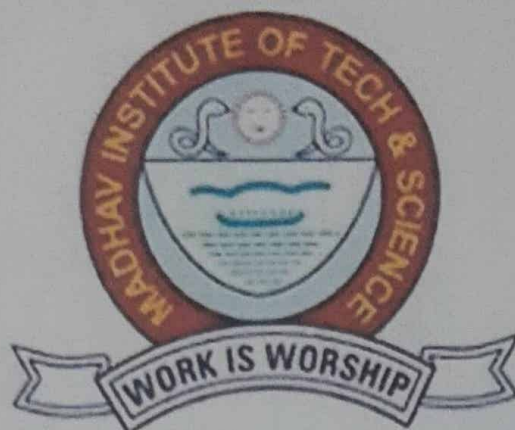


MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)



Project Report

on

C2C ecommerce website (college oriented)

Submitted By:

Shalvi Singhal

0901CS191112

Faculty Mentor:

Mr. Mir Shahnawaz Ahmad

Assistant Professor, Computer Science and Engineering

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

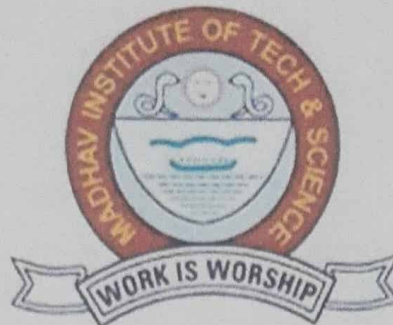
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MAY-JUNE 2022

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on

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A project report submitted in partial fulfilment of the requirement for the degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

Submitted by:

Shalvi Singhal

0901CS191112

Faculty Mentor:

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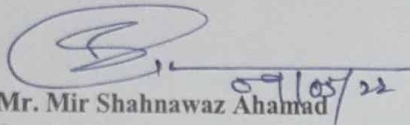
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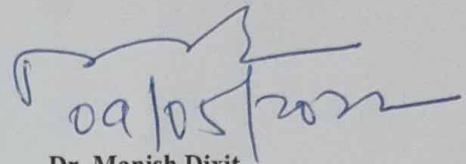
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CERTIFICATE

This is certified that **Shalvi Singhal**(0901CS191112) has submitted the project report titled **Optimal Location Predictor** under the mentorship of **Mr. Mir Shahnawaz Ahmad**, in partial fulfilment of the requirement for the award of degree of Bachelor of Technology in Computer Science and Engineering from Madhav Institute of Technology and Science, Gwalior.



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Dr. Manish Dixit
Professor and Head
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Dr. Manish Dixit
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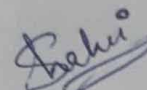
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DECLARATION

We hereby declare that the work being presented in this project report, for the partial fulfilment of requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering at Madhav Institute of Technology & Science, Gwalior is an authenticated and original record of my work under the mentorship of **Mr. Mir Shahnawaz Ahmad, Assistant Professor**, Computer Science and Engineering.

We declare that we have not submitted the matter embodied in this report for the award of any degree or diploma anywhere else.



Shalvi Singhal

0901CS191112

3rd Year

Computer Science and Engineering

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

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Shalvi Singh

0901CS191112

3rd Year

Computer Science and Engineering

Abstract

This is the basic need of today's college youths that they want to sell their used products or item that might help their juniors. So there is a need of an online platform which will bridge the gap between seniors and juniors of 3-tier colleges. This project deals with such a problem and ensures that the resources provided by the seniors are being reused (resulting in reduction of wastage of resources) and the requirements of juniors are fulfilled.

सार:

यह आज के कॉलेज के युवाओं की बुनियादी आवश्यकता है कि वे अपने उपयोग किए गए उत्पादों या आइटम को बेचना चाहते हैं जो उनके जूनियर्स की मदद कर सकते हैं। इसलिए एक ऑनलाइन प्लेटफॉर्म की जरूरत है जो 3-टियर कॉलेजों के सीनियर्स और जूनियर्स के बीच की खाई को पाटेगा। यह परियोजना ऐसी समस्या से निपटती है और यह सुनिश्चित करती है कि वरिष्ठों द्वारा प्रदान किए गए संसाधनों का पुनः उपयोग किया जा रहा है (जिसके परिणामस्वरूप संसाधनों की बर्बादी में कमी आई है) और जूनियरों की आवश्यकताओं को पूरा किया जाता है।

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CHAPTER 1: PROJECT OVERVIEW

1.1 Introduction

The project CollegeCart is a technology based website which is a C2C ecommerce website which connects the buyer student to the seller student. The motive with which we have selected this project is that lots of people are suffering from the lack of basic entities and getting it at a higher cost from outside. Our Website is designed in such a manner that whenever any person uploads advertisement for selling their products and on the other hand the other students can grab the deal in a cheap price from market. This report discusses the result of the work done in development of "C2C E-commerce Website" using Django framework. It is a part of the Minor project going in Computer Science Department, Madhav Institute of Technology at the development of an application framework for providing a common platform for facilitating the use of online Ecommerce services developed by the team and integration of various tools developed during the execution of the project.

1.2 Objective and Scope

The main objective of the study is to develop an online c2c buying and selling brochure system. The system aims to achieve the following objectives:

- To design an c2c online shopping system for college.
- To provides a solution to reduce and optimize the expenses of students order management in the college
- To create an avenue where students can find for all types of products online, and even sell the products to earn some expenses
- To develop a database to store information of students with various products and services.

1.3 Methodology

The tools, which were employed during this methodology stage, where mainly tables, Data Flow Diagrams and Entity Relationship Diagrams. The design ensures that only allows authorized users to access the systems information.

1.3.1 Process Flow

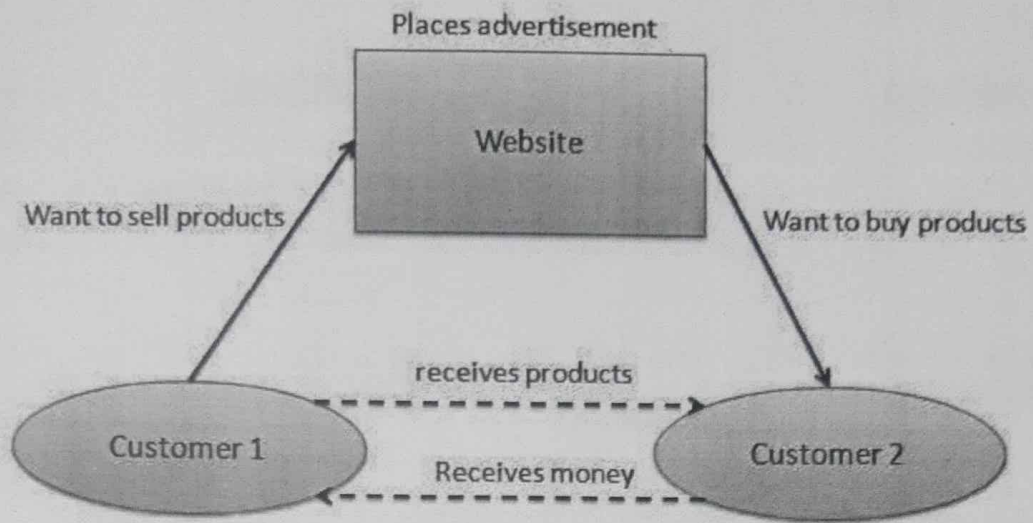


Fig No. 1.3.1 Process Flow Diagram

1.3.2 Flow Chart

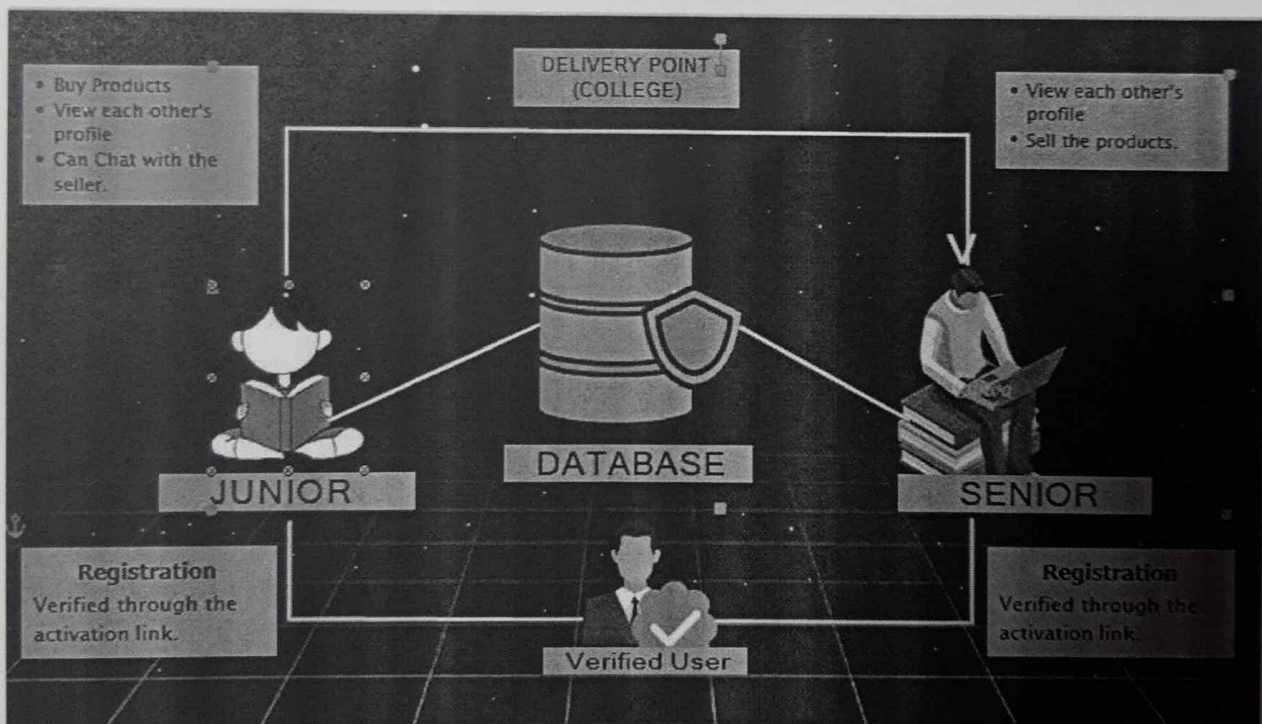


Fig No-1.3.1 Flow Chart

1.3.3 ER Diagram

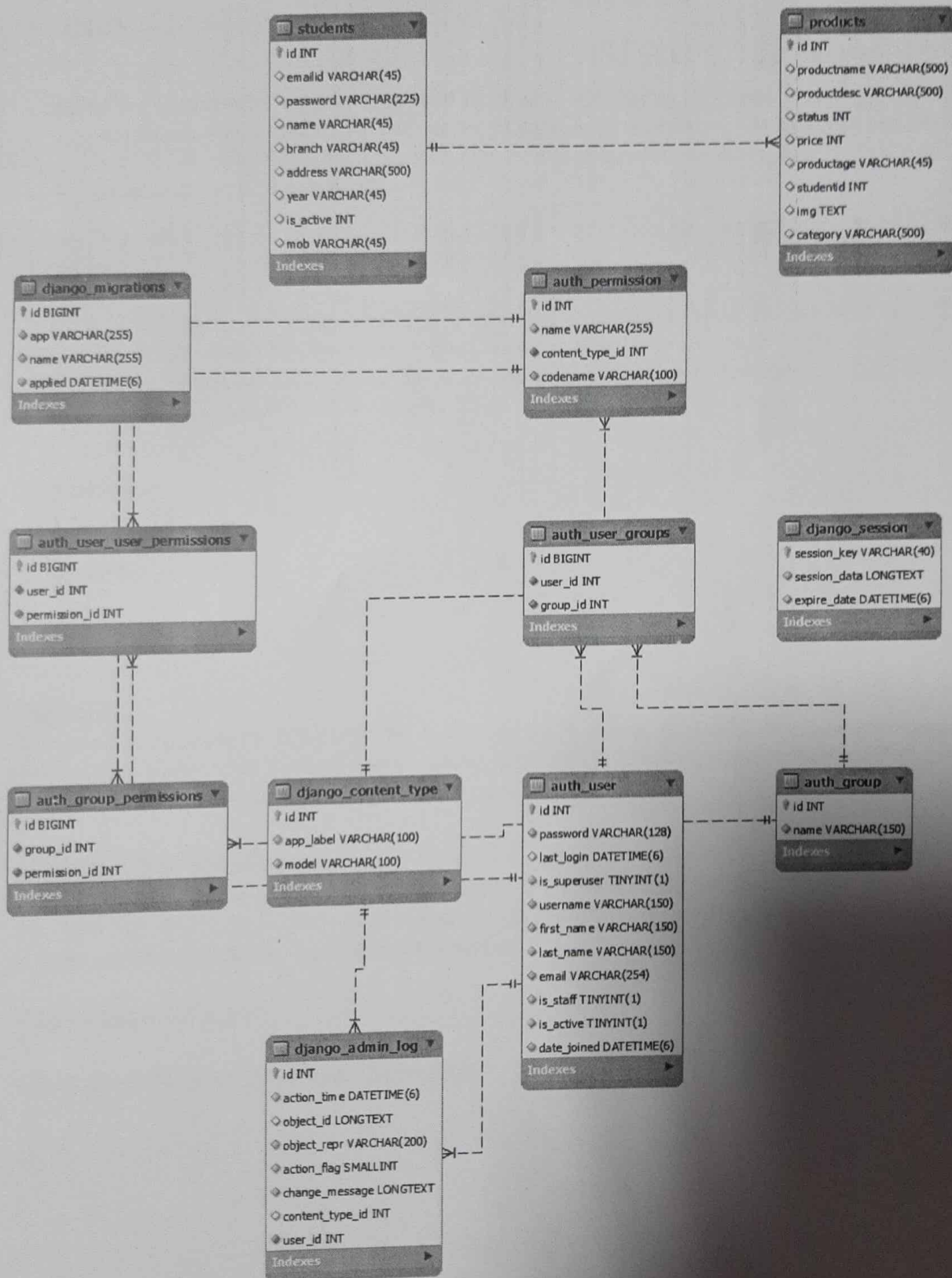


Fig No -1.3.3 E-R Diagram

1.4 Technology used:

PYTHON:

Python is an interpreted high-level general-purpose programming language. Its design philosophy emphasizes code readability with its use of significant indentation. Its language constructs as well as its object-oriented approach aim to help programmers write clear, logical code for small and large-scale projects.

Django:

Django is a high-level Python web framework that encourages rapid development and clean, pragmatic design. Built by experienced developers, it takes care of much of the hassle of web development, so you can focus on writing your app without needing to reinvent the wheel. It's free and open source. Django features to consider if you're looking for the right framework to build a shop:

- Scalability
- Feature-rich
- SEO-friendly
- Reliable

MySQL:

In regard to the general definition, MySQL is an open source relational database management system (RDBMS) with a client-server model. RDBMS is a software or service used to create and manage databases based on a relational model.

HTML, CSS, JavaScript:

HTML provides the basic structure of sites, which is enhanced and modified by other technologies like CSS and JavaScript. CSS is **used to control presentation, formatting, and layout**. JavaScript is used to control the behavior of different elements.

Chat Server: Socket

Hosting: AWS(Amazon Web Services)

1.5 DEFINATION OF TERMS:

- **Web based application:**

a web-based application is a software package that can be accessed through the web browser. the software and database reside on a central server rather than being installed on the desktop system and is accessed over a network.

- **Web browser:**

a web browser is a software application used to enable computer users locate and access web pages.

- **Brochure:**

a brochure is an advertising piece mainly used to introduce a company or an organization and inform about products or services to a target audience.

- **E-commerce:**

electronic commerce is the buying and selling of goods and services, or the transmission of funds or data, over an electronic network, primarily the internet.

- **C2C:**

c2c represents a market environment where one customer purchases goods from another customer using a third-party business or platform to facilitate the transaction. C2C companies are a type of business model that emerged with e-commerce technology and the sharing economy.

CHAPTER 2: LITERATURE SURVEY

This project deals with developing a Virtual website 'C2C E-commerce Website'. It provides the user with a list of the various products available for purchase in the store. For the convenience of online shopping, a shopping cart is provided to the user. After the selection of the goods, it is sent for the order confirmation process. The system is implemented using Python's web framework Django. To develop an e-commerce website, it is necessary to study and understand many technologies.

Scope: Every project is done to achieve a set of goals with some conditions keeping in mind that it should be easy to use, feasible and user friendly. As the goal of this project is to develop an ecommerce website, this system will be designed keeping in mind the conditions (easy to use, feasibility and user friendly) stated above. It may help in effective and efficient order management. In every shot time, the collection will be obvious, simple and sensible. It is very possible to observe the customer potentials and purchase patterns because all the ordering history is store in the database. It is efficient managing all the operations of an online store within a single platform. The project aims to automate the business process of ecommerce website which sale various types of products. The proposed project would cover:

Customer Side

- Customer can view/search products with login.
- When customer try to purchase product, then he/she must login to system.
- After creating account and login to system, he/she can place order.
- Customer can contact with the seller with the provided chat services.
- Customer can see the order status (Pending, Confirmed, Delivered) for each order
- Consumer can sell the item by adding the product info int the sell product section.
- Costumer can contact with the buyer and with the provided chat services.
- Seller can edit the product details such as deleting and updating the product info..

Admin Side

- Admin can provide username, email, password and your admin account will be created.
- After login, there is a dashboard where admin can see how many customers is registered, how many products are there for sale, how many orders placed.
- Admin can add/delete/view/edit the products.
- Admin can view/edit/delete customer details.
- Admin can view/delete orders.

Set up a database for a Django project

Django in its 'out-of-the-box' state is set up to communicate with SQLite -- a lightweight relational database included with the Python distribution. So by default, Django automatically creates a SQLite database for your project.

The Django configuration to connect to a database is done inside the `setting.py` file of a Django project in the `DATABASES` variable.

Default Django `DATABASES` dictionary

from `pathlib` import `Path`

`BASE_DIR = Path(__file__).resolve().parent.parent`

```
DATABASES = {
    'default': {
        'NAME': 'clg_classfields',
        'ENGINE': 'django.db.backends.mysql',
        'USER': 'admin',
        'PASSWORD': '*****',
        'HOST': 'database-1.cenwprx98qyc.us-east-1.rds.amazonaws.com',
    }
}
```

Fig 2.1 -Database set up

The Django `DATABASES` variable defines key-value pairs. Each key represents a database reference name and the value is a Python dictionary with the database connection parameters. In listing 1-14 you can observe the default database reference. The default reference name is used to indicate that any database related operation declared in a Django project be executed against this connection. This means that unless otherwise specified, all database CRUD (Create-Read-Update-Delete) operations are done against the database defined with the default key.

CHAPTER 3 : SYSTEM SPECIFICATIONS

This section describes the hardware components and software requirements needed for effective and efficient running of the system

3.1 Hardware Requirements

- Processor : 2.4 GHz Processor speed
- Memory : 2GB RAM
- Disk Space: 500 GB

3.2 Software Requirements

- Operating System : Windows 10
- Database Management System: MySQL
- Runtime Environment : PyCharm or Visual Studio Code

CHAPTER 4: PROJECT IMPLEMENTATION

4.1 Files Overview

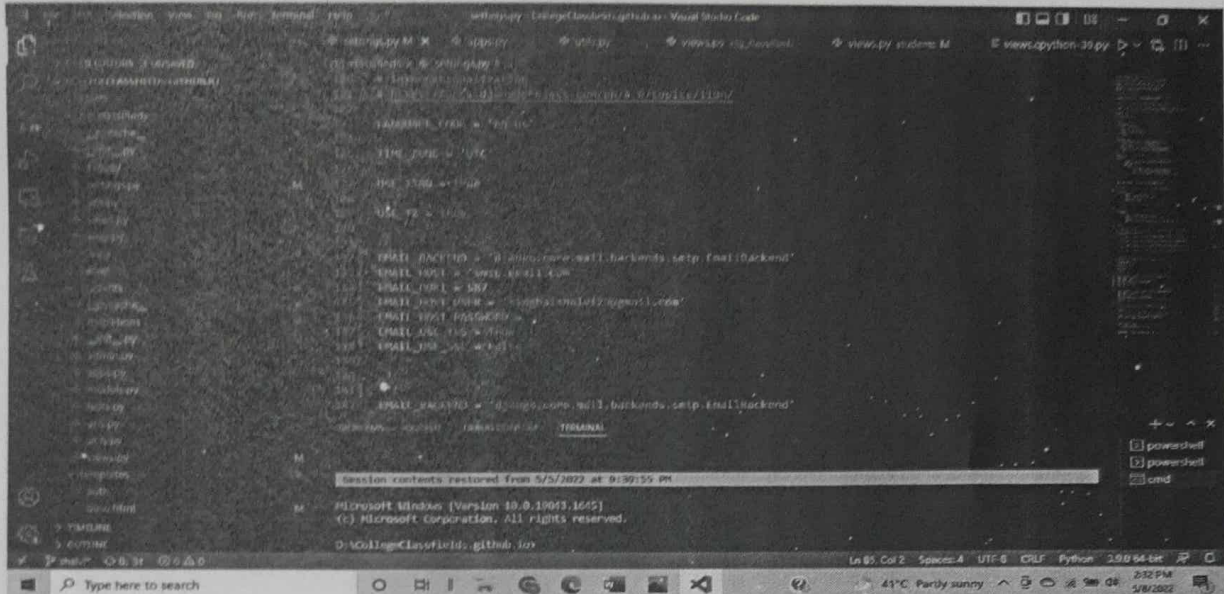


Fig -4.1 Files Overview

o **Views** is a crucial one, it contains all the Views (usually as classes). Views.py can be considered as a file that interacts with the client. Views are a user interface for what we see when we render a Django Web application.

o **URLs** Just like the project urls.py file, this file handles all the URLs of our web application.

clg_classfields folder is the Django application directory consisting of the following essential files.

o **Init.py** This file remains empty and is present there only to tell that this particular directory is a package.

o **Settings.py** This file is present for adding all the applications and the middleware application present. Also, it has information about templates and databases. Overall, this is the main file of our Django web application.

o **Urls.py** This file handles all the URLs of our web application. This file has the lists of all the endpoints that we will have for our website.

o **Wsgi.py** This file mainly concerns with the WSGI server and is used for deploying our applications on to servers like AWS etc.

o **Asgi.py** In the newer versions of Django, you will also find a file named as asgi.py apart from wsgi.py. ASGI can be considered as a succeeded interface to the WSGI. ASGI, short for Asynchronous Server Gateway interface.

4.2 Solution Prototype

- This is a kind of online e-commerce C2C website.
- Everyone has to register through their college Email id (e.g- name@college.in) and the site will send the activation link to the mail & the user will be verified automatically.
- Now everyone has their Login credentials of the website.
- Seniors will be able to make their profiles and upload their products with prices.
- Juniors also will be able to make their profiles and can view the products uploaded by the seniors.
- Juniors will be able to buy the product via a chat feature to the particular senior who uploaded the particular item.
- Every item on the site has a particular delivery point i.e. the college address.
- When the item is sold, then the item will be deleted by the senior who uploaded the item.

CHAPTER 5: RESULT

Home Page:

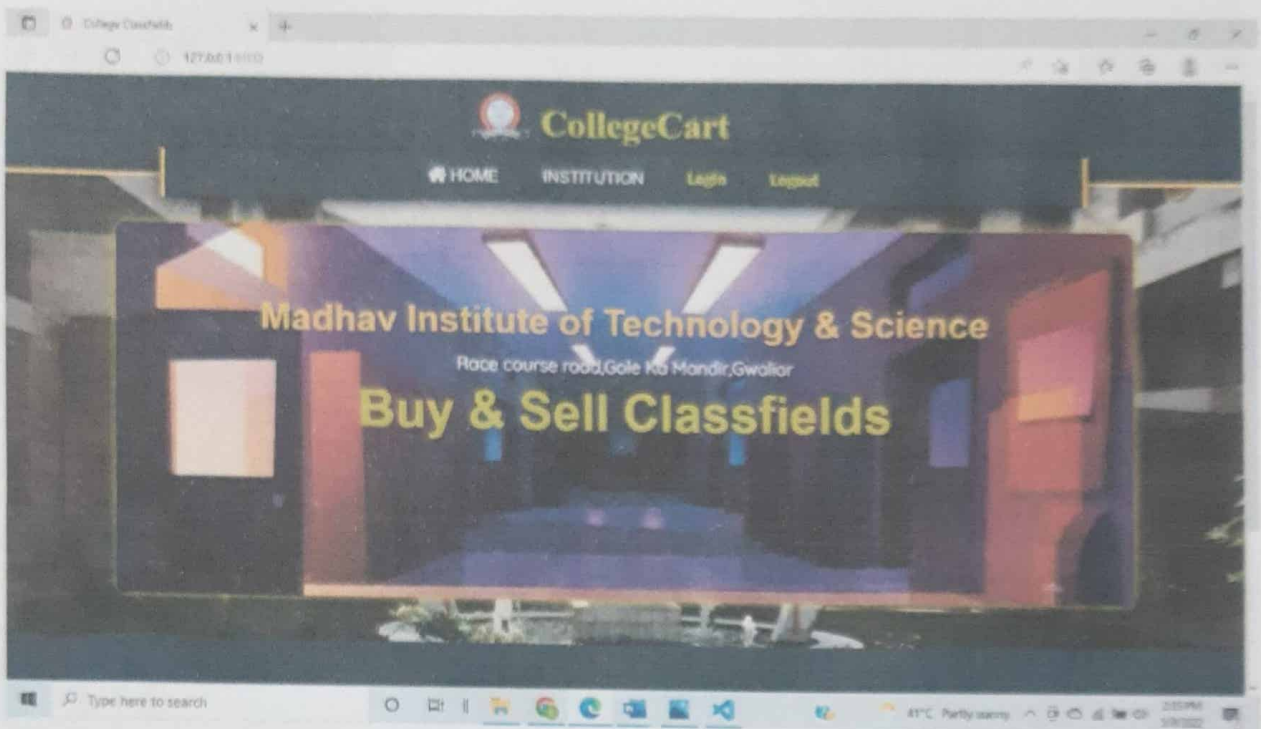


Fig 5.1 Home Page

Login Page:

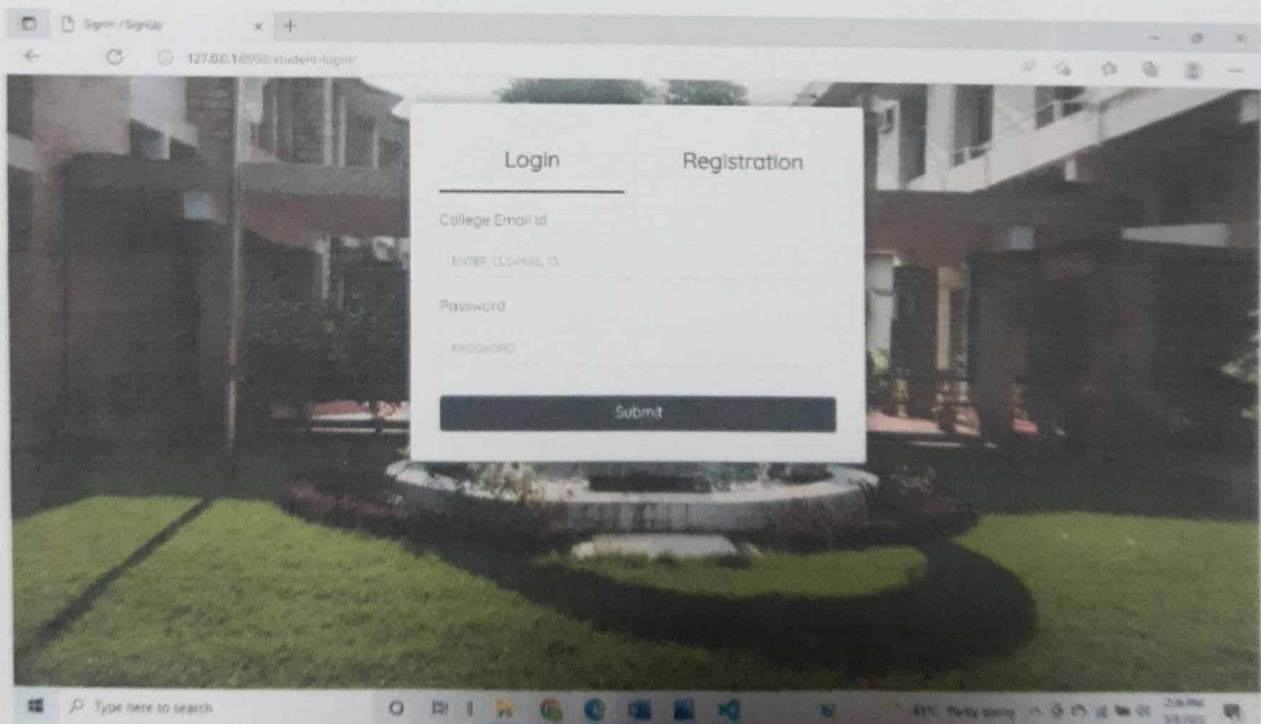


Fig 5.2 Login Page

Registration Page:

The screenshot shows a web browser window with the address bar displaying '127.0.0.1:8000/Custom-Angel/'. The page has two tabs: 'Login' and 'Registration'. The 'Registration' tab is selected, and the form contains the following fields:

- Full Name: ENTER FULL NAME
- Branch: ENTER BRANCH
- College MailId: ENTER COLLEGE MAILID
- Mobile Number: ENTER MOBILE NUMBER
- Address: ADDRESS
- Current Study Year: ENTER CURRENT STUDY YEAR

The browser's taskbar at the bottom shows the Windows logo, a search bar, and various application icons. The system tray on the right indicates a temperature of 41°C, 'Partly sunny' weather, and the time 2:35 PM on 5/8/2021.

Fig 5.3 Registration Page

Email Activation mail:

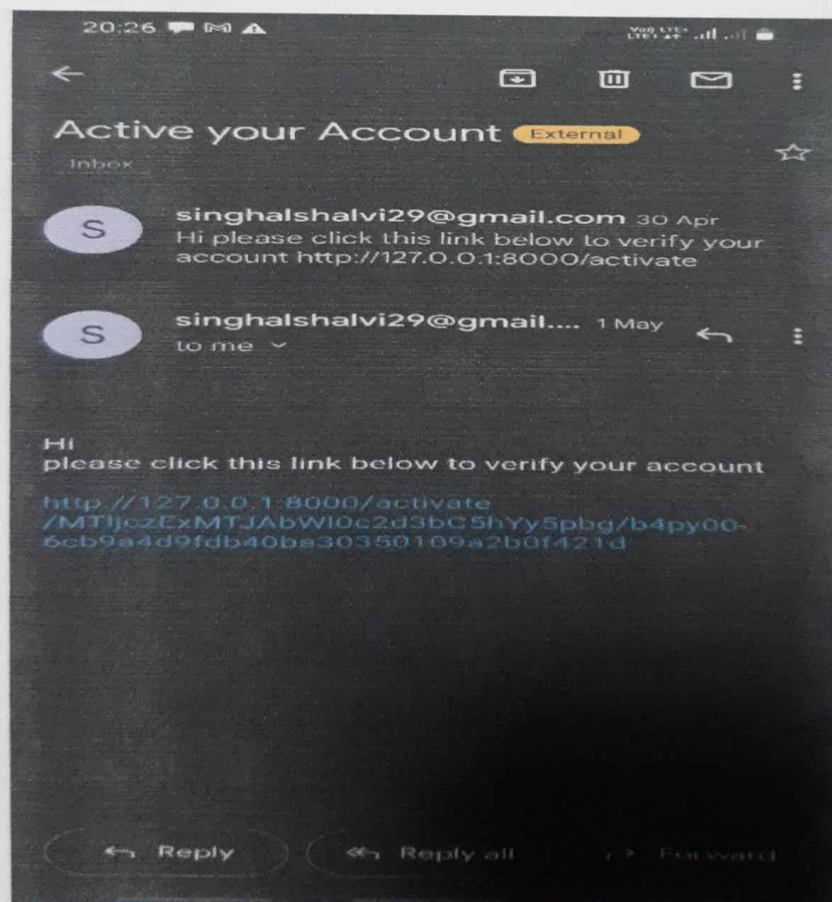


Fig -5.4 Email Activation Mail

Product View :

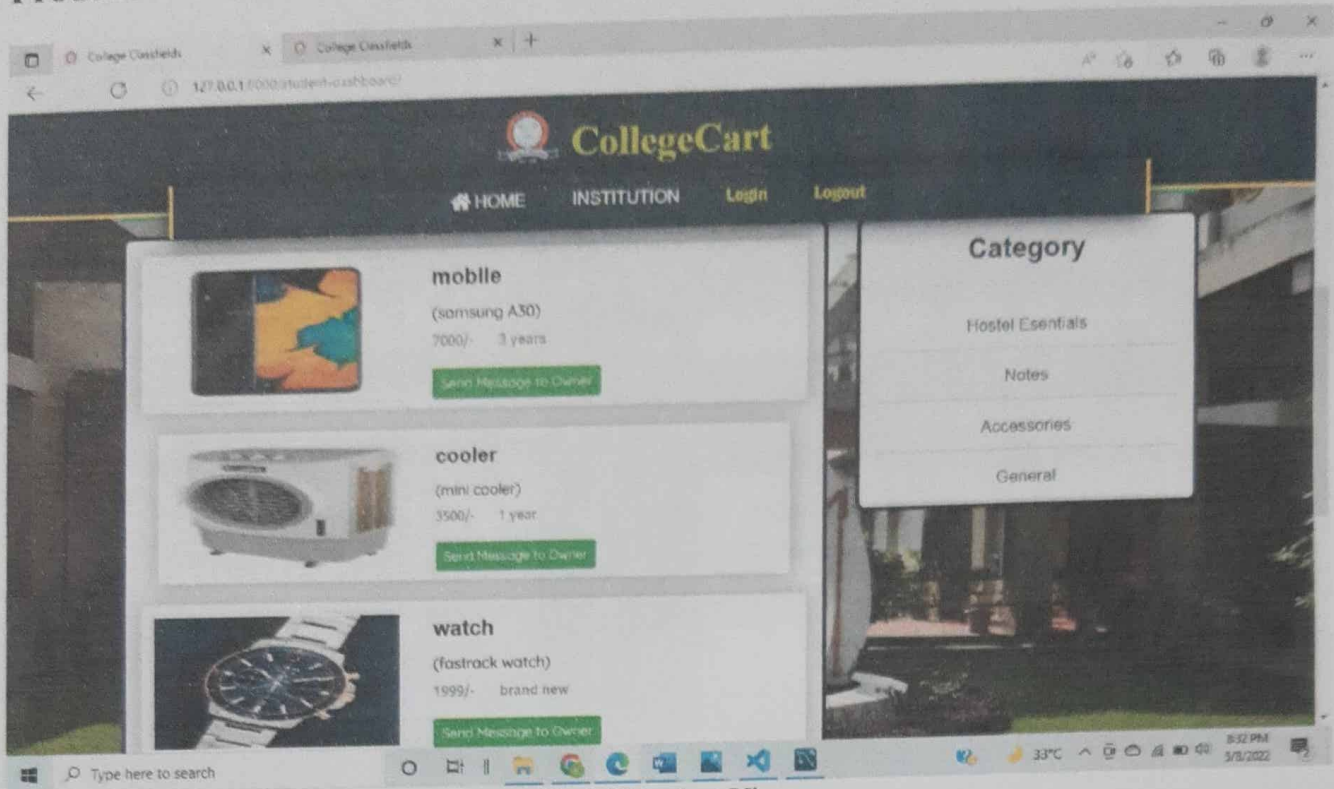


Fig 5.5 Product View

Chat and View Profile:

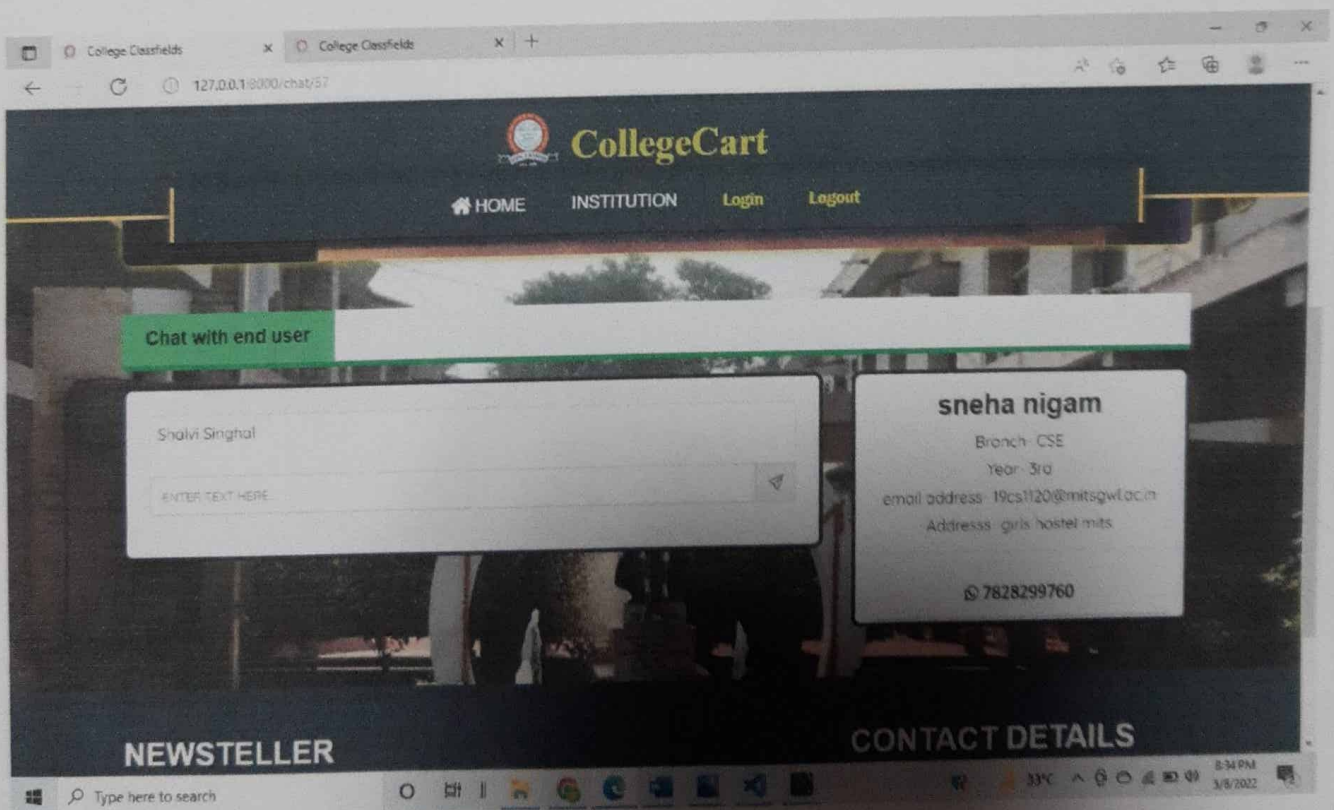


Fig 5.6 Chat and View Profile

Real Time Chat with end user:

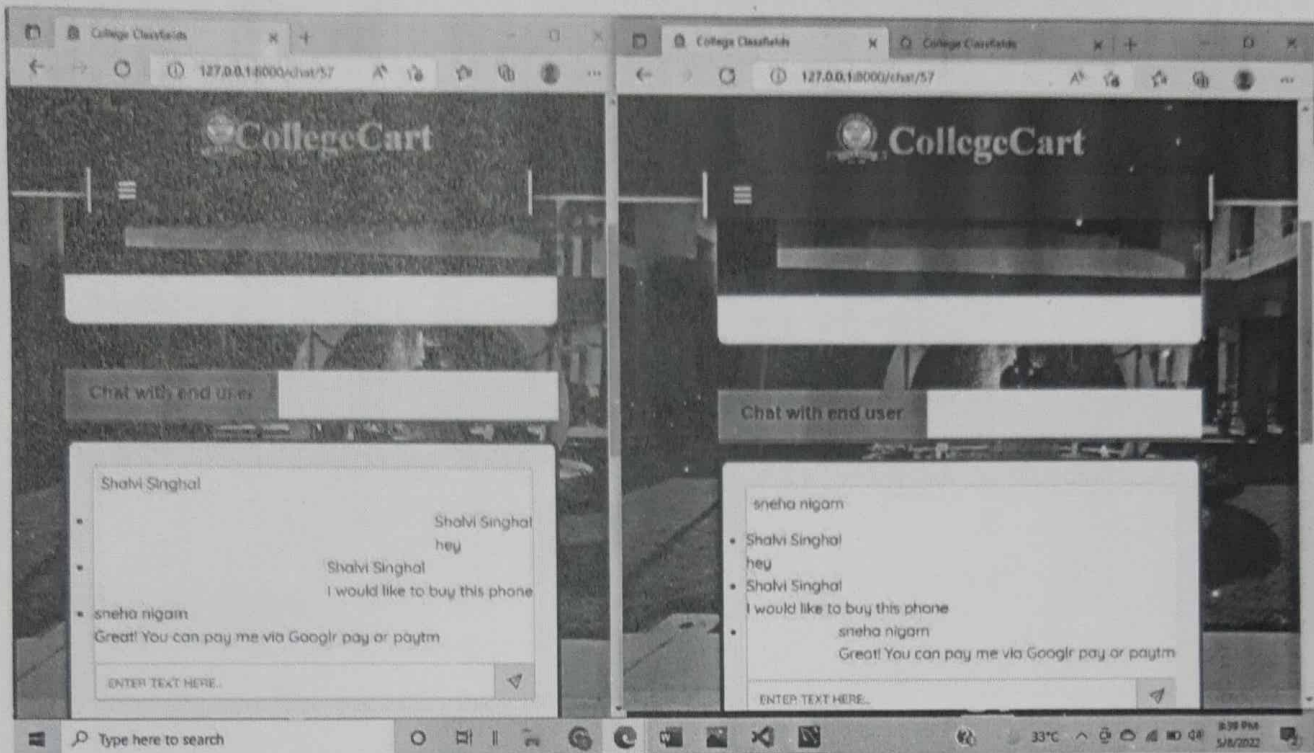


Fig 5.7 Real Time Chat with end user

CHAPTER 6: CONCLUSION AND FUTURE SCOPE

6.1 Conclusion

The project CollegeCart is a technology based website which is a C2C ecommerce website which connects the buyer student to the seller student.

The link for the website is given below-

<http://3.6.5.203:8000/student-dashboard/>

The link of code for the above website is given below-

<https://github.com/Shalvi-Singhal/CollegeClassfields.github.io>

6.2 Future Scope

- Sorting and filtering according to the price of the products.
- If the buyer booked the product, the status of the product shown to us will be booked and when the product is picked, the item should be deleted automatically.
- The products bought by the juniors from the particular senior should reflect the profile of the buyer.
- Monitoring the kind of products that are to be sold on the site.
- Adding more authentication to prevent it from Doss Attack and sql injection.
- Adding logs for every customer visit.(keeping a track record of devices IP address)
- Adding a separate admin pannel for the college to view the progress of the website.
- Adding feedback/rating section for the products

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- <https://testdriven.io/courses/tdd-django/>