**PROJECT PITCH:**

**TITLE: ECOMMERCE APPLICATION**

**ABSTRACT:**

Electronic commerce, also known as ecommerce, is a type of industry where, buying and selling of a product is conducted over electronic systems such as the internet. The purpose of this application is to develop an interactive ecommerce application can be designed from scratch using client-side languages, such as JavaScript and HTML, Python Django Framework combined with RESTFUL API SERVICES. The server side, mostly Python Django-Framework, contains all the implementation related to setting up the database, creating session models for joining different user-interface (UI) pages, calculating the shipping costs. It is responsible for taking information from the database and making it available to the UI by mapping the category or item ID to the respective IDs stored in the database. The client side is responsible for showing the entire user interface, containing the CSS, HTML, and JavaScript.

**PURPOSE:**

The purpose for designing this ecommerce (shopping-cart) application is because most of the people prefer shopping online rather than spending lot of time at physical markets. Further, using the available stores to sell the products, there is also the possibility of designing one’s own customized shopping-cart application from scratch because custom-designed platforms are expensive. Moreover, our team is interested in learning about the Python, Django Framework with integrated RESTFUL API services, JavaScript programming languages as well as seeing how powerful and dynamic they are when it comes to web designing and applications. Apart from developing the project, helps understanding the concepts of web-application designing, which would be very easy to incorporate the idea of using programming techniques from the available visuals to understand how a piece of code appears on a user interface. The languages used to build this application are JavaScript, HTML, Python Django Framework integrated with RESTFUL API services.

**AIM:**

This project mainly focuses on the integrating RESTFUL API services along with Python Django Framework. We will be mainly focusing on the below mentioned APIs to integrate with our ecommerce applications.

**API:**

**Google Sign-in API:**

In this Ecommerce application we are going to provide new users to authenticate and sign up for the application by integrating the google sign-in to our application.

<https://developers.google.com/identity/sign-in/web/sign-in>

**Twitter login API:**

In this Ecommerce application we are going to provide new users to authenticate and sign up for the application by integrating the twitter login to our application.

<https://developer.twitter.com/en/docs/authentication/guides/log-in-with-twitter>

**SendGrid API/ Mailgun:**

In this Ecommerce application, we are going to send email notification to the users on the orders that were successfully placed, and the mail would also contain a pdf copy which would contain the order details.

<https://documentation.mailgun.com/en/latest/>

**Fixer API:**

This API will be used for currency conversion for the products in the ecommerce website.

[https://fixer.io](https://fixer.io/)

**PayPal API:**

In this ecommerce application, we are going to integrate the PayPal payment gateway for users to make payment for their orders.

<https://developer.paypal.com/docs/api/overview/>

**Twilio API:**

This API will be used to send SMS notification and messages to the user on the orders they have places.

<https://www.twilio.com/docs/api>

**TAX API:**

**USER AND ADMIN INTERFACE:**

1. **User Interface:** Users are able to view the home page of the ecommerce application, browse different products and add any number of items from any categories to the shopping cart, look for information about each product, delete the items in the cart, save the cart for later viewing, check out or continue shopping after adding the item to the cart, and can place the order by completing the required information in the order form.
2. **Admin Interface:** The administrator is able to view the users’ information that was entered during checkout process in the database. The admin can also update the information, price, shipping costs of the items, add or remove items from the database

**FEATURES:**

1. **Admin:** The administrator is the owner of this ecommerce application. The administrator is responsible for maintaining the system. The administrator can perform the following functions:

* Assign or change the price of the items, update the products in the list, and delete the products.
* View the history of the customers who purchased the products.
* Will have ability to download the all the orders list in excel using JSON API integrated with excel.
* Send SMS to customers on purchase of items in the cart with the help of integration of Twilio API.

1. **Users:** The users of this ecommerce application are all customers who would browse and buy products from the application. These users are anyone with shopping experience and they know how to browse through an ecommerce application. They must have basic understandings about computers and the internet. The users should be able to perform the following functions using this application:

* View, browse, and select a category on the home page.
* Allows users to view products in different currencies, as in the application will be integrated with currency converter API.
* View, add, and update items in the cart.
* Delete items from the cart.
* Check out the items from the application or continue shopping.
* Can sign-up and login to the application by registering through the sign-up form or can sign-in by authenticating and registering through Google / Twitter sign-in.
* Place the order by completing the order form.