

PINTEREST CLONE

**THIS PROJECT IS TO UNDERSTAND THE FUNCTION
OF SOCIAL MEDIA WEBSITE PINTEREST**

**A PROJECT REPORT SUBMITTED IN PARTIAL
FULFILMENT OF REQUIREMENT**

FOR THE AWARD OF THE DEGREE

MASTER OF COMPUTER APPLICATIONS

(MCA)

OF

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

BY

ASWIN GIRISH

Reg No: 23PMC114



**MARIAN COLLEGE
KUTTIKKANAM**

(AUTONOMOUS)

MAKING COMPLETE

Marian College Kuttikkanam Autonomous

Peermade, Kerala – 685 531

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Under the guidance of

Ms. Reny Jose
assistant professor
PG Department of Computer Applications
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Marian College Kuttikkanam Autonomous

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

KUTTIKKANAM – 685 531, KERALA.

CERTIFICATE

This is to certify that the project work entitled

PINTEREST CLONE

is a bonafide record of work done by

ASWIN GIRISH

Reg. No. 23PMC114

In partial fulfillment of the requirements for the award of Degree of

MASTER OF COMPUTER APPLICATIONS [MCA]

During the academic year 2023-2024

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Finally, we express our deep appreciation to all our friends and family members for the moral support and encouragement they have given to complete this project successfully.

Aswin Girish

ABSTRACT

This project aims to develop a clone of Pinterest, a popular social media platform for sharing and discovering visual content. The clone will replicate key features of Pinterest, including user authentication, image uploading, and a visually appealing front-end interface. The front-end will be developed using HTML, CSS, and JavaScript to create a seamless and intuitive user experience. The back-end will be powered by Django 4.2, leveraging its built-in frameworks and libraries for robust and secure user authentication and image uploading. The combination of these technologies will enable the creation of a flexible and customizable platform that closely emulates the functionality and aesthetics of Pinterest.

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1.INTRODUCTION

1.1 PROBLEM STATEMENT

In today's digital age, individuals seek inspiration and ideas from a multitude of images, often belonging to specific topics or areas of interest. However, the challenge lies in the fragmented nature of these images, as they are scattered across various platforms and devices. For some, these visuals serve as sources of inspiration, while for others, they act as comforting elements. Additionally, the absence of a centralized and easily accessible platform for storing and sharing such captivating images hinders the seamless experience of curating, sharing, and accessing them from multiple locations and devices. This fragmentation highlights the need for a comprehensive solution that addresses the disparate nature of inspirational and comforting images, providing a unified platform for users to discover, store, and share visual content effortlessly.

1.2 PROPOSED SYSTEM

my solution to this problem is website where multiple user can login and upload there images they can view other user images and they can pin them to there board and they can also comment on the images this images can be artwork quotes or just random image

1.3 FEATURES OF THE PROPOSED SYSTEM

The proposed system allows users to create individual accounts for the purpose of uploading images securely. During the signup process, users provide necessary details like their name, age, and phone number to establish their accounts. Subsequently, upon successful login, users gain the ability to seamlessly upload images to their dedicated accounts. This process prioritizes user convenience and security. Furthermore, users can easily manage their uploaded content, including the option to remove or delete images as needed. The system focuses on providing users with their own personalized space within the platform, ensuring a straightforward and secure experience for uploading and managing images associated with their accounts.

2.FUNCTIONAL REQUIREMENTS

2.1 MODULE SPECIFICATION

- Login Module
- Signup module
- Pin Module
- remove module

1.Login Module:

- Purpose: This module enables customers to create an account by providing essential information and then log in to access various services. Users will need to enter their username and password to log in securely.

2. Signup Module:

- Purpose: In the Signup module, customers are required to provide details such as their name, age, phone number, and other necessary information to complete the registration process. This module ensures that user data is collected for account creation.

3. Pin Module:

- Purpose: The Pin Module is designed for users who wish to upload images to their accounts. Upon logging in, users can use this module to securely upload images, ensuring that the process is user-friendly and secure.

4. Remove Module:

- Purpose: With the Remove Module, users have the capability to delete images they have previously uploaded. This feature provides users with control over their uploaded content and helps manage their account effectively.

3. NON FUNCTIONAL REQUIREMENTS

3.1 NON FUNCTIONAL REQUIREMENT

- **Performance**

System is Error-free and it can handle multiple user interaction at same time
Large amount of data can be handled easily.

- **Compatibility**

system is compatible with most of the web browsers like (chrome ,fir fox ,ms edge) because it is designed in django and can be hosted it local network

- **Security**

A password is given by the SQL server. Super admin is the only person who have access to the entire data .and each user can interact to user data throw the system only

4.UML DIAGRAMS

4.1 USE CASE

1. Sign up
2. Login
3. Add pins
4. remove pins
5. Edit user account

1.REGISTRATION

Use case id	U01
Use case name	Singup
Created By	Aswin
Date created	05/11/2023
Discription	This use case allows user to register to the system and create an account to the system. The user must have enter name,address email id and password for the registration
Primary Actor	User
Secondary Actor	None
Precondictions	<ul style="list-style-type: none"> • User need a valid email address
Main flow	<ul style="list-style-type: none"> • The user enter name, ,email id and password ,Dob,username • The user submits the name and essential to the system to for vivifications • The system create an account

2.LOGIN

Use case id	U02
Use case name	Login
Created By	Aswin Girish
Date created	05/11/2023
Discription	This use case allows user to login to the system
Primary Actor	User
Secondary Actor	None
Preconditions	<ul style="list-style-type: none">• User have a valid account
Main flow	<ul style="list-style-type: none">• The user enter the username or email and password• The user submits the essentials The system verifies authenticity of user and redirects the user to a user page• The system display the users homepage• The use case ends

3.Add pins

Use case id	U03
Use case name	Add pins
Created By	Aswin Girish
Date created	06/11/2023
Description	This allows users to upload there images to system
Primary Actor	User
Secondary Actor	None
Preconditions	<ul style="list-style-type: none">• User have a valid account• System can find the image
Main flow	<ul style="list-style-type: none">• The user enter the login credentials• Get into the system• Add different types of images• The use case ends

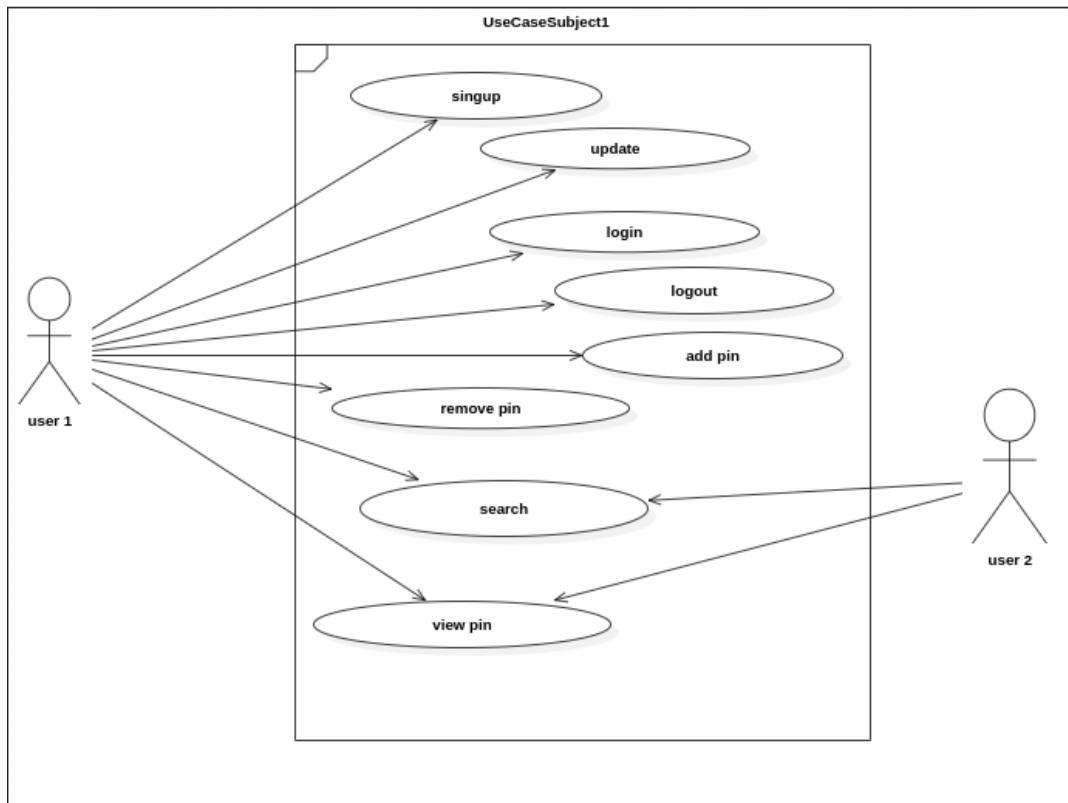
4.Remove Pins

Use case id	U04
Use case name	Removes pins
Created By	Aswin Girish
Date created	06/11/2023
Discription	The user can remove the images they have uploaded
Primary Actor	User
Secondary Actor	None
Precondictions	<ul style="list-style-type: none">• User have a valid account• the image belongs to the user
Main flow	<ul style="list-style-type: none">• The user enter login credentials• select the image he wants to remove• request for removal• systems allows the user to delete the image• The use case ends

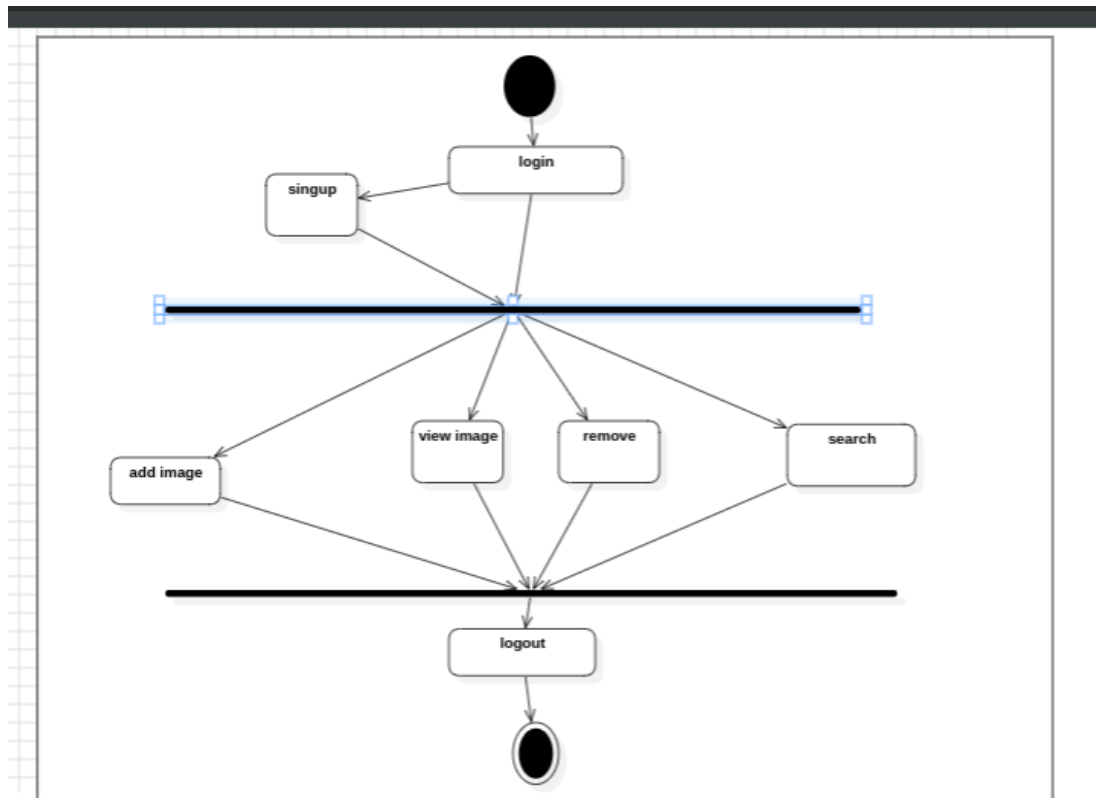
5.EDIT USER ACCOUNT

Use case id	U06
Use case name	Edit user account
Created By	Aswin Girish
Date created	06/11/2023
Description	This user case allows the user to delete his account from the system
Primary Actor	User
Secondary Actor	None
Preconditions	<ul style="list-style-type: none">• User have a valid account
Main flow	<ul style="list-style-type: none">• The user login to his account• he select setting and can make changes to his account• The use case ends

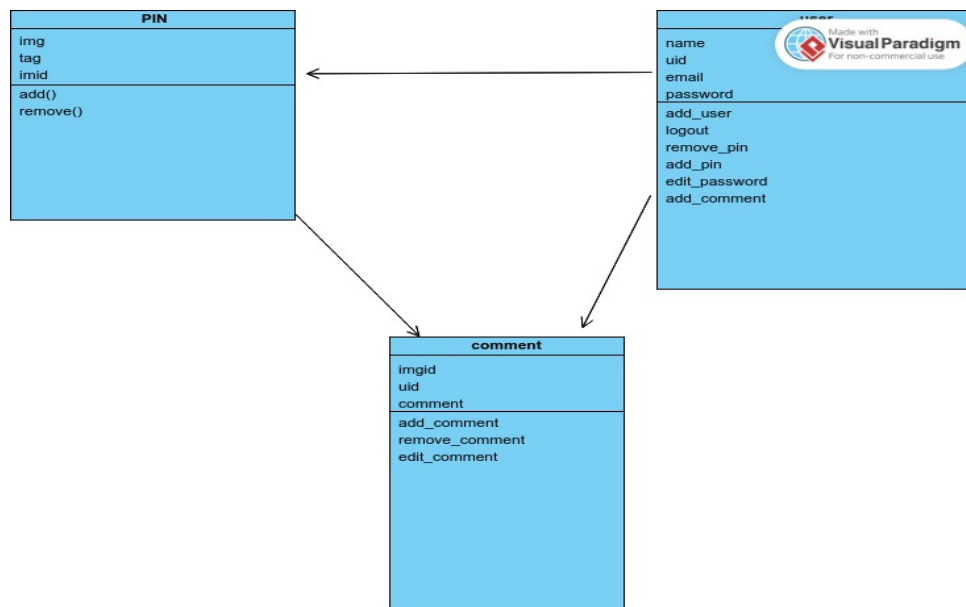
4.2 USE CASE DIAGRAM



4.3 ACTIVITY DIAGRAM



4.4 Class Diagram



5.DATABSE DESIGN

1.Table Name: USER_DETAILS**Primary key: Uid**

SINO	COLUMN NAME	DATA TYPE	DESCRIPTION
1.	UID	VARCHAR)	PRIMARY KEY, UNIQUE IDENTIFIER FOR EACH USER
2.	USERNAME	VARCHAR	USER'S LOGIN USERNAME
3.	FNAME	VARCHAR)	USER'S FIRST NAME
4.	LNAME	VARCHAR)	USER'S LAST NAME
5.	EMAIL	VARCHAR_	USER'S EMAIL ADDRESS
6.	DOB	DATE	USER'S DATE OF BIRTH
7.	PIC	IMAGE	USER'S PROFILE PICTURE

2.Table Name: PINS**Primary key: ID**

SINO	COLUMN NAME	DATA TYPE	DESCRIPTION
1.	ID	INTEGER	PRIMARY KEY, UNIQUE IDENTIFIER FOR EACH USER PIN
2.	USERID	VARCHAR	FOREIGN KEY, THE UID OF THE USER WHO OWNS THE PIN
3.	TAG	VARCHAR	THE USER'S PIN
4.	IMAGE	VARCHAR	OPTIONAL, THE USER'S PROFILE PICTURE FOR THE PIN

6.TEST CASES

6.1 Sign up

Sr No	Test cases	Feature	Description	Steps to Execute	Expected Results
1	Tc-001	Required fields	Check the required fields By not filling any data	1. Do not enter any value in the field 2. Click on the register button	It should show a mandatory symbol (*) on mandatory fields.
2	Tc-002	Required fields	Check user should Register by filling all the required fields	1. Enter valid values in the required fields. 2. Click the Register button.	1. Users should be registered successfully. 2. A successful registration message should show. 3. Mail should send to the user
3	Tc-003	Optional Fields	Check all the optional fields when do not fill data	1. Do not enter any detail in optional fields 2. Enter valid data in required fields 3. Click on the Signup button	1. It should not ask to fill the optional fields 2. User should be registered successfully 3. A successful registration message should show 4. Mail should send to the user
4	Tc-004	Email validation	<ul style="list-style-type: none"> • Check the Email text field that has an Email address without @ symbol • Check the Email text field that has a random string instead of a real email. • Check the Email text field that has a missing dot in the email address. 	1. Enter Invalid Emails 2. Click on the Register Button.	It should show the validation message for valid email
5	TC-007	Email	Check all the	1. Enter valid	It should not show any

		validation	valid emails	Emails 2. Click on the Register Button.	validation message
6	Tc-006	Phone Number validation	Check the phone number when passing alphanumeric data	1. Enter alphanumeric data in phone field 2. Click on Register button	It should show the validation message 8 for Phone Number
7	Tc-007	Phone Number validation	Check the phone number when not pass country code	1. Enter valid phone number without country code 2. Click on Register button	It should show the validation message for country code is required
8	TC-08	Password Validation	Check the password limit when enter value less than min	1. Enter value which is alphanumeric but less than 8. 2. Click on Register button	It should show validation message

6.2 LOGIN

Sr No	Test cases	Feature	Description	Steps to Execute	Expected Results
1	Tc- 001	Required fields	Check the required fields By not filling any data	1.Do not enter any value in the field 2.click on the login button	It should show a mandatory symbol (*) on mandatory fields.
2	Tc-002	Required fields	Check user should login by filling all the required fields	1. Enter valid values in the required fields. 2. Click the login button.	1. Users should be login successfully. 2. A successful login message should show.
3	Tc-004	Email validation	<ul style="list-style-type: none"> • Check the Email text field that has an Email address without @ symbol • Check the Email text field that has a random string instead of a real email.. • Check the Email text field that has a missing dot in the email address. 	1. Enter Invalid Emails 2. Click on the Login Button.	It should show the validation message for valid email
4	TC-05	Password Validation	Check the password limit when enter value less than min	1. Enter value which is alphanumeric but less than 8. 2.Click on Login button	It should show validation message

6.3 ADD PINS

Sr No .	Test cases	Feature	Description	Steps to Execute	Expected Results
1	Tc- 001	Required fields	Check the required fields By not filling any data	1.Do not enter any value in the field 2.click on the Add button	It should show a mandatory symbol (*) on mandatory fields.
2	Tc-002	Required fields	Check user should login by filling all the required fields	1. Enter valid values in the required fields. 2. Click the add button.	1. Users should be add successfully. A successful add message should show.
3	Tc-003	Optional Fields	Check all the optional fields when do not fill data	1. Do not enter any detail in optional fields 2. Enter valid data in required fields 3. Click on the add button	1. It should not ask to fill the optional fields 2. User should be add product successfully 3. A successful add message should show

7. INPUT AND OUTPUT DESIGN

7.1 INPUT DESIGN

in this website we have mainly used four forms to get user details and they are

- **Sign up Form-** Here the customer creates their accounts using the relevant details asked to fill for and it is stored to the database and used whenever it is needed.
- **Login Form-** The user login to the website, to their account using their particular username and password.
- **Add Image Form-** The user add the image to the website using this form filling the relevant information such as image Tag and Image ,
- **Update Form-** this form is used to update user details

7.2 OUTPUT DESIGN

This are the pages which are used by the user (user interfaces)

Home page :- all the images upload by all the users are shown here

User page :-this page is where user can upload and see his pins

Edit page :-this page is used to edit user details like password and email

8. FUTURE ENHANCEMENT

8.1FUTURE ENHANCEMENT

The Pinterest clone serves as an interactive user platform, necessitating further enhancements in both user interface (UI) and optimization. In addition to this, it lacks a variety of features such as image-based searching, user recommendations, and other advanced functionalities, all of which require the integration of machine learning algorithms and a more finely tuned and efficient database. Hence, there is a pressing need for an expansion of both user interface elements and optimization strategies to elevate the overall user experience on the platform. Hence, these are the features I would like to add to the website in the future.

9.CONCLUSION

9.1 CONCLUSION

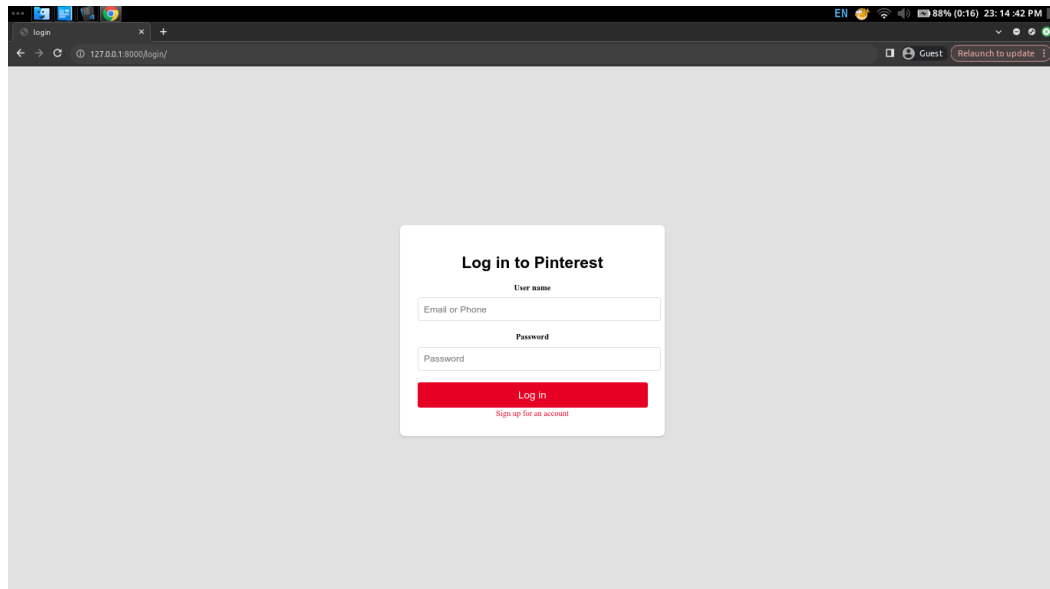
This website was designed to learn and understand the workings of Pinterest, a multi-user social media platform. The Pinterest clone was developed using the Python Django framework version 4.2, employing custom-built templates using CSS and HTML. The primary objective of the website was to gain hands-on experience and explore the functionalities of model-view-template architecture, along with basic CRUD (Create, Read, Update, Delete) operations in Django. This development process successfully fulfilled the intended

10.REFERENCES

1. <https://docs.djangoproject.com/en/4.1/intro/tutorial01/>

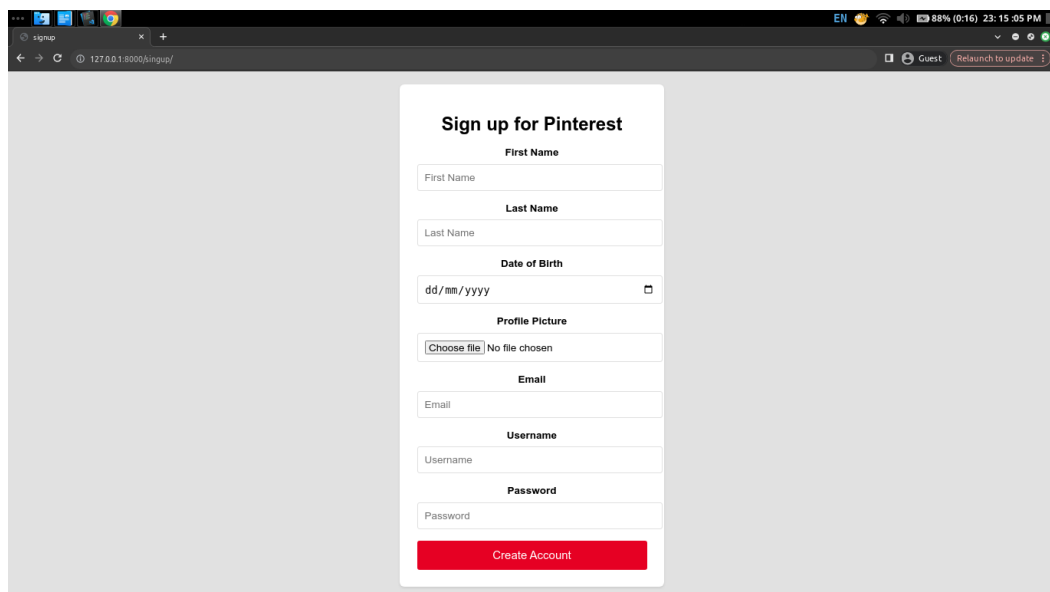
11.APPENDIX

LOGIN PAGE



A screenshot of a web browser displaying the login page of a Pinterest clone. The browser's address bar shows the URL "127.0.0.1:8000/login/". The page features a central white card with the title "Log in to Pinterest". Below the title, there are two input fields: "Email or Phone" and "Password". A red "Log in" button is positioned below these fields. A link "Sign up for an account" is located at the bottom of the card. The browser's status bar at the top indicates the time as 23:14:42 PM and the battery level as 88%.

Sign up Page



A screenshot of a web browser displaying the sign-up page of a Pinterest clone. The browser's address bar shows the URL "127.0.0.1:8000/signup/". The page features a central white card with the title "Sign up for Pinterest". Below the title, there are several input fields: "First Name", "Last Name", "Date of Birth" (with a calendar icon), "Profile Picture" (with a "Choose file" button and "No file chosen" text), "Email", "Username", and "Password". A red "Create Account" button is positioned at the bottom of the card. The browser's status bar at the top indicates the time as 23:15:05 PM and the battery level as 88%.

Home Page

