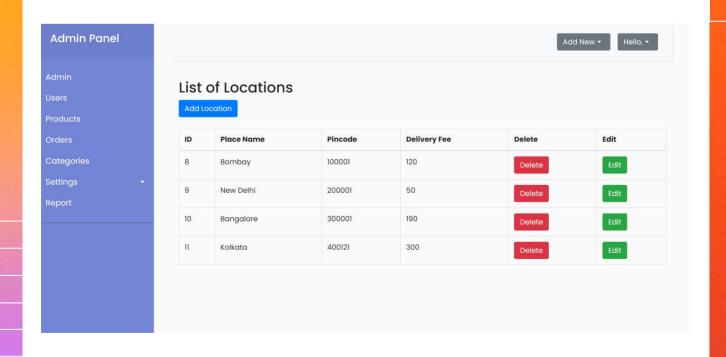
Admin Panel: Manage Categories



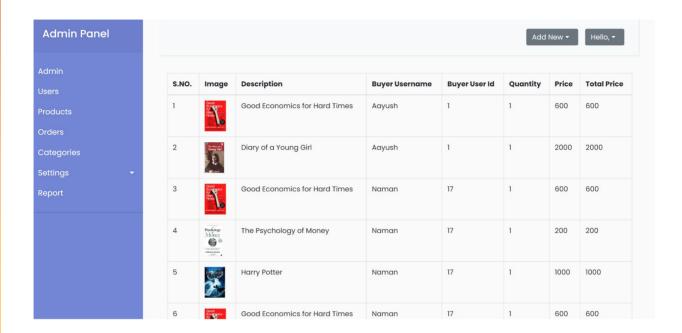
Admin Panel: Manage Discounts



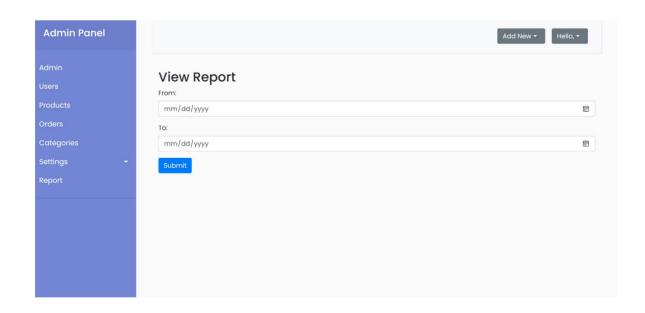
Admin Panel: Manage Delivery Locations and their respective Delivery Fees



Admin Panel: View Orders



Admin Panel: Generate Report



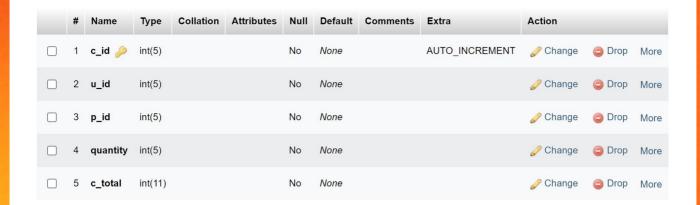
Category Table: Categories information is stored in table.

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra	Action		
1	category_id 🔑	int(5)			No	None		AUTO_INCREMENT	Change	Drop	More
2	category_name	varchar(30)	utf8mb4_general_ci		No	None			Change	Drop	More

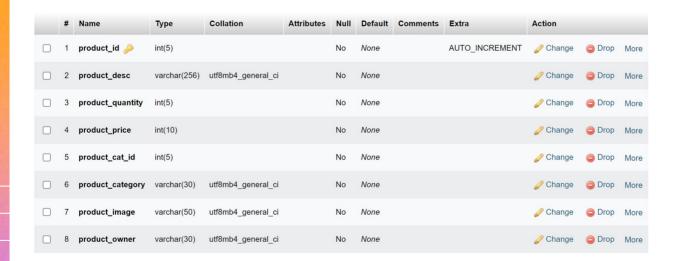
User Table: User information is added to database with Unique ID based on their roles.

	#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra	Action		
	1	user_id 🔑	int(11)			No	None		AUTO_INCREMENT	Change	Drop	More
	2	user_name	varchar(256)	utf8mb4_general_ci		Yes	NULL			Change	Drop	More
	3	user_email 🔎	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change	Drop	More
	4	user_password	varchar(256)	utf8mb4_general_ci		No	None			Change	Drop	More
	5	user_image	varchar(256)	utf8mb4_general_ci		Yes	NULL			Change	Drop	More
	6	user_details	varchar(256)	utf8mb4_general_ci		Yes	NULL			Change	Drop	More

Cart Table: Cart information is stored in table.



Product Table: Product information is added to database with Unique IDs.



Challenges Faced

Selection of Right DBMS:

criteria which we set

- i. Easy to understand.
- li. In sync to Our course.
- Iii. Large Community support.
- Iv. To understand other DBMS with the help of this DBMS

Solution: Preferred RDBMS, more specifically chosen Mysql as it fits to solve the above problems.

Authentication Related problems:

We wanted that a user can't access home page without logging into the home page.

Solution: Used \$_SESSION to solve this problem.A session is a way to store information (in variables) to be used across multiple pages.

So I started the session on logging in and put the condition to open the page only when session is active.

Connecting database with PHP code:

Solution:

\$conn = mysqli_connect(\$servername, \$username,
\$password,\$db);

mysqli_connect() function opens a new connection to the MySQL server.

How we will run codes in Local server:

Solution: Xampp

xampp allows you to work on a local server and test a local copies of websites using PHP code and MySQL databases.

Once xampp is active, you can access your local copy with a browser using localhost. Also Xampp can run over both Windows and Linux.

<u>Selection of Front-end Framework for Smooth</u> interface:

Bootstrap makes responsive web design a reality. It makes it possible for a web page to detect the visitor's screen size and orientation and automatically adapt the display accordingly.

The software is available precompiled or as source code.

Conclusion

The project titled BestBuy was completed successfully. The system has been developed with much care and free of errors and at the same time it is efficient and less time consuming. The purpose of this project was to develop a web application for purchasing items from an online store. This project enabled us to gain valuable information and practical knowledge on several topics like designing web pages using HTML, CSS, usage of Bootstrap's responsive templates, designing of full stack PHP application, and management of database using MySQL.

Also, the project helped us in understanding about the development phases of a project and software development life cycle. We learned how to test different features of a project. This project has given us great satisfaction in having designed an application which can be implemented to any nearby shops or branded shops selling various kinds of products by simple modifications. However, it was very challenging learning and developing an application using a new technology.