



INSTITUTE FOR ADVANCED COMPUTING AND SOFTWARE DEVELOPMENT AKURDI, PUNE

Documentation On

"Online E-Commererce Platform for GI Tag Products"

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1. Introduction

Online E-Commerce platform for GI Tag is a web application that provides the function

and features to authenticate and identify the users and provide then with easy, intuitive, personalized and user-customizable web-interface for facilitating access to information and services that are of primary relevance and interests to the users. The Purpose of project is to make a full functional online Platform system that allows its users to search and purchase a product online based on category, can add the product in shopping cart and place order online.

A geographical Indication (GI) tag is form of intellectual property, a certification given

to certain goods or products from particular area or state or country that is unique to a particular geographical region these tags are tools to protect the ownership rights on natural resources and manufacture goods.

Problem Statement

Nowadays, the network plays an import role in people's life. In the process of the improvement of the people's living standard, people's demands of the life's quality and efficiency are higher.

A premium collection of regional origin quality assuring products & artworks without any compromises made by experienced hands throughout the years, which reflects cultural and traditional legacy of our country

By creating such a shopping website for GI products we also promoting "Made In India" program. Using Our E Commerce Website User can purchase the products online which maintains old heritage and classic behavior. The Purpose of project is to make a full functional E-Commerce Website that allows its users to search and purchase product online based on category.

Product Scope

The Online E-Commerce platform for GI Tag Actors is divided into three categories, one is the front user, one is subscriber and one is the background user (Admin). Frontend users are mainly customers who will buy products from our platform. Front-end users can register, login, search the products, add the products to shopping cart and place orders. The subscriber will be able add, modify or delete the product details, can add the latest products. Also admin will be able to store log of both these users.

Aims & Objectives

- We are creating a platform, a digital market where you can find and buy Invaluable Treasures of Incredible India (GI) Geographical Indication Products Online
- To develop a system that will surely satisfy the customer.
- To design a system able to accommodate huge amount of orders at a time.
- To improve the communication between the customer and the subscriber and minimize the time of ordering.
- To automatically compute the bill.

The system will also automatically calculate and displays the final bill without having any error because the information for that item is already inserted.

Overall Description

PROPOSED SYSTEM

- The Proposed system provide full functional online platform that allows its users to search and purchase a product online based on category and subcategory.
- Actors of this project are divided into three categories, one is the front user, one is subscriber and one is the background user (Admin).
- Front-end users are mainly customers who will buy products from our platform. Front-end users can register, login, search the products, add the products to shopping cart and place orders.
- The subscriber will be able add, modify or delete the product details, can add the latest products. Also admin will be able to store log of both these users

Benefits of Online E-Commerce platform for GI Tag

- This Online E-Commerce platform is fully functional and flexible.
 And It is very easy to use.
- This Online E-Commerce platform helps user to purchase the Geographical Indication (GI) products online from home. It saves a lot of time
- Eco-friendly: The monitoring of the user order and the overall business becomes easy and includes the least of paper work
- The application acts as an office that is open 24/7.
- It increases the efficiency of the system at offering quality services to the customers.
- It provides custom features development and support with the application.

Users and Characteristics:

Admin Module:

1 .Admin Login-

• Admin can login using verified username and password;

2. Customer Management-

- View customer's details.
- View all orders by each customer.
- Validating customer during login.

3. Product Status Management-

• Admin can see status of product as per subscribers subscription period.

4. Subscriber Management-

• If subscriber choose subscribe option and fill the related form of subscription and terms and conditions. Admin add him in subscriber table. Admin views products uploaded by subscribe related tables.

Customer Module:

1 .Customer Registration Login-

- Customer can register as a member, after login, modify personal information, modify the password and exit.
- If Customer not registered then give him option of registration.

2 .Category display-

• Customer can view products as per States and Category.

3 .Product display-

• Customer can Search the products by category, by state or it simply search in search box.

4. Cart Management-

- Customers are not required to sign in or register to be able to maintain their shopping cart / baskets items.
- Customer can add the products in the cart which customers wants to buy, modify quantity of products, can be able to remove the products from the cart.

5. Order Management-

- Customer can order the product, review the details of existing order and place the order, cancel the order.
- Customers can change shiping address and in last place order

6.Customer Account Management-

• Customers have access and control over their personal account information via the "My Account" area on your website.

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• Here they can view their current and previous orders, return items, add product reviews and update their address and contact information.

7. Checkout Options-

- Customers can choose from a variety of payment options including PayPal, account payment, cash on delivery when placing their order.
- Can apply offers and discount coupons

8. Feedback-

• Customers can give feedback as per quality of product he received, time of arrival, etc.

Subscriber Module:

1. Registration and Login-

Retailer can register as a subscriber, after accepting terms
 And conditions. He can modify personal information, modify the password and exit.

2. Product details Management-

- Here Admin controls addition, updating, deletion of details of products in respected table.
- Showing similar products on basis of statewise people's choice.
- After subscription subscriber can add products on our page and can update details of products.

4. Order Management-

- View order by order status, order details and accordingly take decision.
- If order is placed by customer then gives order details and shipped the order

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after buyer payment and gives order tracking.

- Manage Postage & Packing as Per Limits Flat Rate per Item
- Manage Unsupported Postal Areas
- 5. <u>Feedback Management-</u>
- Answering the feedbacks given by customers.

Operating Environment:

Server Side:

Processor: Intel® Xeon® processor 3500 series

HDD: Minimum 500GB Disk Space

RAM: Minimum 4GB OS: Windows 10, Linux 6 Database: MySQL

Client Side (minimum requirement):

Processor: Intel Dual Core

HDD: Minimum 80GB Disk Space

RAM: Minimum 2GB OS: Windows 7, Linux

Specific Requirement

External Interface Requirements:

User Interfaces:

- All the users will see the same page when they enter in this website. This page asks the users a username and a password.
- After being authenticated by correct username and password, user will be redirect to their corresponding profile where they can do various activities.
- The user interface will be simple and consistence, using terminology commonly
 understood by intended users of the system. The system will have simple
 interface, consistence with standard interface, to eliminate need for user training
 of infrequent users.

Hardware Interfaces:

- No extra hardware interfaces are needed.
- The system will use the standard hardware and data communication resources.
- This includes, but not limited to, general network connection at the server/hosting site, network server and network management tools.

Application Interfaces:

OS: Windows 10

Web Browser:

The system is a web-based application; clients need a modern web browser such as Mozilla Firebox, Internet Explorer, and Chrome. The computer must have an Internet connection in order to be able to access the system.

Communications Interfaces:

- This system uses communication resources which includes but not limited to, HTTP protocol for communication with the web browser and web server and TCP/IP network protocol with HTTP protocol.
- This application will communicate with the database. Users can contact with server side through HTTP protocol. This function allows the application to use the data retrieved by server to fulfil the request fired by the user.

System Design

Activity Diagram

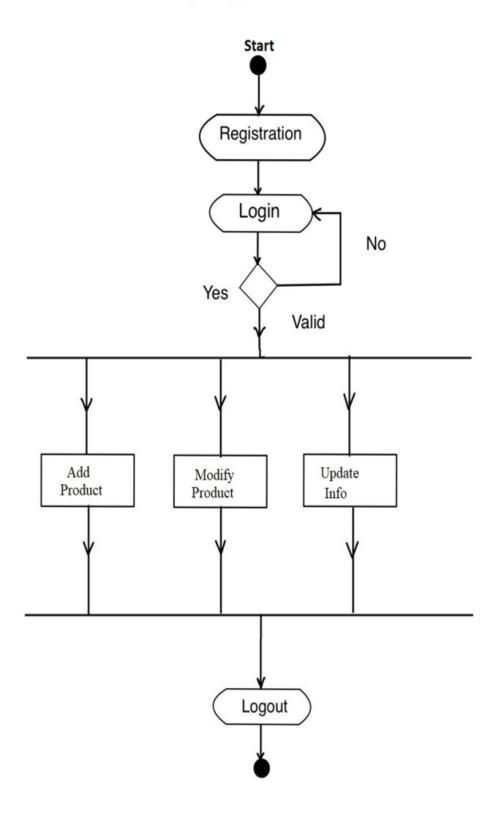
Figure 1: Admin Activity Diagram

Figure 2: Customer Activity Diagram

Activity Diagram for Customer Start Registration Login No Yes Valid user View details Give Feedback Place Update Info Order Search Products Tracking Order Add to Cart Logout

Figure 3: Subscriber Activity Diagram

Activity Diagram for Subscriber



Data Flow Diagram

Figure 4: Level 1 Data Flow Diagram

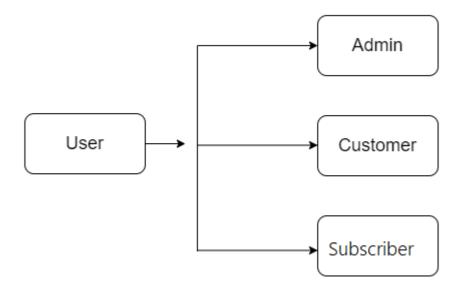


Figure 5: Data Flow Diagram for Admin

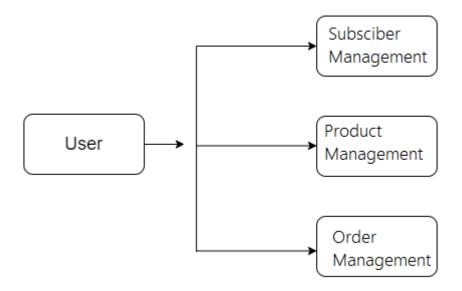
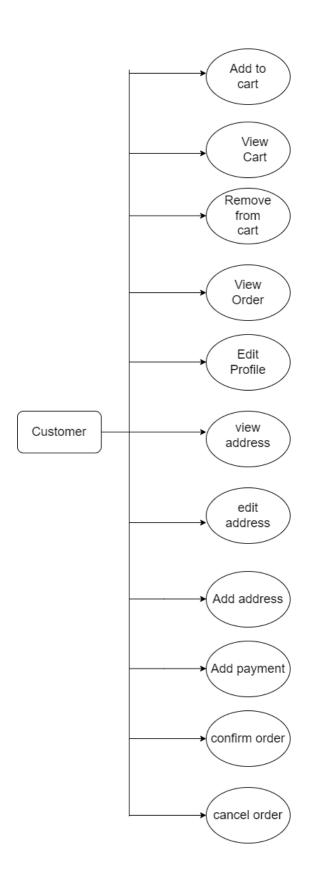


Figure 6: Data Flow Diagram for customer



Class Diagram

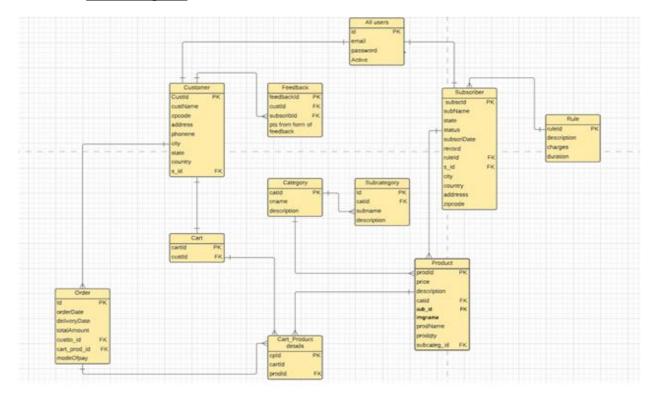
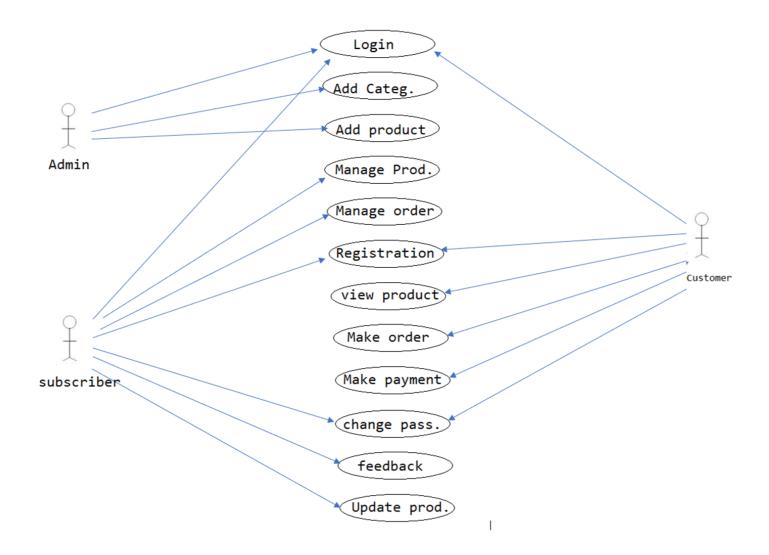


Figure 8: Class Diagram

Use Case Diagram

Figure 9: Use Case Diagram



ER Diagram

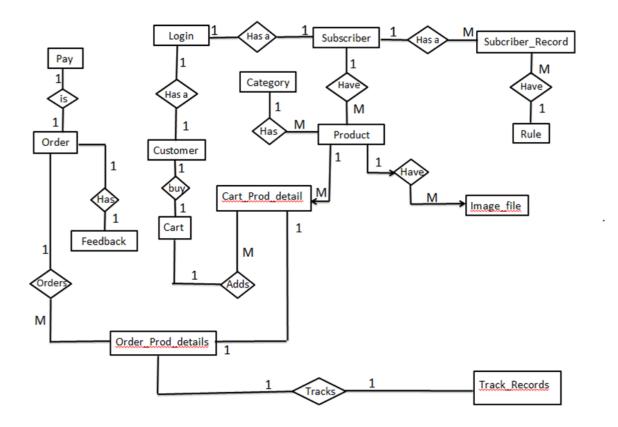


Table Structure

Admin table:

Field	Type	Null	Key	Default	Extra
Id	int	NO	PRI	NULL	auto_increment
admin_name	Varchar(30)	NO		NULL	
S_id	int	NO	MUL	NULL	

<u>Customer table</u>:

Field	Type	Null	Key	Default	Extra
Id	int	NO	PRI	NULL	auto_increment
City	Varchar(20)	YES		NULL	
Country	Varchar(20)	YES		NULL	
cust_name	Varchar(40)	YES		NULL	
cust_phoneno	Varchar(30)	YES		NULL	
Address	Varchar(500)	YES		NULL	
State	varchar(20)	YES		NULL	
zip_code	Varchar(20)	YES		NULL	
s_id	int	NO	MUL	NULL	

Subscriber table:

Field	Type	Null	Key	Default	Extra
Id	int	NO	PRI	NULL	auto_increment
City	Varchar(20)	NO		NULL	
Country	Varchar(20)	NO		NULL	
subscr_name	Varchar(40)	NO		NULL	
subscr_phoneno	Varchar(30)	NO		NULL	
Address	Varchar(500)	NO		NULL	
State	varchar(20)	NO		NULL	
zip_code	Varchar(20)	NO		NULL	
s_id	int	NO	MUL	NULL	
Status	Varchar(20)	NO		NULL	
subscr_date	date	NO		NULL	
rule_id	Varchar(30)	NO	MUL	NULL	

Rule table:

Field	Type	Null	Key	Default	Extra
Id	Varchar(30)	NO	PRI	NULL	auto_increment
Charges	double	NO		NULL	
Description	Varchar(30)	NO		NULL	
Duration	Varchar(30)	NO			

All User table:

Field	Type	Null	Key	Default	Extra
Id	int	NO	PRI	NULL	auto_increment
Active	bit(1)	NO		NULL	
Email	varchar(30)	YES	UNI	NULL	
Password	varchar(500)	YES	_	NULL	

<u>User Role :</u>

Field	Type	Null	Key	Default	Extra
Id	int	NO	PRI	NULL	auto_increment
Role	Varchar(20)	NO		NULL	

All_user_roles:

Field	Type	Null	Key	Default	Extra
user_id	int	NO	PRI	NULL	auto_increment
role_id	int	NO		NULL	

<u>Product table :</u>

Field	Type	Null	Key	Default	Extra
Id	int	NO	PRI	NULL	auto_increment
Price	double	YES		NULL	
produc_desc	varchar(300	YES		NULL	
categ_id	int	NO	MUL	NULL	

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sub_id	int	NO	MUL	NULL	
Imgname	Varchar(60)	YES		NULL	
prodname	varchar(300)	YES		NULL	
Prodqty	int	YES		NULL	
subcateg_id	int	NO	MUL	NULL	

Category table:

Field	Type	Null	Key	Default	Extra
Id	int	NO	PRI	NULL	auto_increment
Categ_descrip	Varchar(300)	NO		NULL	
categ_name	Varchar(30)	NO	UNI	NULL	

Sub category table:

Field	Type	Null	Key	Default	Extra
Id	int	NO	PRI	NULL	auto_increment
sub_categ_name	Varchar(40)	YES		NULL	
categ_id	int	NO	MUL	NULL	

<u>Customer_cart_details_table :</u>

Field	Type	Null	Key	Default	Extra
Id	int	NO	PRI	NULL	auto_increment
Cartquantity	int	NO		NULL	
creation_date	date	YES		NULL	
customer_id	int	NO	MUL	NULL	
product_id	int	NO	MUL	NULL	

Order table :

Field	Type	Null	Key	Default	Extra
Id	int	NO	PRI	NULL	auto_increment
order_date	date	NO		NULL	
delivery_date	date	NO	UNI	NULL	
custo_id	int	NO	MUL	NULL	
customer_order_item_id	int	NO	MUL	NULL	
mode_ofpay	Varchar(300)	NO		NULL	

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total_amount	double	NO	NULL	

Feedback table:

Field	Type	Null	Key	Default	Extra
Id	int	NO	PRI	NULL	auto_increment
product_name	Varchar(255)	NO		NULL	
rating	int	NO		NULL	
customer_id	int	NO	MUL	NULL	
subscr_id	int	NO	MUL	NULL	

Conclusion

This project aim is automating the existing manual system. This is a paperless work. It can be monitored and guarded remotely also provide accurate information. Online E-Commerce platform the customer can purchase GI Tag Products online. By this platform we are promoting products of tribal people who are backbone of ethnicity of India we also help to MAKE IN INDIA programme through this project

Future Scope

The following section describes the work that will be implemented with future releases of the software.

- Gmail: Retrieve password through Gmail, Send details through email
- Customize orders: Allow customers to customize GI product orders
- Enhance User Interface by adding more user interactive features.
 Provide Deals and promotional Offer details to home page.
- Payment Options: Add different payment options such as PayPal,
 Cash, Gift Cards etc. Allow to save payment details for future use.
- Delivery Options: Add delivery option
- Order Tracking: Live tracking of the delivery using Map

7.0 References

- [1] https://docs.spring.io/spring-data/jpa/docs/current/reference/html/#preface
- [2] https://react-bootstrap.github.io/getting-started/introduction/
- [3] https://stackoverflow.com/
- [4]https://docs.oracle.com/en/java/javase/11/docs/api/java.base/java/lang/Integer.html
- [5]https://reactjs.org/docs/getting-started.html