BACKEND DEVELOPMENT

INTERNSHIP PROJECT REPORT

(Submitted in Partial Fulfilment of the Requirements for the award of the degree)

Of

Bachelor of Technology in Computer Science Engineering

Submitted By

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NEW DELHI – 110053

MAY 2020

CERTIFICATE

we are crazy

CRAZY FOR SUCCESS FOUNDATION

TO WHOMSOEVER IT MAY CONCERN

12-08-2020 Certificate no: E200135

This is to certify that **Shubham Gupta**, has successfully completed his/her online internship with **CRAZY FOR SUCCESS FOUNDATION** during the period **12-05-2020 to 12-08-2020**.

During the period, he/she handled the position of **PHP Development Team Lead** for the organization..

During the course of internship, **Shubham Gupta** has shown great amount of responsibility, sincerity and a genuine willingness to learn and zeal to take on new assignments & challenges. In particular, his/her coordination skills and communication skills are par excellence and his/her attention to detail is impressive.

We wish him/her all the very best for the future.

With regards,

Himanshu Singh
Vice President

Crazy for Success Foundation

ABSTRACT

This report describes my internship at ‘We are Crazy’ is a non-profit educational organization that teaches personal development through a worldwide network of clubs. We are Crazy is helping people from diverse backgrounds become more successful, happy and rich. This company develops various application with various technologies as back-end and front-end for providing best services to the users at an affordable price.

The scope of this report is to identify and describe the analysis carried out, projects completed and experience gained.

During my internship at We are Crazy, I was introduced to some new techniques and methodologies which not only enhanced my skill but also helped me tackle industrial problems.

Overall, I am very satisfied with the results of my internship. I was able to use my knowledge as a software intern and apply it in real life scenarios. Due to the character of this internship and the long time period spent at We are Crazy, I took this experience as an opportunity to grow my skills and knowledge.

TABLE OF CONTENTS

CHAPTER 1. INTRODUCTION

1.1 INTRODUCTION ABOUT THE COMPANY

We are Crazy is a non-profit educational organization that teaches personal development through a worldwide network of clubs. We are Crazy is helping people from diverse backgrounds become more successful, happy and rich.

The founders of this company is Mr. Himanshu.

Their vision is to deliver accessible, quality and affordable comprehensive products, through a chain of We are Crazy.

To implement the vision, We are Crazy is building a smart, scalable, next generation, affordable and trusted platform for an integrated preventive comprehensive urban world.

1.2 PROBLEM STATEMENT

People have to face many problems when it comes to buy products online. They have to go through the following difficulties:

Costs and transparency: Buying products costs a lot of money due to different variety of products.

Consumer experience: It is possible that the customer has to wait for so many processes. This as a result exhausts the customer to go for further procedures.

1.3 PROPOSED SOLUTION

We are Crazy wants to add a new functionality called Quick delivery. This functionality will help the customers to directly contact to We are Crazy's trusted partner. Whenever a customer wishes to place an order through application. All these orders would be placed to trusted partner.

All these functionality will be very affordable and customers can place these orders in the nearby Centers.

1.4 PROJECT OBJECTIVES

- To create APIs based on the back-end technology of PHP
- Creating relational database models
- Testing the application thoroughly
- Applying new methodologies and techniques
- Maintaining modularity of the project code

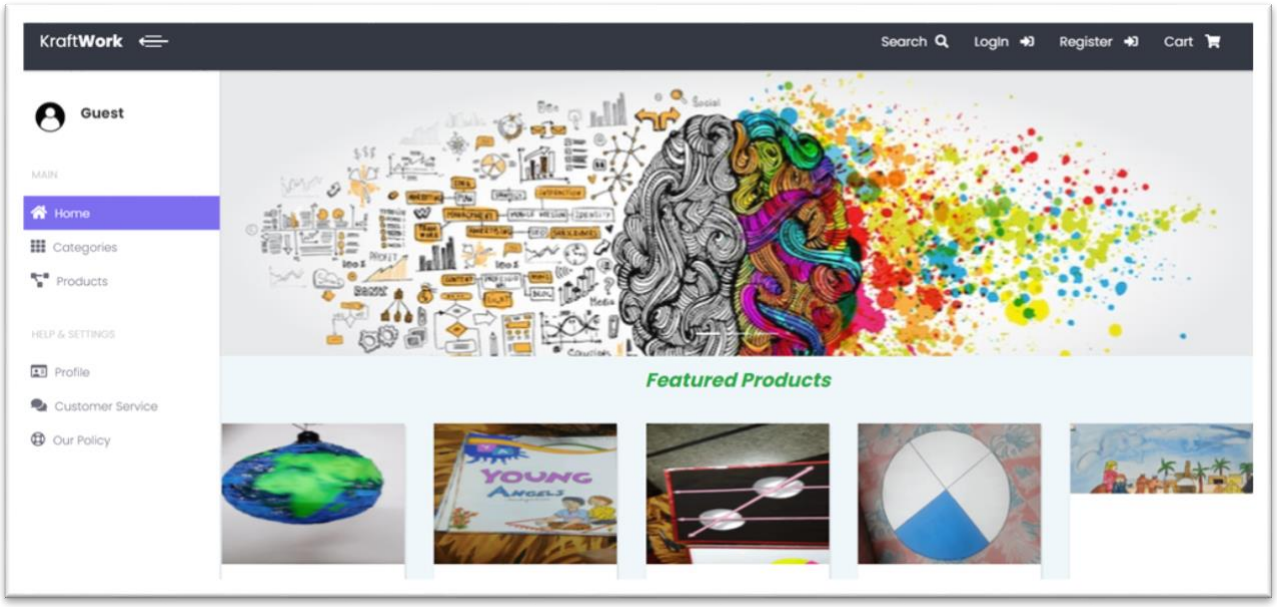


Fig 1. Kraft_work Website

CHAPTER 2. PROJECT DESCRIPTION

2.1 TOOLS AND PLATFORM IMPLEMENTATION

2.1.1 TECHNOLOGY INTRODUCTION

PHP

The project is based on the back-end technology called PHP. PHP is a backend platform for building fast, scalable, network applications. With PHP each incoming request by the user is handled by one single thread in operations. This is possible due to the fundamental support of backend for events.

PHP has several advantages, some of which are:

- **Rest API** (Representational State Transfer) **api's** are web standards base architecture and uses HTTP Protocol for exchanging data between applications or systems. In RESTFUL web service HTTP methods like GET, POST, PUT and DELETE can be used to perform CRUD.

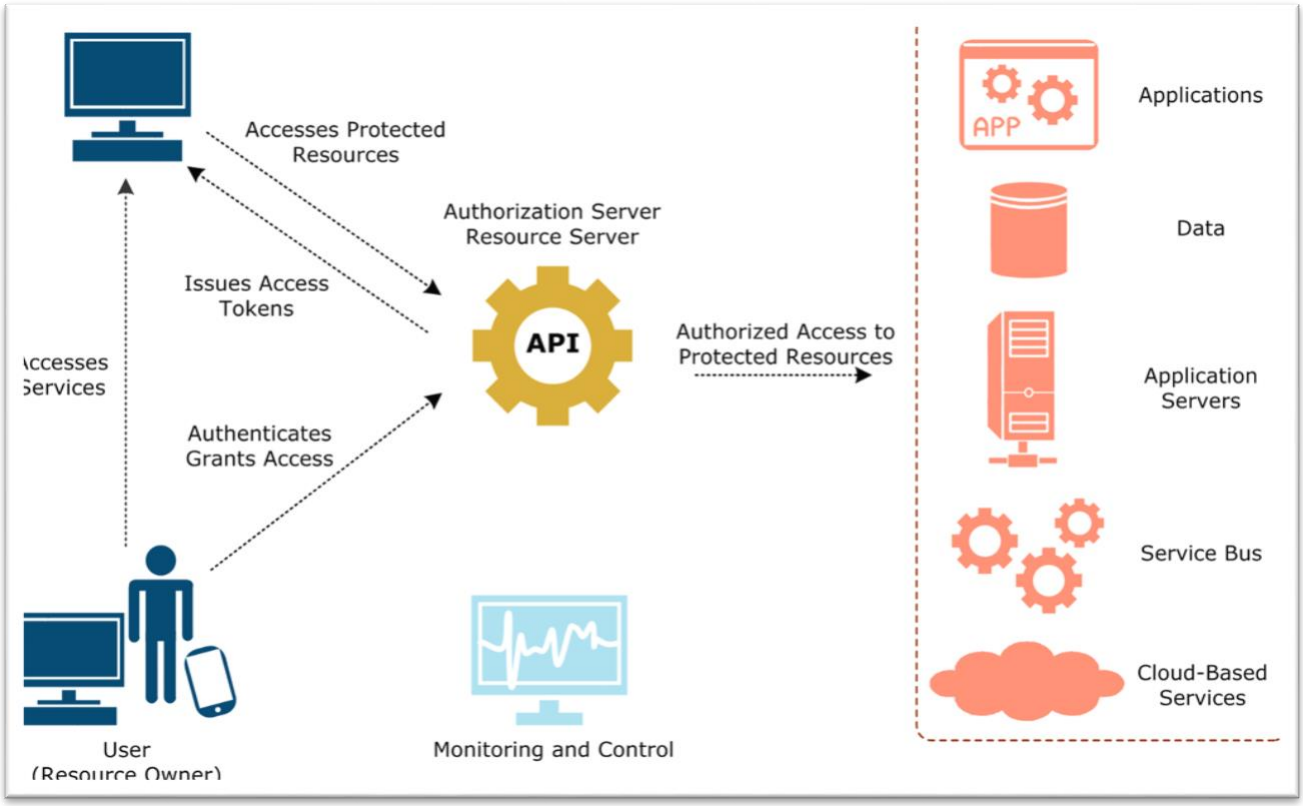


Fig 2. Workflow of PHP

Rest API

REST is acronym for RE**presentational** S**tate** T**ransfer. It is architectural style for** distributed hypermedia systems

- Client–server – By separating the user interface concerns from the data storage concerns, we improve the portability of the user interface across multiple platforms and improve scalability by simplifying the server components.
- Stateless – Each request from client to server must contain all of the information necessary to understand the request, and cannot take advantage of any stored context on the server. Session state is therefore kept entirely on the client.
- Cacheable – Cache constraints require that the data within a response to a request be implicitly or explicitly labeled as cacheable or non-cacheable. If a response is cacheable, then a client cache is given the right to reuse that response data for later, equivalent requests.

MySQL

MySQL is an open source relational database management system based
on SQL – Structured Query Language. The application is used for a wide range of purposes, including data warehousing, e-commerce, and logging applications.
The most common use for MySQL however, is for the purpose of a web database. It can be used to store anything from a single record of information to an entire inventory of available products for an online store.

It performs the following operations:

- Data query: requesting specific information from the existing database.
- Data manipulation: adding, deleting, changing, sorting, and other operations to modify the data, the values or the visuals.
- Data identity: defining data types, e.g. changing numerical data to integers. This also includes defining a schema or the relationship of each table in the database
- Data access control: providing security techniques to protect data, this includes deciding who can view or use any information stored in the database

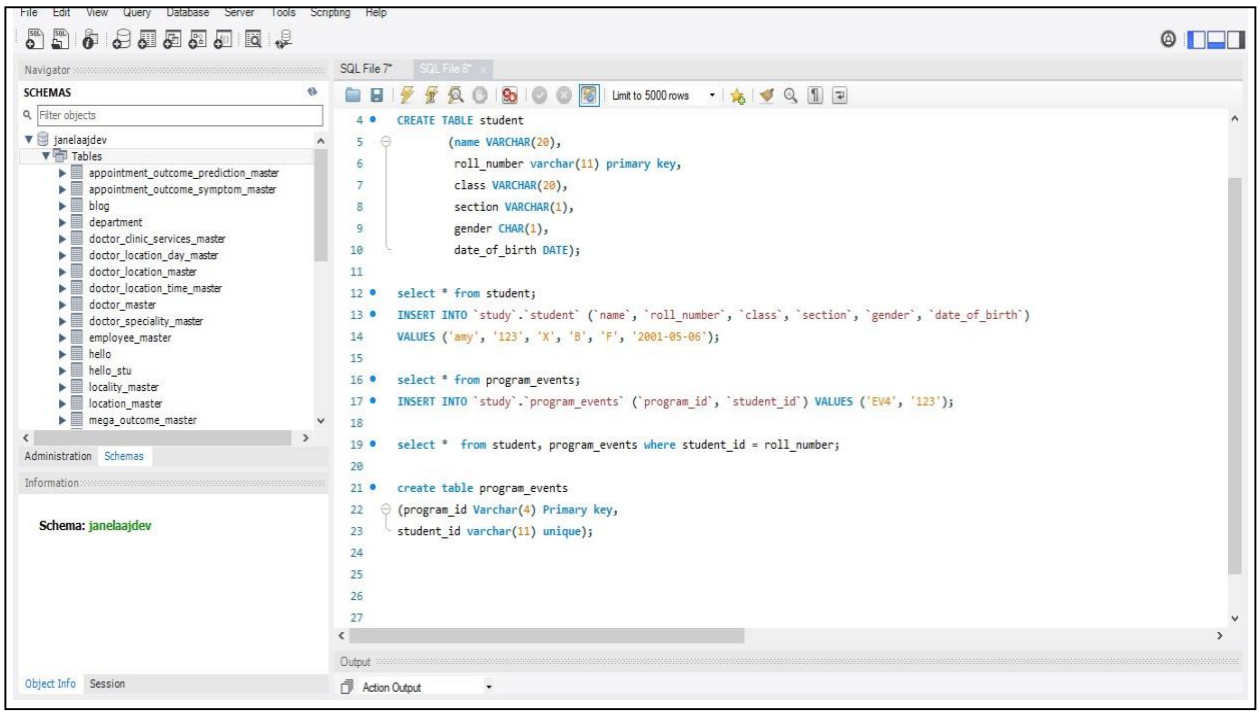


Fig 3. MySQL query snippet in MySQL Workbench

2.2 SYSTEM SPECIFICATIONS

2.2.1 HARDWARE SPECIFICATIONS

This new functionality of app requires:

- 8 GB RAM
- Quad Core Processor
- 50 GB Disk Space

For Seller's App

- Bar Code Reader: The barcode reader will be used by the seller to store the readings of the products and the barcode willbe stored in the MySQL database.

2.2.2 SOFTWARE SPECIFICATIONS

- Linus Operating System(64-bit) Or Windows(64-bit)
- Text Editors : Visual Studio Code

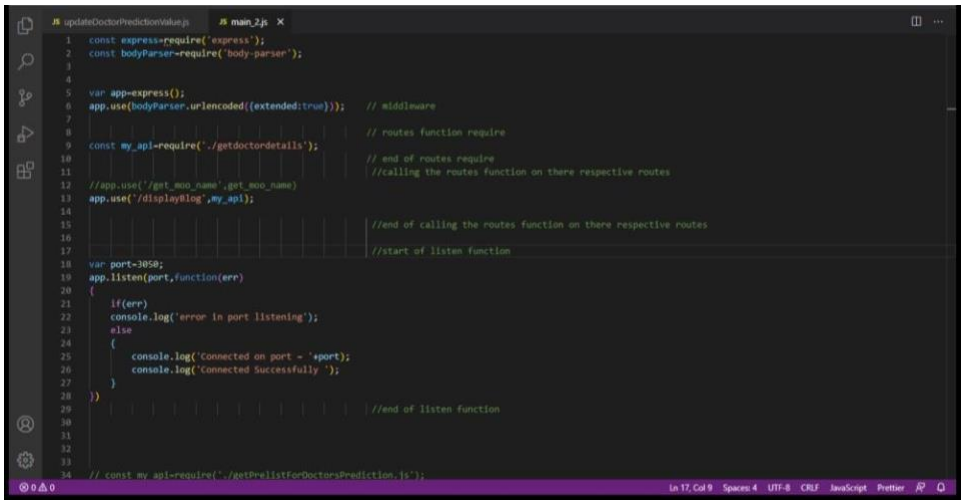


Fig 4. Visual Studio Code IDE for PHP

- Virtual Machine hosted on Google Cloud Platforms
- MySQL Workbench(to create, delete, manipulate data in databases)

CHAPTER 3. FUNCTIONALITIES

This application allows the users to place orders with the sellers. Not only the app provides this only but also does the following:

APPLICATION INTERFACE

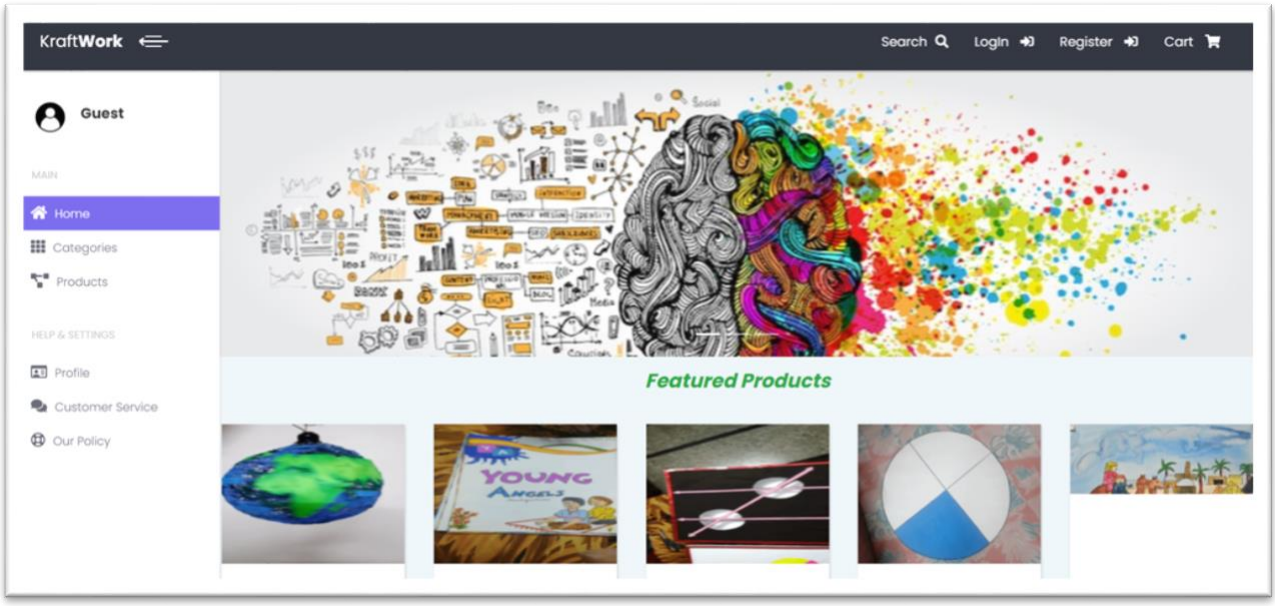
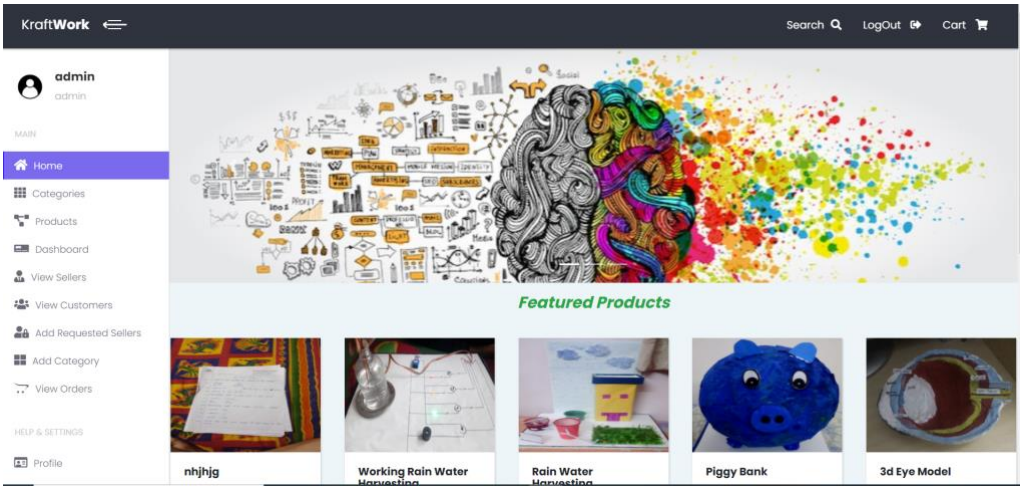


Fig 6. Application Interface

- HOME SCREEN
  - **Top Products**

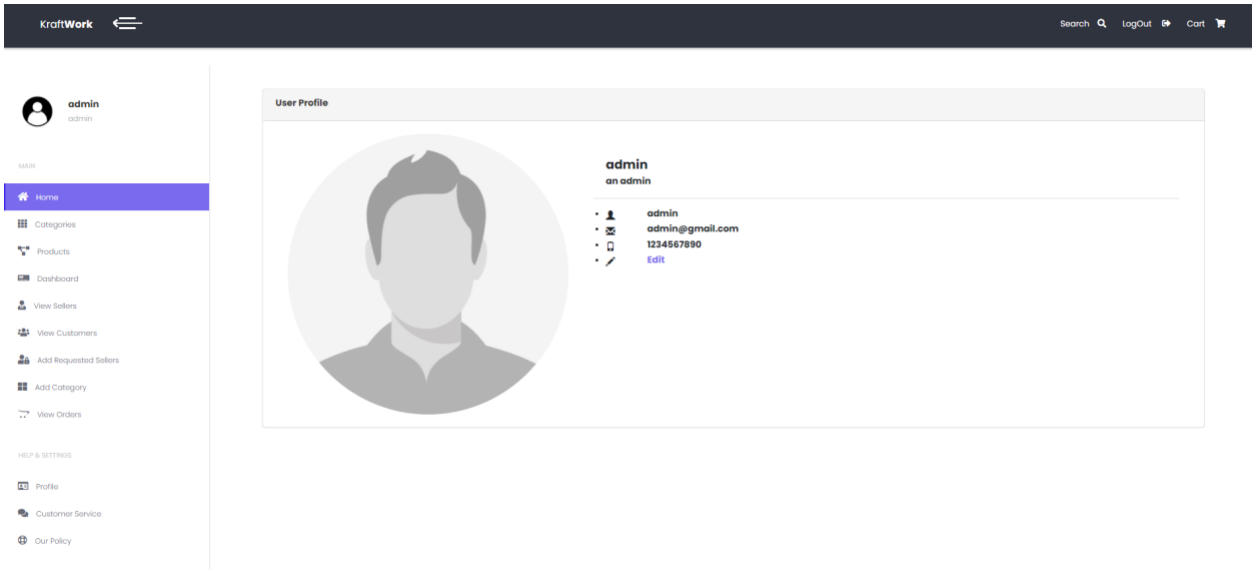
    In the first screen the user is able to see top products.
  - Trending Now

    In this section the user is able to see the trending products.



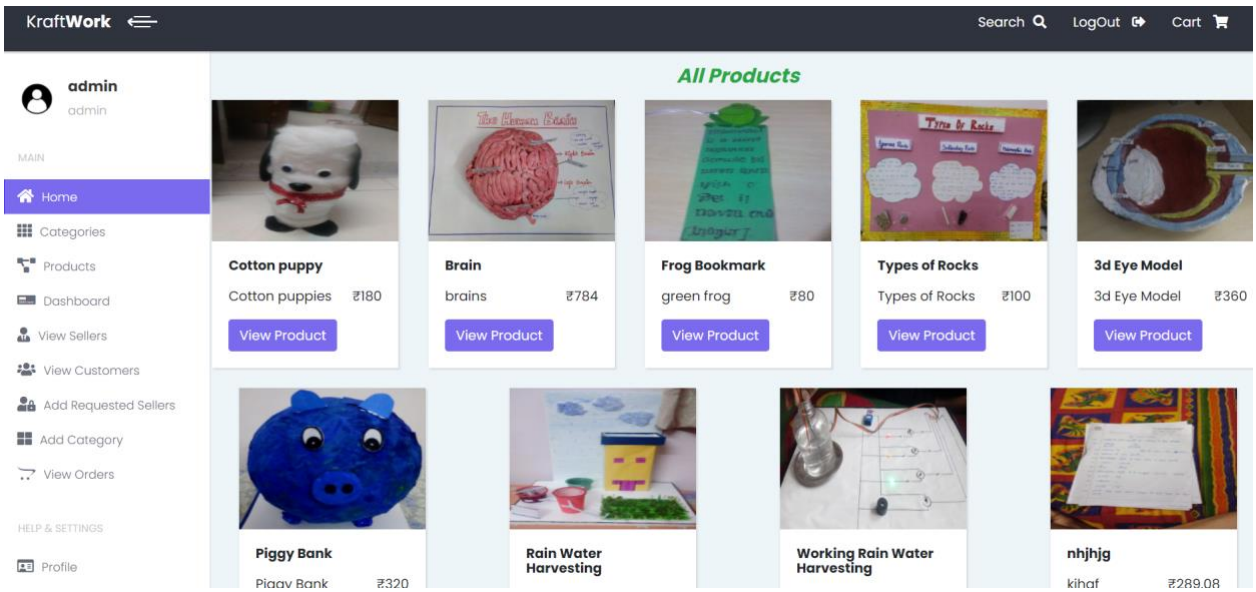
- PROFILE SCREEN
  - **View profile**

    Those customers who have created an account can view their profile and can change their password accordingly.



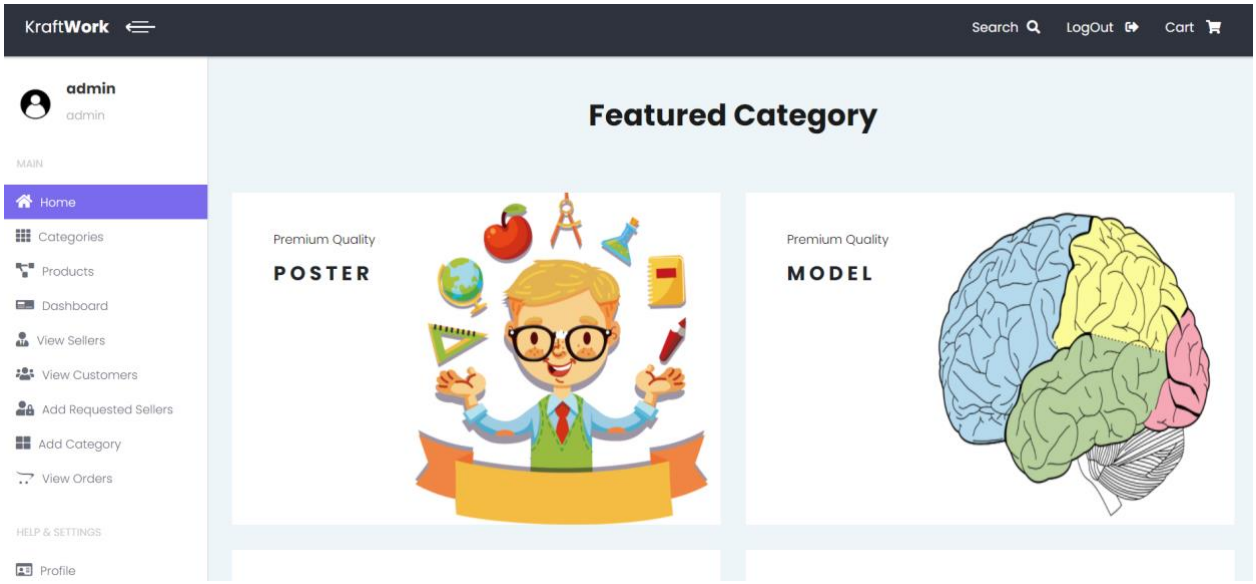
- PRODUCTS PAGE

  This screen displays all the products.



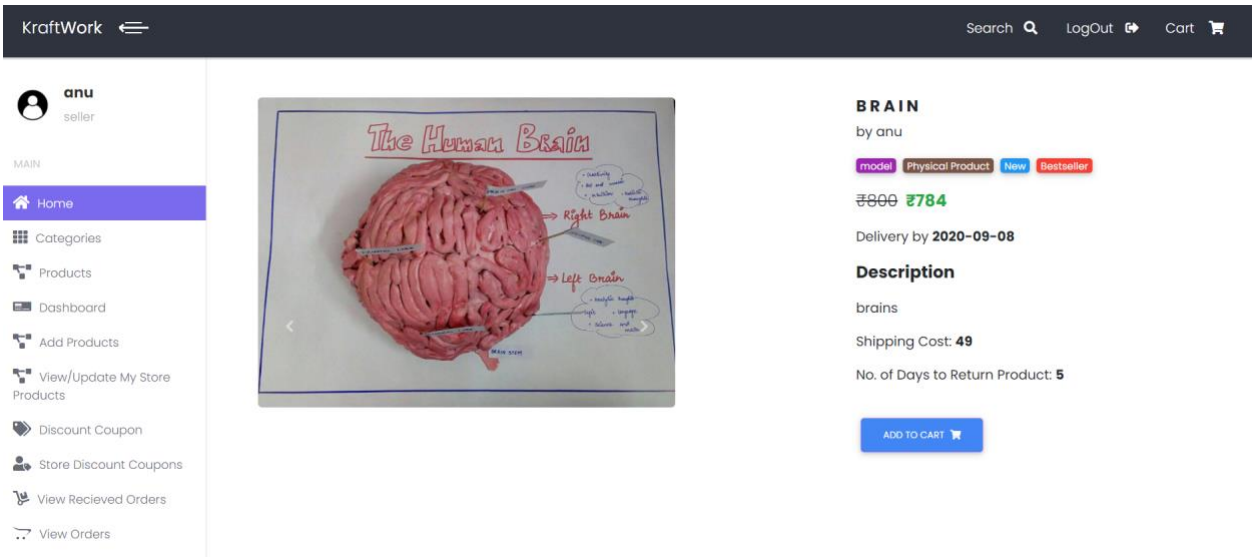
- CATEGORY PAGE

  This screen displays all the categories.



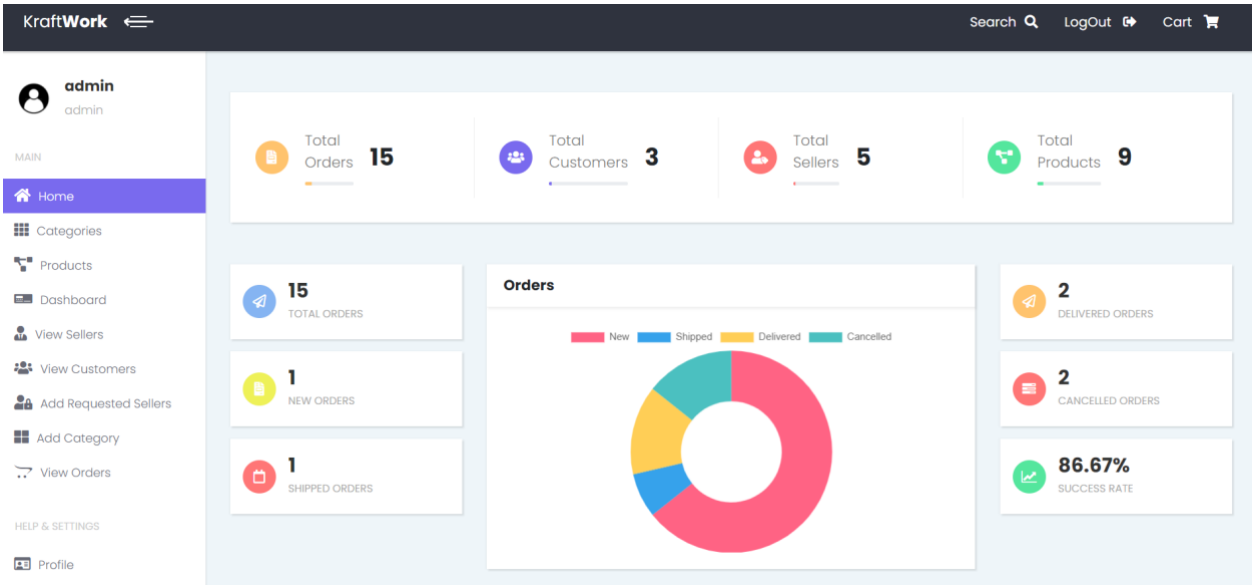
- PRODUCT PAGE

  This page shows all the product description like the product image, name, seller name, description, price, price discount, Physical/Virtual product, category of product.



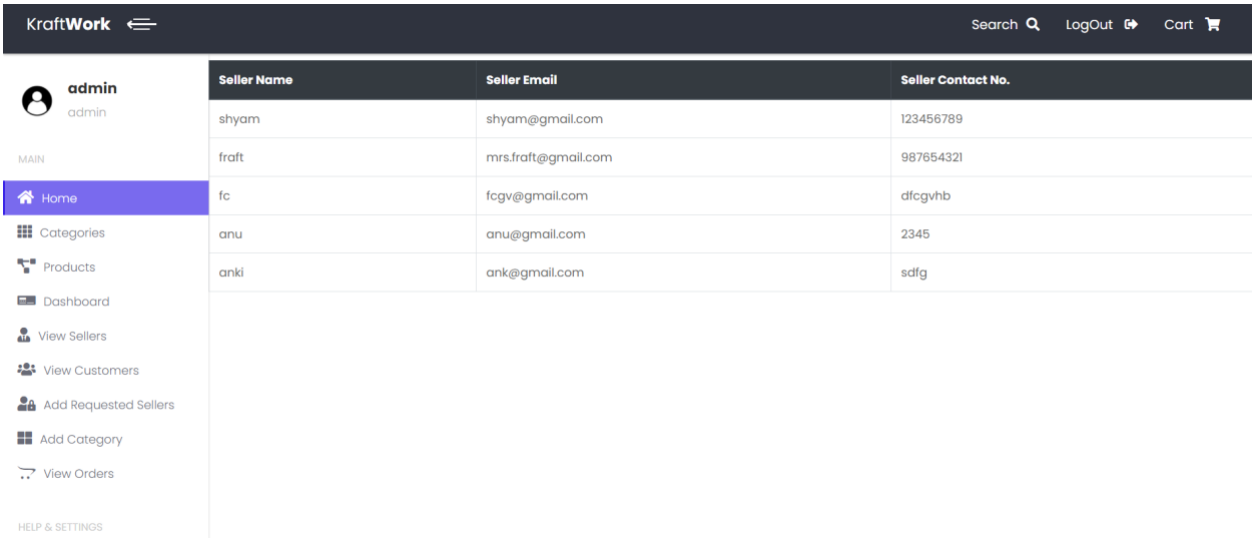
- DASHBOARD

This page is used to show all the orders, count of customers, orders, sellers and all the products and categories, success rate of company, all the roles, discounts.



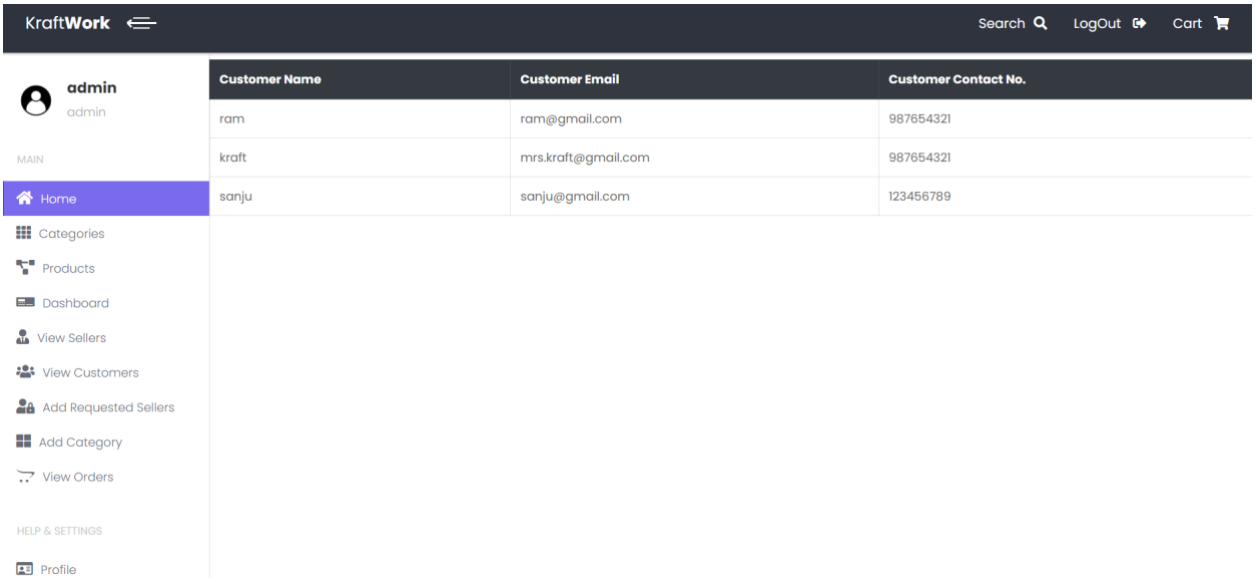
- VIEW SELLERS PAGE

This feature is used by the admin to view all the seller that are selling on their website.



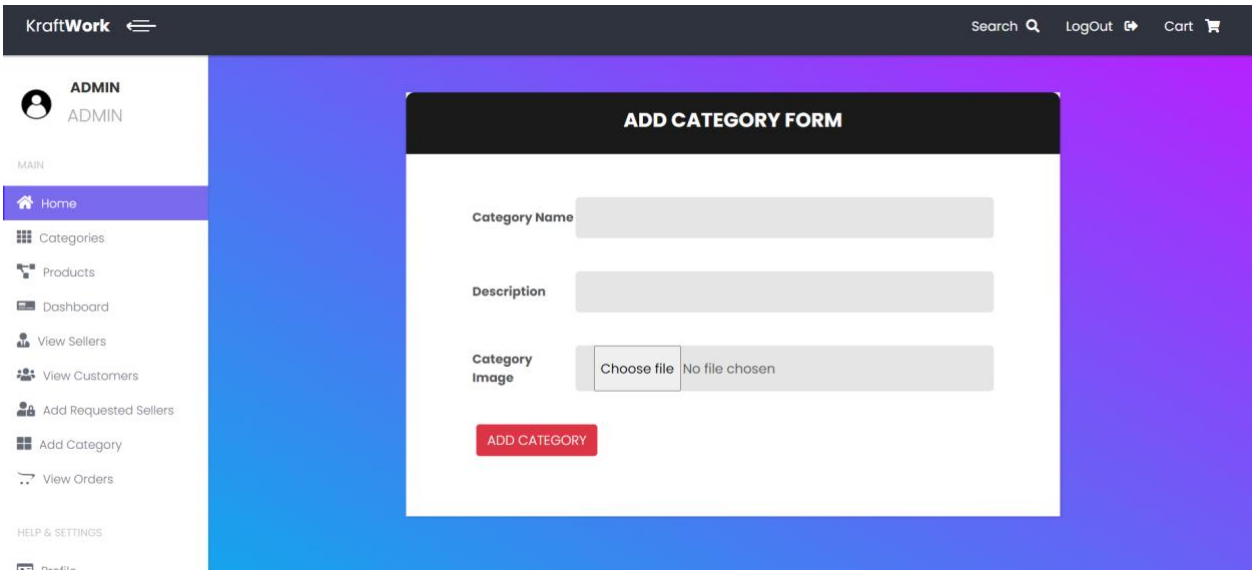
- VIEW CUSTOMERS PAGE

  This feature is used by the admin to view all the customers that are registered on their website.



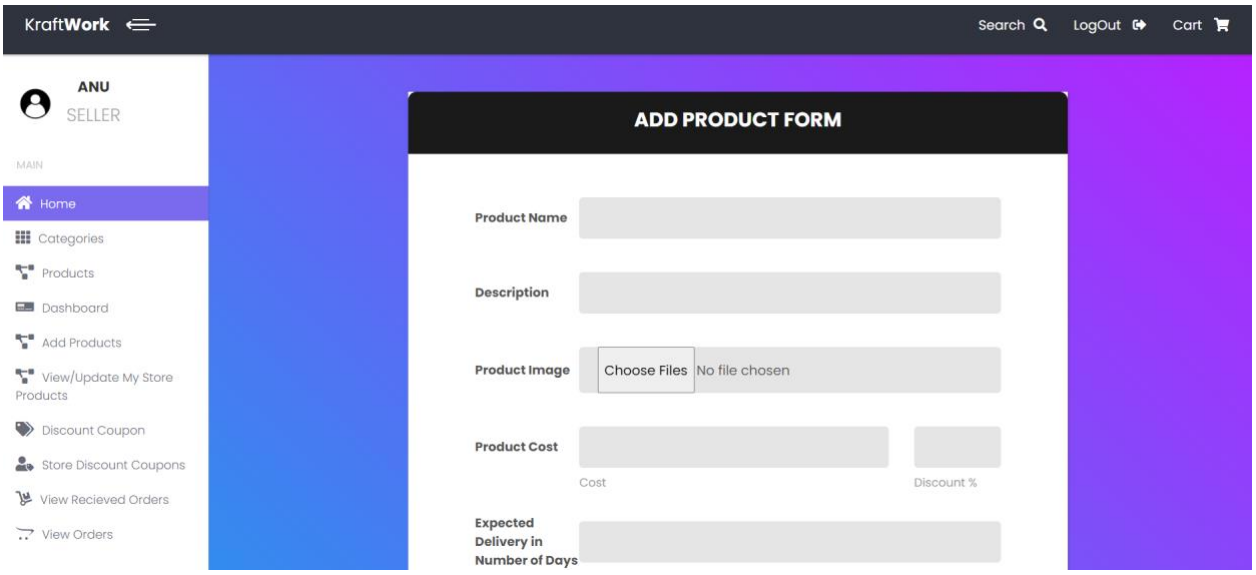
- ADD CATEGORY PAGE

  This features allow the admin to add the new categories on their website.



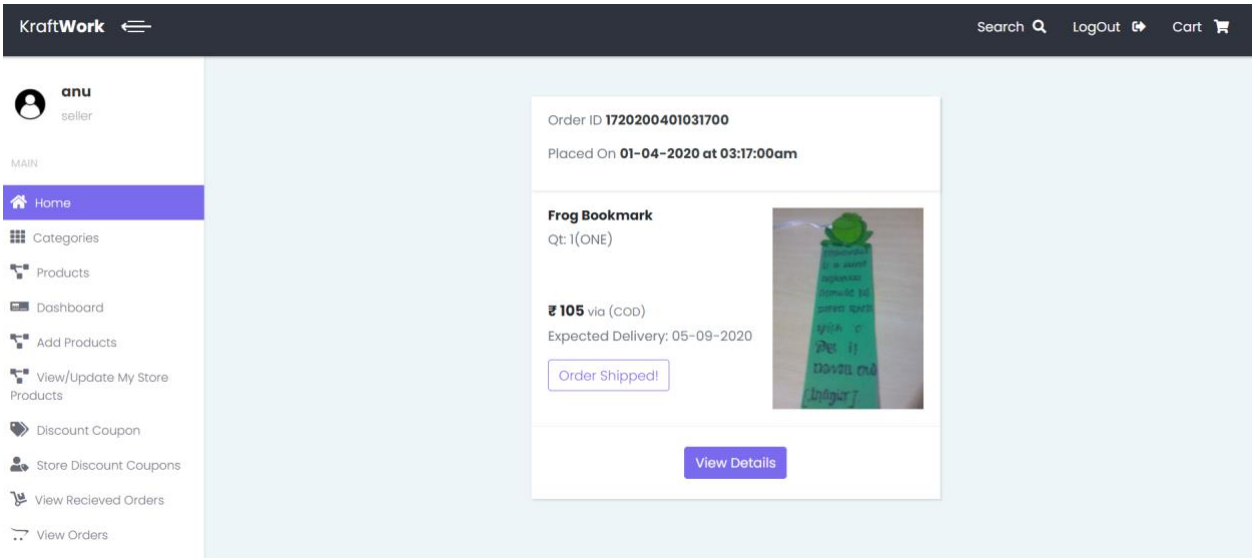
- ADD PRODUCT PAGE

This features allow the seller to add the new products on their website.



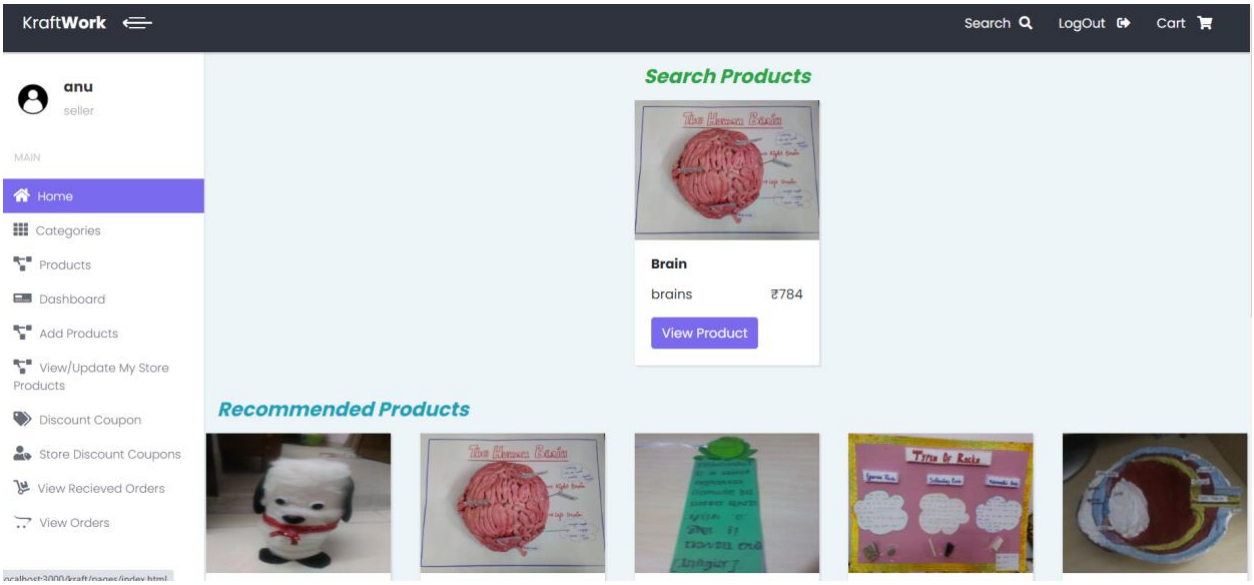
- VIEW RECIEVED ORDERS PAGE

This features allow the seller to view the orders that are placed for their products.



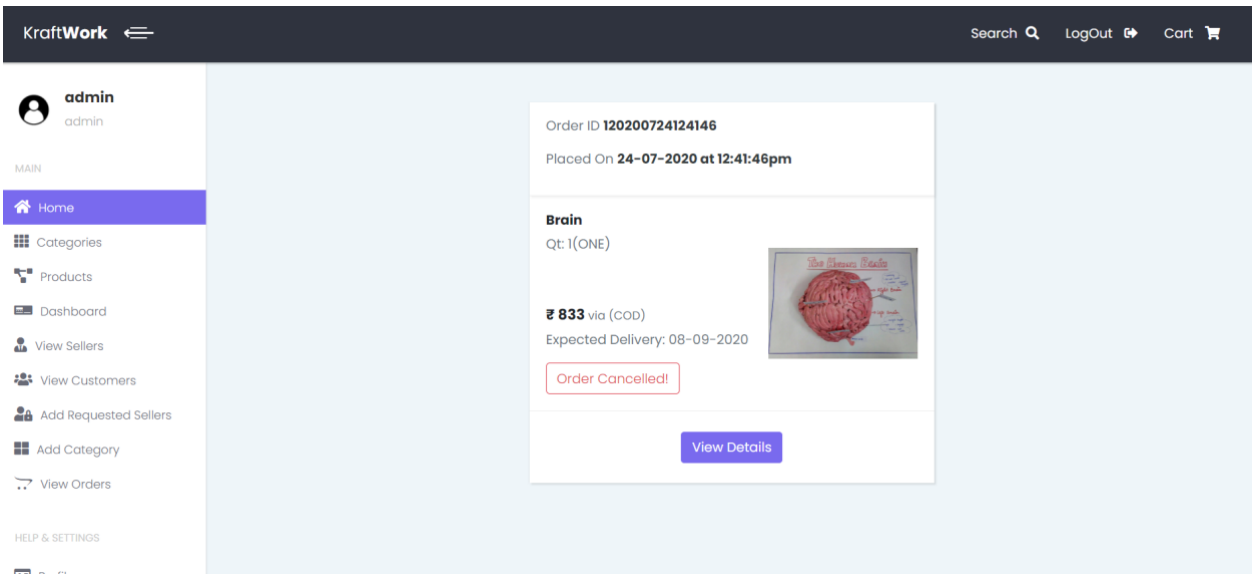
- SEARCH PAGE

This features allow the user to view the products according to their search.



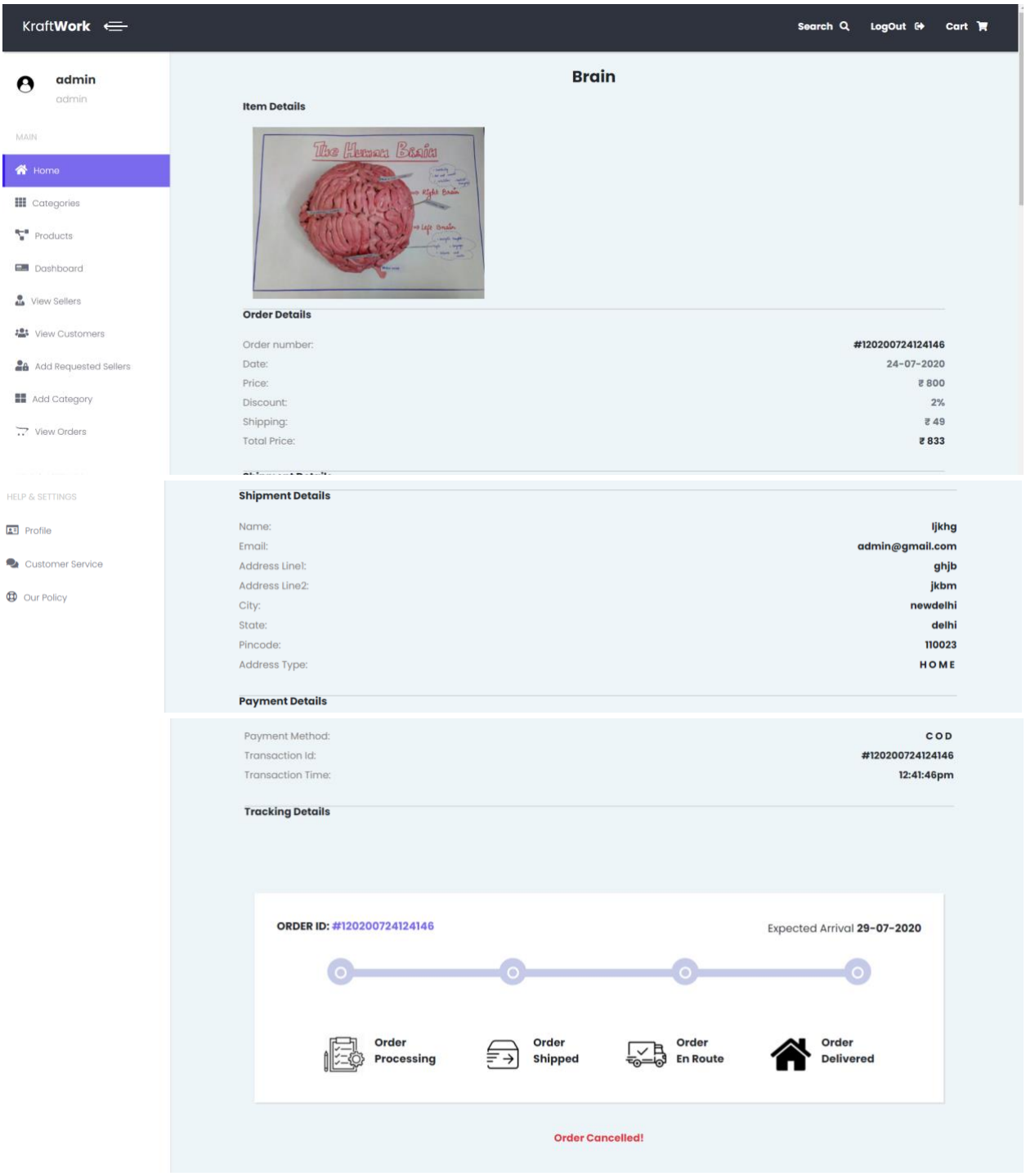
- VIEW ORDERS PAGE

This features allow the user to view the orders that are placed.



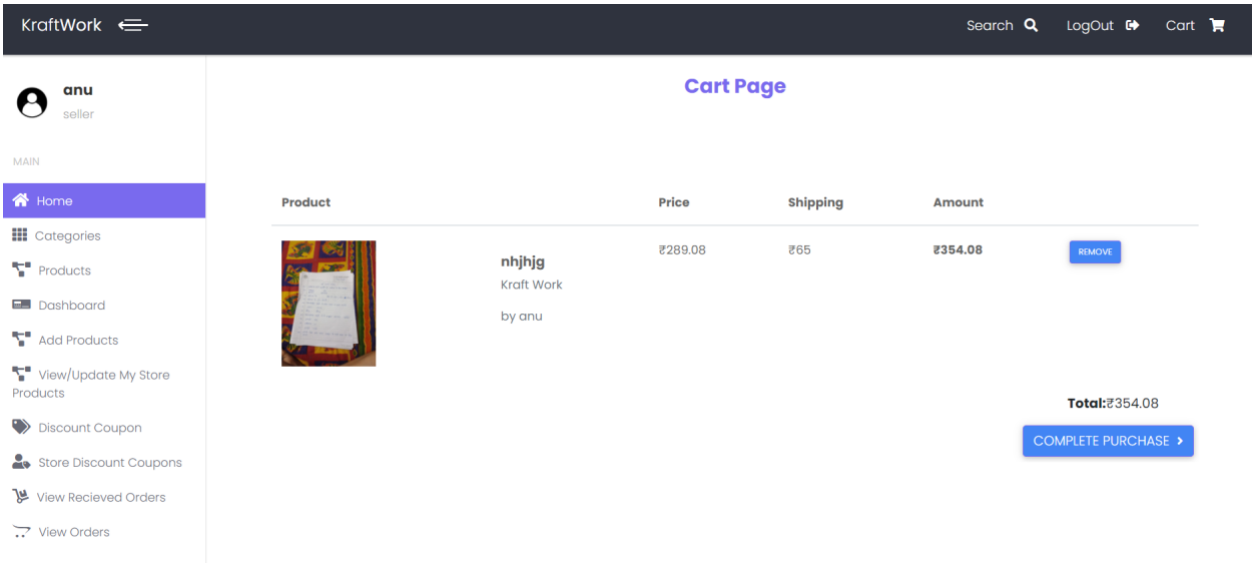
- VIEW ORDERS DETAILS PAGE

This features allow the user to view the orders details that are placed.



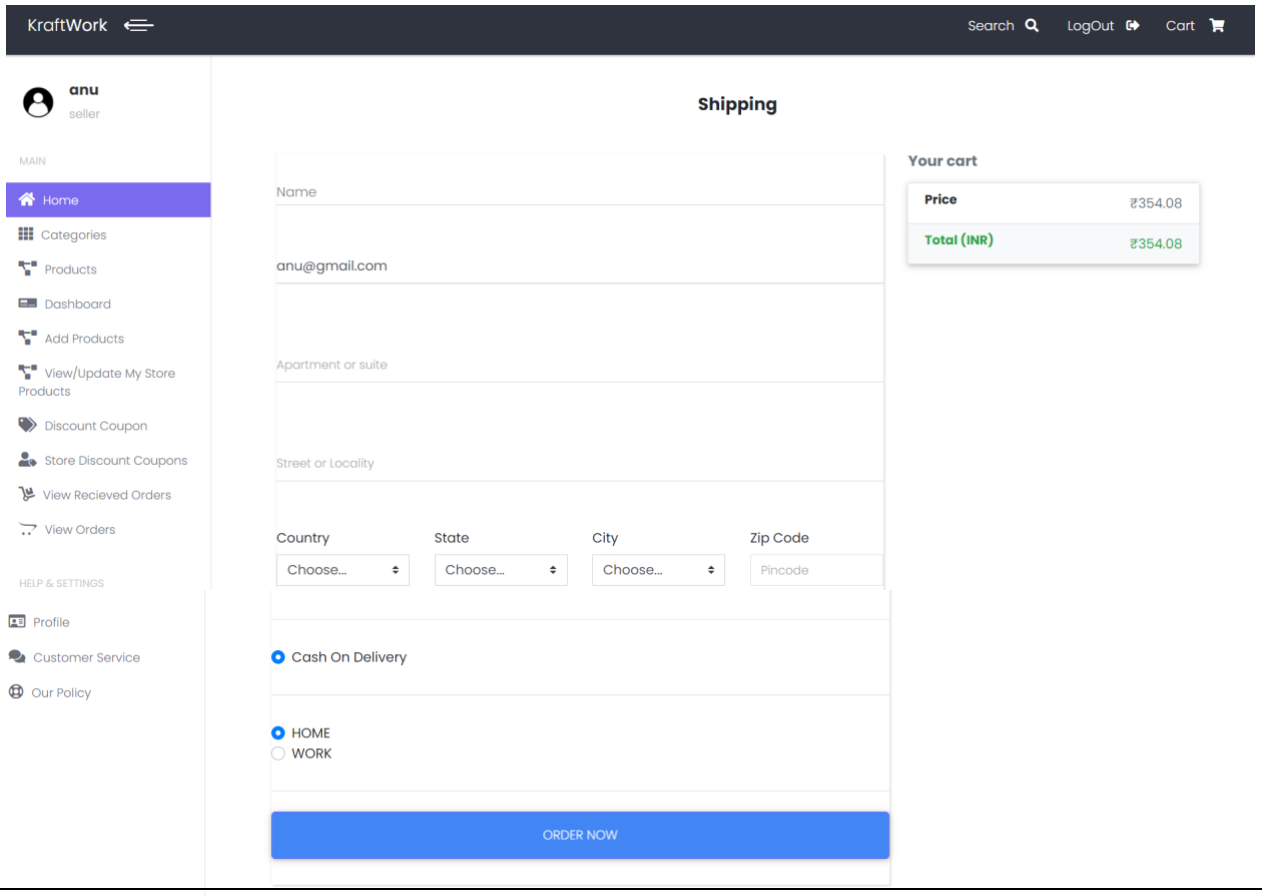
- CART PAGE

This features allow the user to view the products that are their in there cart.



- SHIPPING PAGE

This features allow the user to enter their shipping details.



CHAPTER 4. CONCLUSIONS AND REFERENCES

4.1 CONCLUSION

PHP is a platform for building network applications.

PHP started out as a small open source project that evolved as more and more people found out how useful it was. Rasmus Lerdorf unleashed the first version of PHP way back in 1994.

PHP is a MUST for students and working professionals to become a great Software Engineer specially when they are working in Web Development Domain. I will list down some of the key advantages of learning PHP:

- PHP is a recursive acronym for "PHP: Hypertext Preprocessor".
- PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites.
- It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server.
- PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the Unix side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time.
- PHP supports a large number of major protocols such as POP3, IMAP, and LDAP. PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time.
- PHP is forgiving: PHP language tries to be as forgiving as possible.
- PHP Syntax is C-Like.

In conclusion, I greatly recommend PHP as a gateway to learning web development and getting engaged in the open-source community, and as a tool for rapid developing of http applications. The amount of tools and passion the community has put into the php ecosystem and web applications in general makes development straightforward and abstracts the complex deployment difficulties.

4.2 LIMITATIONS OF THE SYSTEM

- System is a bit vulnerable.
- UI of the application is very simple.
- Uploading a products (by the seller) takes 5 to 6 seconds.
- Updating the order details takes 5 to 6 seconds.

4.3 POSSIBLE IMPROVEMENTS

- A more complicated UI
  UI of the application is very simple. It should be more complicated

- Testing
  More improved testing should be there like alpha and beta testing

- Database complexity
  Complexity of the database can be decreased

4.4 REFERENCES

- https://www.php.net/
- https://www.w3schools.com/php/DEFAULT.asp
- https://www.tutorialspoint.com/php/index.htm
- https://www.mysql.com/