



# NEXT GEN EMPLOYABILITY PROGRAM

Creating a future-ready workforce

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College Name

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# CAPSTONE PROJECT SHOWCASE

## Project Title

Voting Application using Django Framework-Mohamed haleem J  
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Abstract | Problem Statement | Project Overview | Proposed Solution |  
Technology Used | Modelling & Results | Conclusion



## Abstract

The proposed voting application is a web-based platform that allows users to create and participate in online votes. The application is built using the Django framework, a popular and well-supported Python-based web framework that provides a robust foundation for building scalable and secure web applications . The application is also designed to be flexible and scalable, with a modular architecture that allows for easy customization and extension. This makes it suitable for a wide range of use cases, from small-scale internal votes to large-scale public elections . Overall, the proposed voting application is a secure, user-friendly, and flexible platform for conducting online votes. Its use of the Django framework ensures a robust and scalable foundation, while its focus on security and user experience makes it an ideal choice for a wide range of voting scenarios.

## Problem Statement

Online voting has become increasingly popular in recent years, with a growing number of organizations and governments turning to digital platforms to conduct elections and polls. However, online voting also presents a number of challenges, particularly in terms of security and integrity . Overall, the proposed voting application will address the challenges of security and integrity in online voting, while also providing a user-friendly platform for conducting online votes. Its use of the Django framework will ensure a robust and scalable foundation, while its focus on security and user experience will make it an ideal choice for a wide range of voting scenarios. In addition to its focus on security, the application will also prioritize user experience, with a clean and intuitive interface that makes it easy for users to create and participate in votes. The application will support multiple types of votes, including single-choice and multiple-choice votes, and will allow users to set deadlines and restrictions for each vote.

## Project Overview

The project overview for a voting application using the Django framework involves creating a secure and user-friendly online voting system. The application allows users to register, vote, and view real-time results. Here is a steps involved in building the voting application:

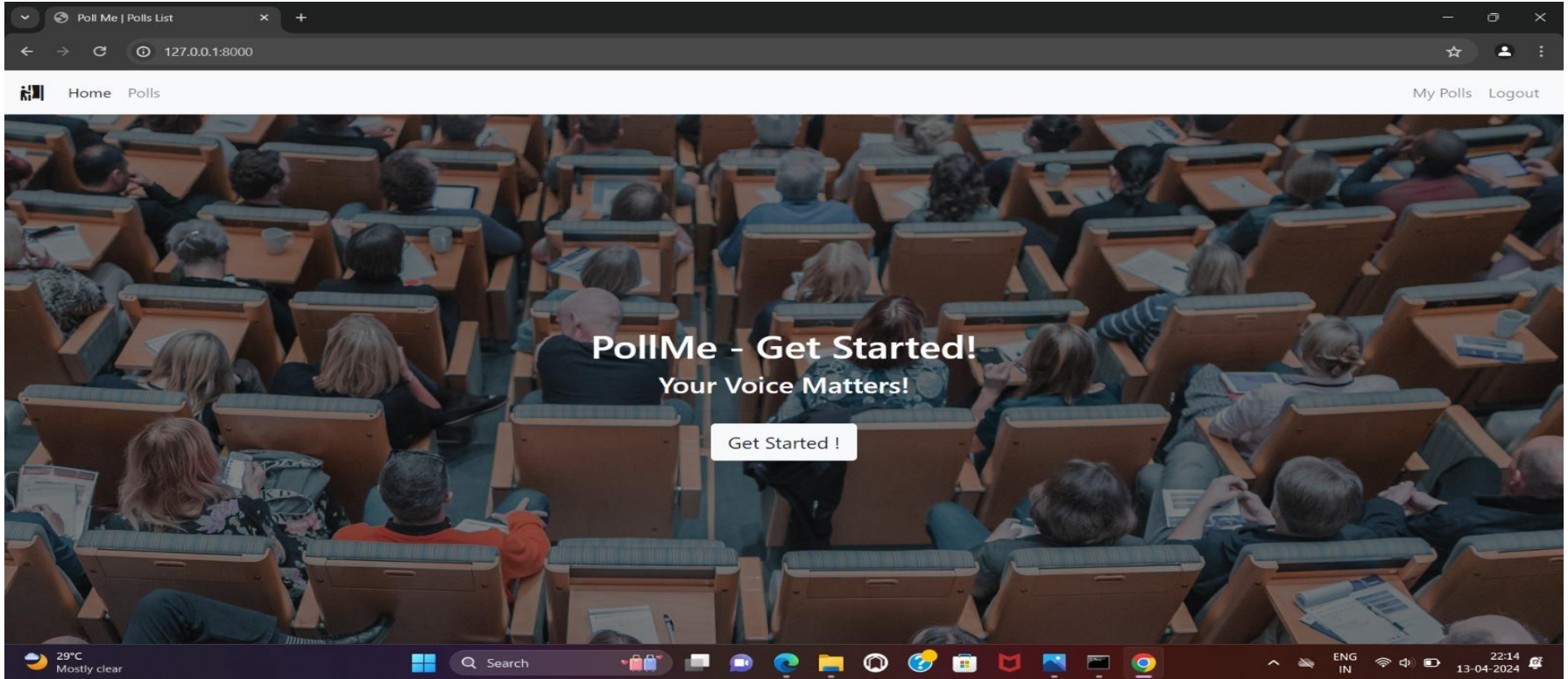
- 1.Setting up a Django Project:** Create a Django project to serve as the foundation for the voting application.
- 2.Designing the Database Schema:** Define the database structure to store user information, votes, and other relevant data.
- 3.Creating User Authentication:** Implement user authentication to allow users to register, log in, and participate in voting.
- 4.Building the Voting Interface:** Develop the interface where users can view options, select their choices, and submit votes.
- 5.Implementing Real-time Results:** Display the voting results dynamically to provide instant feedback to users.
- 6.Developing an Admin Panel:** Build an admin panel to manage the voting process, candidates, and user accounts effectively.

## Proposed Solution

The proposed solution for a voting application using the Django framework is to create a secure and user-friendly online voting platform. The application will allow users to register, vote, and view real-time results. To build the application, the Django framework will be used as the foundation due to its robustness and scalability. The application will have a user-friendly interface, a secure database, real-time results, and an admin panel for efficient management of elections, candidates, and user accounts.

In summary, the proposed solution for a voting application using the Django framework is a secure, user-friendly, and flexible platform for conducting online votes. Its use of the Django framework ensures a robust and scalable foundation, while its focus on security and user experience makes it an ideal choice for a wide range of voting scenarios.

## Home Page



The screenshot shows a web browser window displaying the PollMe website. The browser's address bar shows the URL "127.0.0.1:8000". The website has a navigation bar with "Home" and "Polls" links, and a "My Polls" link with a "Logout" button. The main content area features a large background image of an audience in a lecture hall. Overlaid on this image is the text "PollMe - Get Started!" and "Your Voice Matters!". Below this text is a white button with the text "Get Started !". The Windows taskbar is visible at the bottom of the screen, showing the date and time as 22:14 on 13-04-2024.

Poll Me | Polls List

127.0.0.1:8000

Home Polls

My Polls Logout

**PollMe - Get Started!**  
Your Voice Matters!

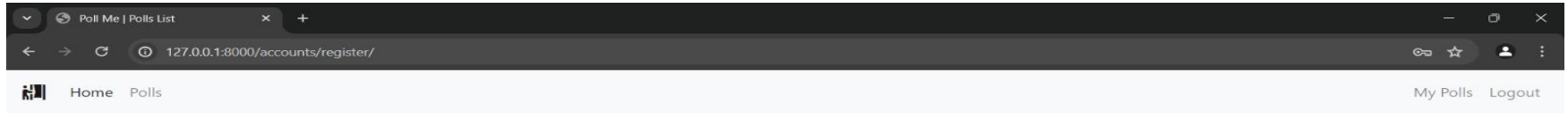
Get Started !

29°C Mostly clear

Search

22:14 13-04-2024

## home



Already have an account? [Login Here](#)

Username:

Email:

Password:

Confirm Password:

[Sign Up](#)



## Create new poll

Poll Me | Polls List

127.0.0.1:8000/polls/add/

Home Polls

My Polls Logout

### Create new poll

Text:

Choice 1:

Choice 2:

Add Poll

Back

## Voting Page



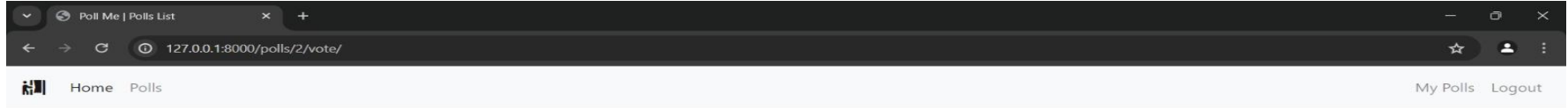
### Polls details page

Which of the following is the correct syntax to add the external stylesheet in CSS?

- ☐ `<style src = quiz.css>`
- ☐ `<link rel="stylesheet" type="text/css" href="quiz.css">`

[Vote](#) [Cancel](#)

## Voting Details Page



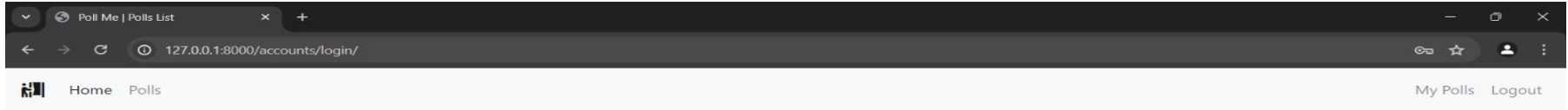
Result for: Which of the following is the correct syntax to add the external stylesheet in CSS?

Total: 1 votes

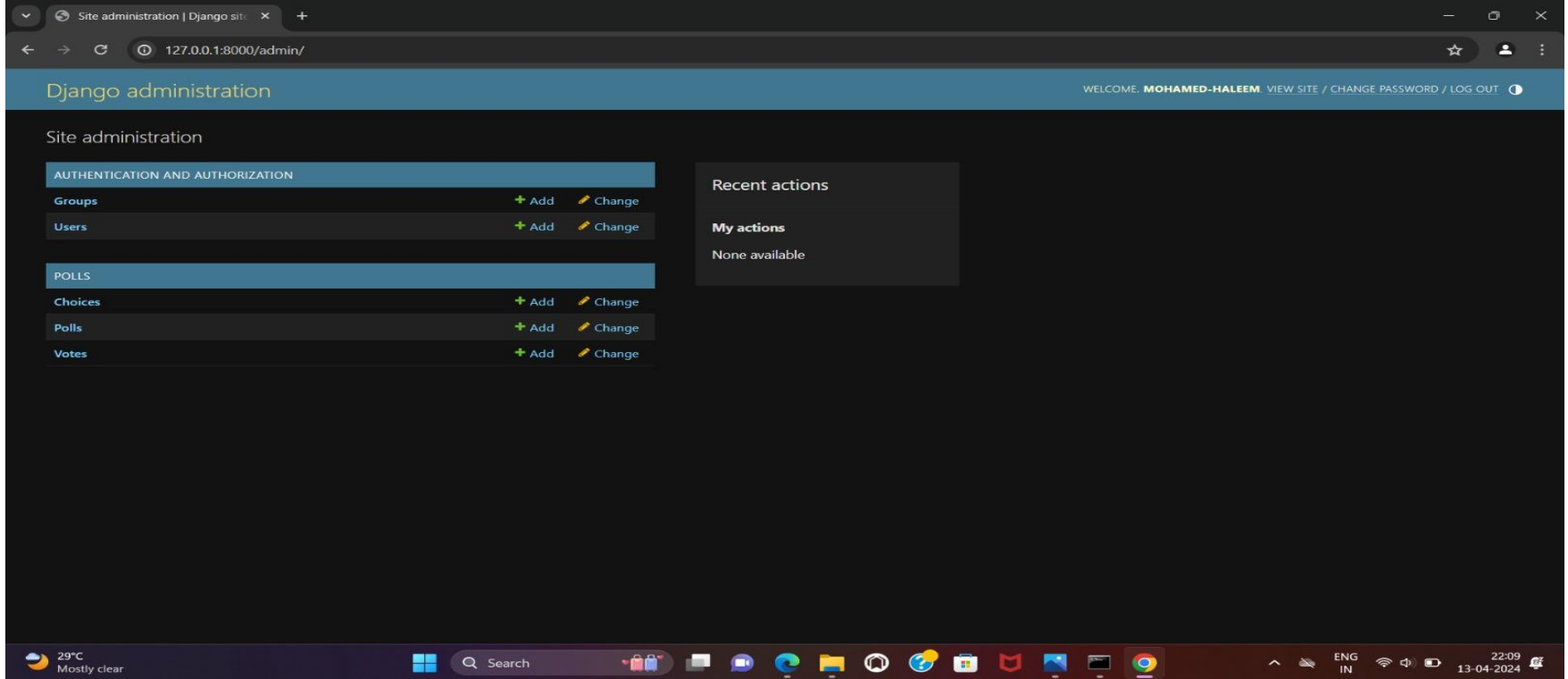
<style src ....>100%	
<style src = quiz.css>	1
<link rel="stylesheet" type="quiz/css" href="quiz.css">	0

[Back To Polls](#)

## Admin Login Page



## Admin Home Page



The screenshot displays the Django administration interface in a web browser. The browser's address bar shows the URL `127.0.0.1:8000/admin/`. The page header includes the text "Django administration" and a welcome message for "MOHAMED-HALEEM" with links for "VIEW SITE", "CHANGE PASSWORD", and "LOG OUT".

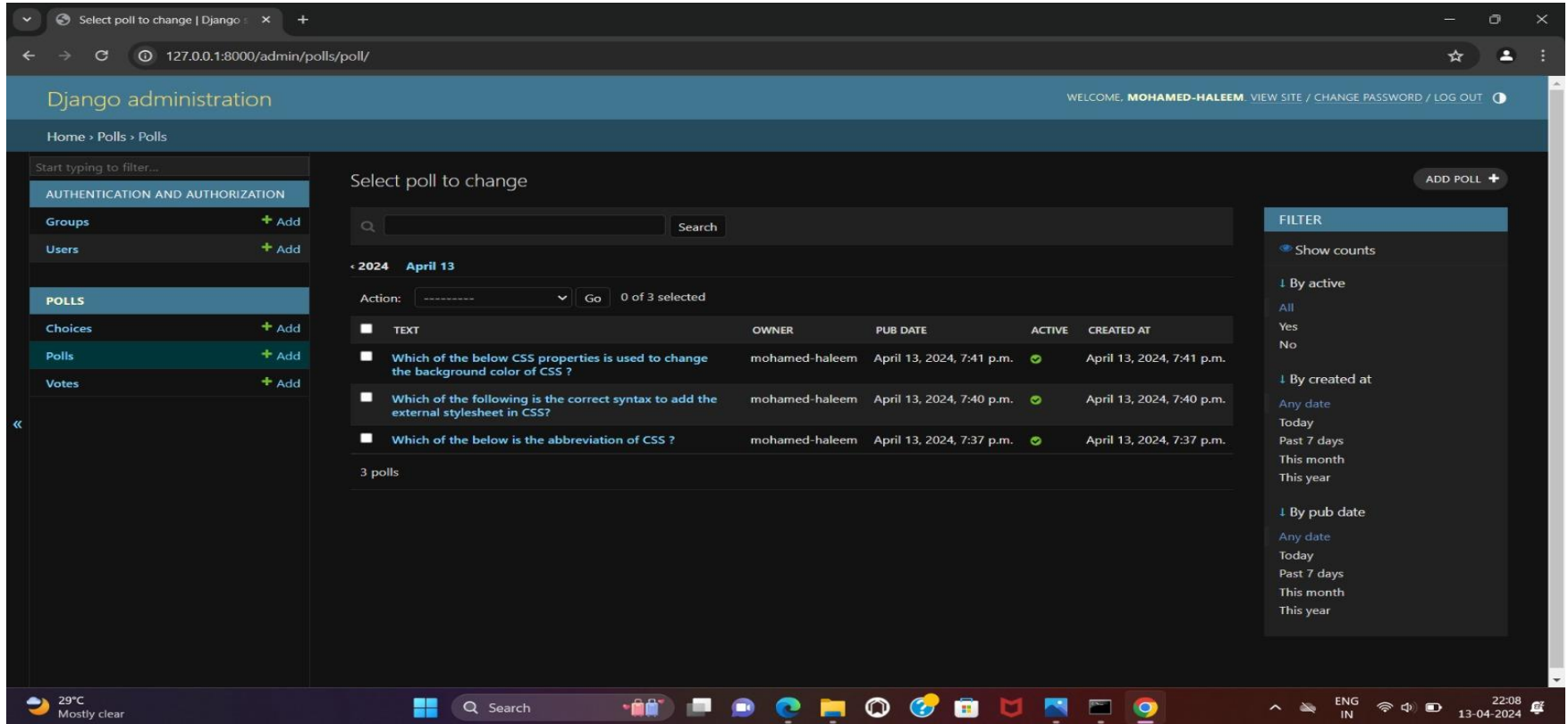
The main content area is titled "Site administration" and is divided into two columns. The left column contains two sections: "AUTHENTICATION AND AUTHORIZATION" and "POLLS".

- AUTHENTICATION AND AUTHORIZATION**
  - Groups**: Includes links for "+ Add" and "Change".
  - Users**: Includes links for "+ Add" and "Change".
- POLLS**
  - Choices**: Includes links for "+ Add" and "Change".
  - Polls**: Includes links for "+ Add" and "Change".
  - Votes**: Includes links for "+ Add" and "Change".

The right column contains a "Recent actions" section, which is currently empty, and a "My actions" section, which also shows "None available".

The Windows taskbar at the bottom indicates a temperature of 29°C, a "Mostly clear" weather forecast, and the date and time as 22:09 on 13-04-2024.

## Authentication and Authorization Page



The screenshot displays the Django administration interface for a poll management system. The browser address bar shows the URL `127.0.0.1:8000/admin/polls/poll/`. The page title is "Django administration". The user is logged in as "MOHAMED-HALEEM" and can view the site, change their password, or log out.

The left sidebar contains a navigation menu with the following items:

- Start typing to filter...
- AUTHENTICATION AND AUTHORIZATION
  - Groups + Add
  - Users + Add
- POLLS
  - Choices + Add
  - Polls + Add
  - Votes + Add

The main content area is titled "Select poll to change". It features a search bar and a table of polls. The table has columns for "TEXT", "OWNER", "PUB DATE", "ACTIVE", and "CREATED AT". There are 3 polls listed, all created on April 13, 2024.

TEXT	OWNER	PUB DATE	ACTIVE	CREATED AT
Which of the below CSS properties is used to change the background color of CSS ?	mohamed-haleem	April 13, 2024, 7:41 p.m.	✓	April 13, 2024, 7:41 p.m.
Which of the following is the correct syntax to add the external stylesheet in CSS?	mohamed-haleem	April 13, 2024, 7:40 p.m.	✓	April 13, 2024, 7:40 p.m.
Which of the below is the abbreviation of CSS ?	mohamed-haleem	April 13, 2024, 7:37 p.m.	✓	April 13, 2024, 7:37 p.m.

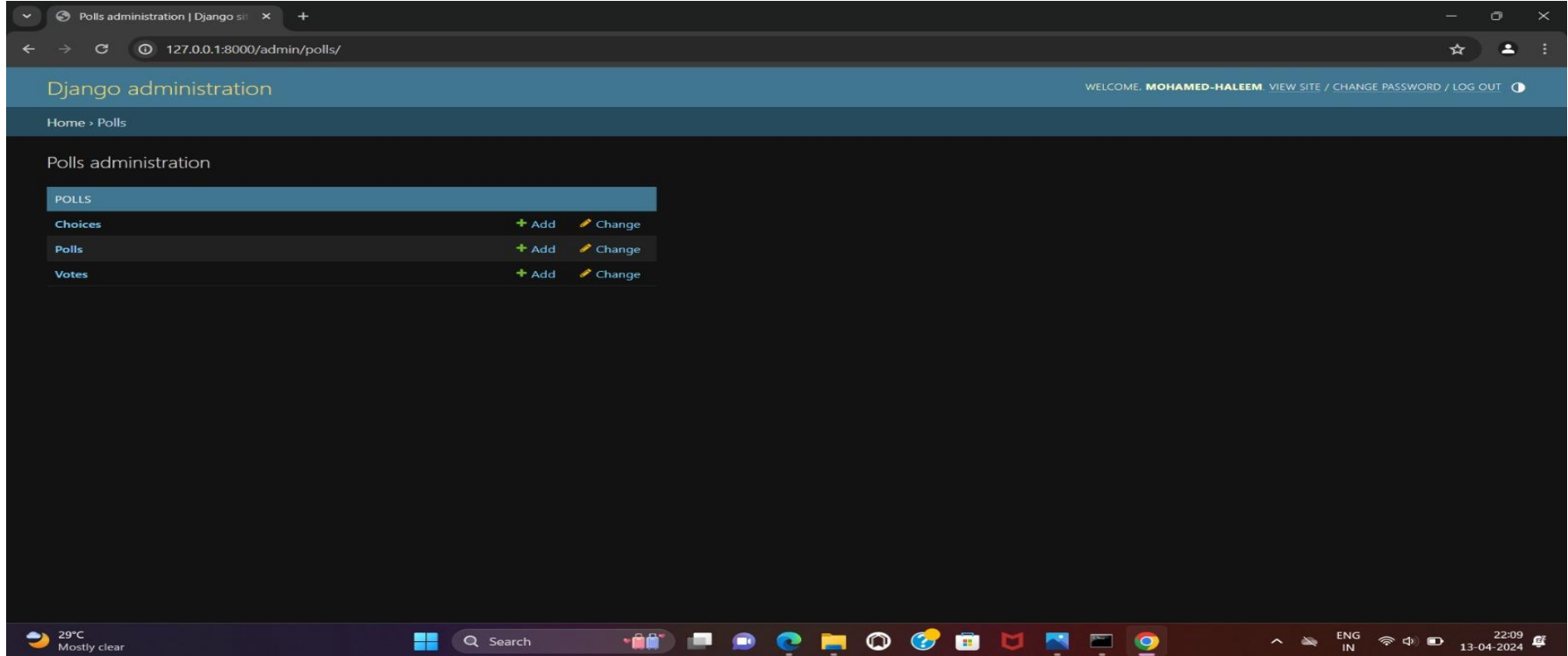
Below the table, it indicates "3 polls".

The right sidebar contains a "FILTER" section with the following options:

- Show counts
- By active
  - All
  - Yes
  - No
- By created at
  - Any date
  - Today
  - Past 7 days
  - This month
  - This year
- By pub date
  - Any date
  - Today
  - Past 7 days
  - This month
  - This year

The bottom of the screen shows a Windows taskbar with the date and time "22:08 13-04-2024".

## Voting Details Page



The screenshot displays the Django administration interface for a 'Polls' application. The browser window shows the URL '127.0.0.1:8000/admin/polls/'. The page header includes the Django logo and the text 'Django administration'. A welcome message for 'MOHAMED-HALEEM' is visible, along with links for 'VIEW SITE', 'CHANGE PASSWORD', and 'LOG OUT'. The breadcrumb trail shows 'Home > Polls'. The main content area is titled 'Polls administration' and features a table with three rows: 'POLLS', 'Choices', and 'Polls'. Each row has '+ Add' and 'Change' links. The Windows taskbar at the bottom shows the date as 13-04-2024 and the time as 22:09.

Polls administration | Django 5.1.1

127.0.0.1:8000/admin/polls/

Django administration

WELCOME, MOHAMED-HALEEM. [VIEW SITE](#) / [CHANGE PASSWORD](#) / [LOG OUT](#)

Home > Polls

Polls administration

POLLS	
Choices	<a href="#">+ Add</a> <a href="#">Change</a>
Polls	<a href="#">+ Add</a> <a href="#">Change</a>
Votes	<a href="#">+ Add</a> <a href="#">Change</a>

29°C Mostly clear

Search

ENG IN

22:09 13-04-2024

## Technology Used

Front-end



Back-end





## Future Enhancements:

Future enhancements in a voting application using the Django framework, several key features and improvements can be considered based on the information from the provided sources,

**1.Asynchronous Programming:** Implementing asynchronous programming can enhance the performance of the application by allowing tasks to run concurrently, improving responsiveness and scalability.

**2.Microservices Architecture:** Adopting a microservices architecture can make the application more modular, easier to maintain, and scalable by breaking it into smaller, independent services that communicate with each other

**3.Serverless Computing:** Utilizing serverless computing can optimize resource utilization and reduce costs by enabling automatic scaling and only paying for actual usage, enhancing the application's efficiency and cost-effectiveness.

**4.Client-Side Encryption:** Enhancing security by implementing client-side encryption can protect sensitive data and ensure the confidentiality of votes, contributing to a more secure e-voting platform.

**5.Blockchain Technology:** Integrating blockchain technology can provide transparent and verifiable voting processes, ensuring the integrity of elections and promoting trust in the system

## Conclusion

To create a voting application using Django, one should have a solid understanding of Python programming, Django framework, HTML, CSS, and Bootstrap. The development process involves creating a new Django project, creating a Django app, defining models, creating views, defining templates, and creating URLs. The application can be further enhanced with features such as real-time results, a user-friendly interface, and a secure database design. It can also include an admin panel for managing elections, candidates, and user accounts. Overall, a voting application using the Django framework is a powerful and flexible solution for creating online voting systems that can cater to various use cases and requirements.

**Thank You!**