Report
On

College Management System

Prepared By

Group No - 1

Aditya Khare (Roll no: 211000003)

Karan Agrawal (Roll no: 211000025)

Lakshya Garg (Roll no: 211000027)

Rishabh Bothraa (Roll no: 211000044)

Submitted To

Dr. Avantika Singh

Asst. Professor, DSAI

IIIT-NR

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Abstract:

College Management System (CMS) is an essential tool for educational institutions to manage their operations effectively. It helps in streamlining various academic and administrative tasks, reducing the workload of staff, and improving the overall functioning of the institution. Django is a high-level Python web framework that is well suited for developing web-based applications.

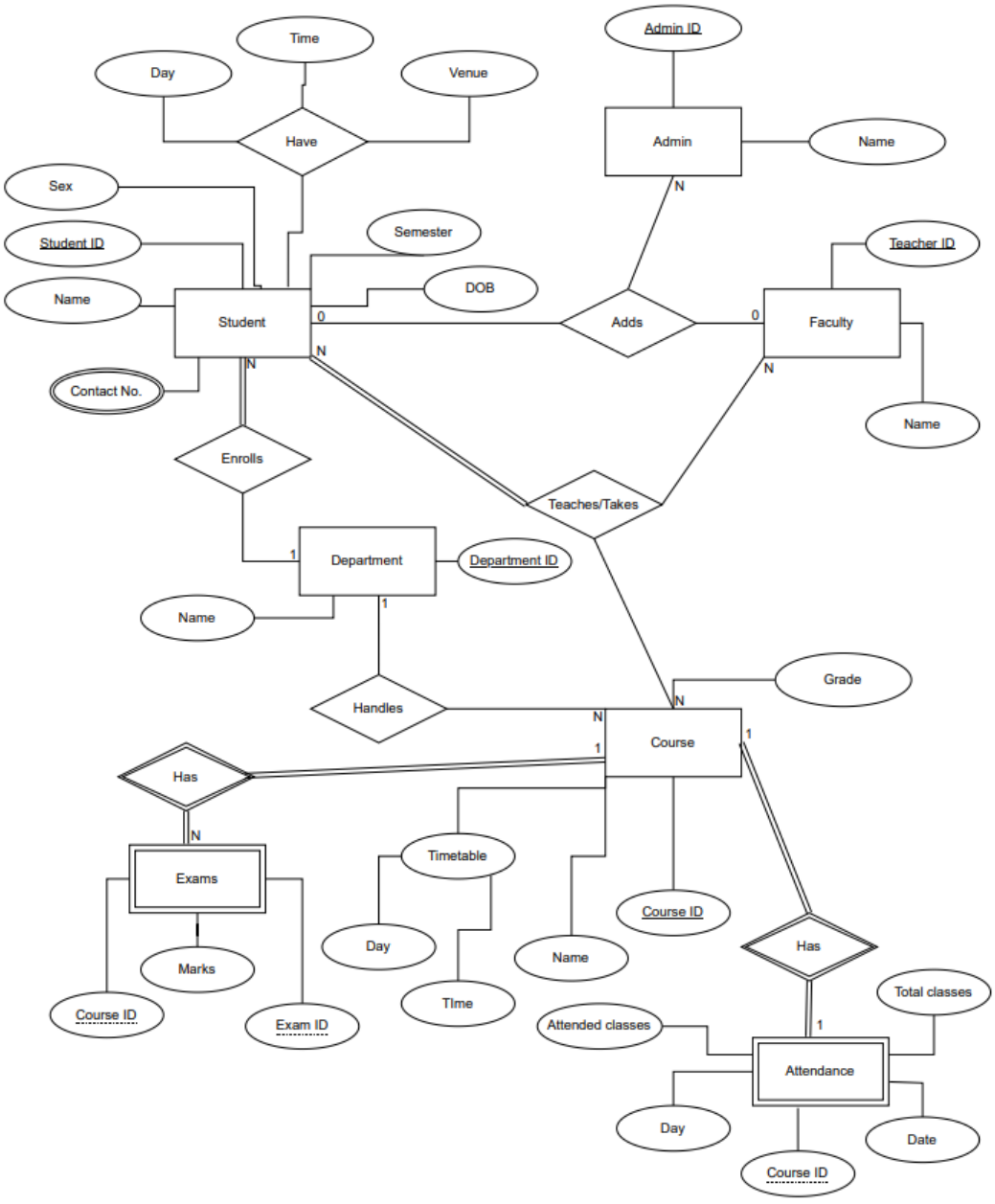
The system consists of different modules for different stakeholders such as students, teachers and administrators.

- Students can access their academic records, receive grades and weekly schedules.
- Teachers can manage academic records, grades, weekly schedules and generate reports.
- Administrators can manage new students, teachers and manage their personal and academic details, also maintaining their records. It also facilitates the creation of departments, courses, classes and assignment of teachers.

The system provides a user-friendly interface and is accessible to authorized users such as college administrators, teachers, and students. The Django framework provides robust security features such as authentication, authorization, and encryption to ensure the confidentiality and security of the data stored in the system.

The implementation of the College Management System can bring several benefits to educational institutions, including efficient and cost-effective solutions for colleges to manage their activities. The system helps to communicate and collaborate properly, and enhances transparency and accountability while providing a secure platform to manage college operations.

E-R Diagram: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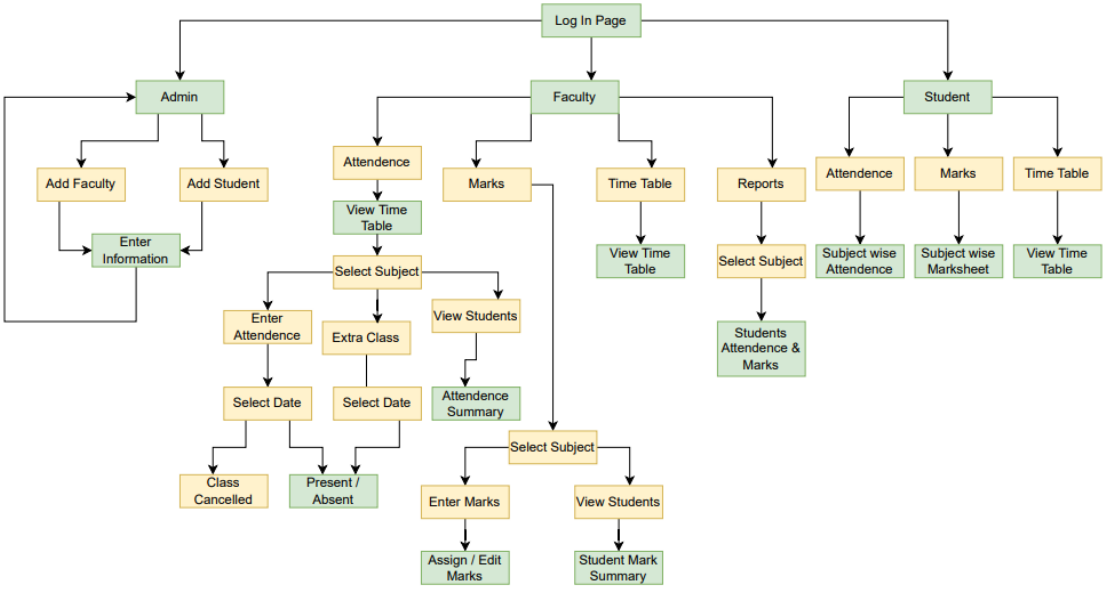
Sequence Diagram:



Software Used:

The Django framework was used to build the College Management System. Django is a high-level Python web framework that enables rapid development of secure and maintainable web applications. It follows the Model-Template-View (MTV) architectural pattern and provides an easy-to-use structure for creating web pages, handling user authentication, and interfacing with databases.

Django is known for its battery-included approach, which means that it provides a lot of built-in functionality, including an ORM (Object-Relational Mapping) for interacting with databases, template engine for rendering HTML pages, and a URL dispatcher for routing URLs to views. This makes it easy for developers to get started quickly and reduces the time needed to develop complex applications.

One of the key benefits of Django is its strong security features, which include protection against cross-site scripting (XSS) and cross-site request forgery (CSRF) attacks, password hashing, and protection against SQL injection. Additionally, Django's modular design makes it easy to extend and customize, allowing developers to build complex and feature-rich applications with ease.

Overall, Django is a powerful and versatile web framework that is well-suited for a wide range of web development projects, from simple blogs to complex e-commerce platforms. Its ease of use, security features, and extensive documentation make it an attractive choice for both experienced and beginner web developers.

Benefits:

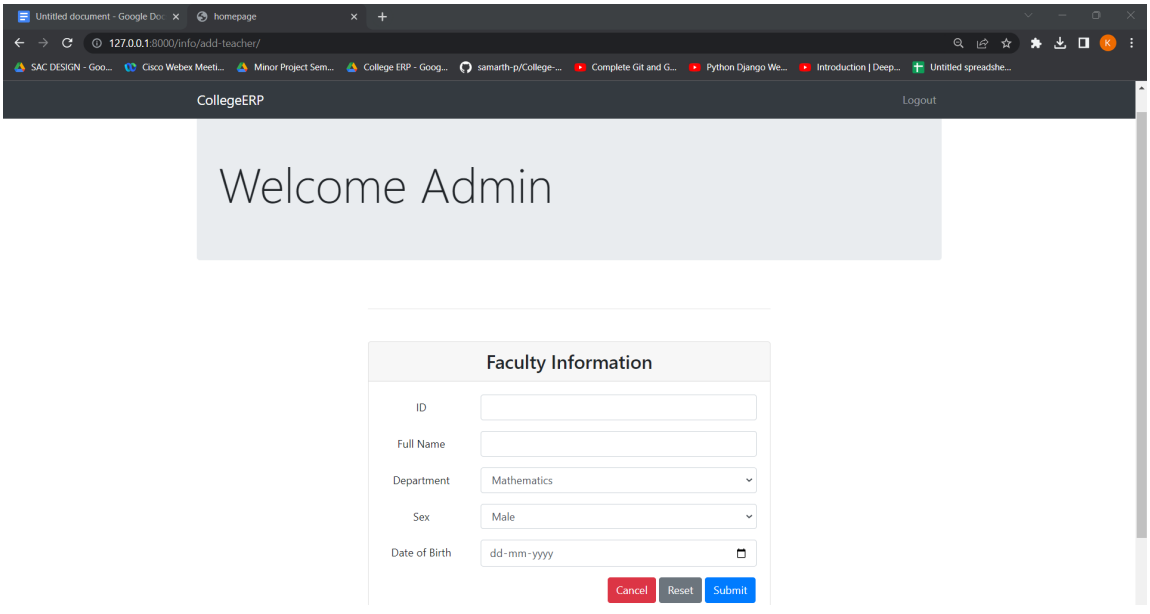
- **Ridiculously fast:** Django was designed to help developers take applications from concept to completion as quickly as possible.

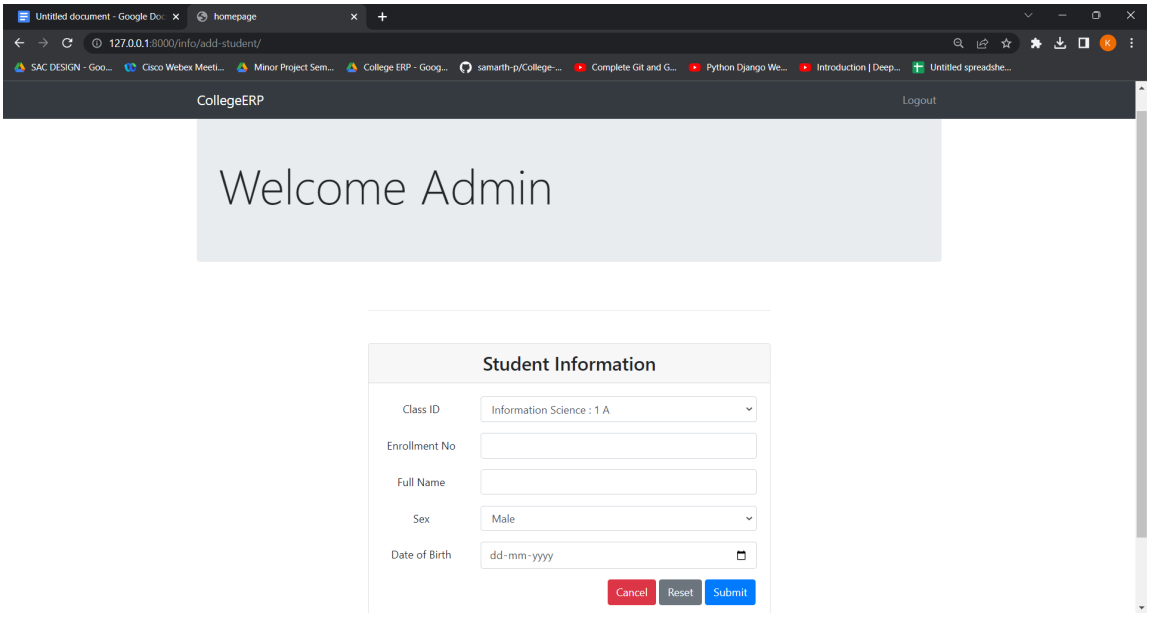
- **Reassuringly secure:** Django takes security seriously and helps developers avoid many common security mistakes.

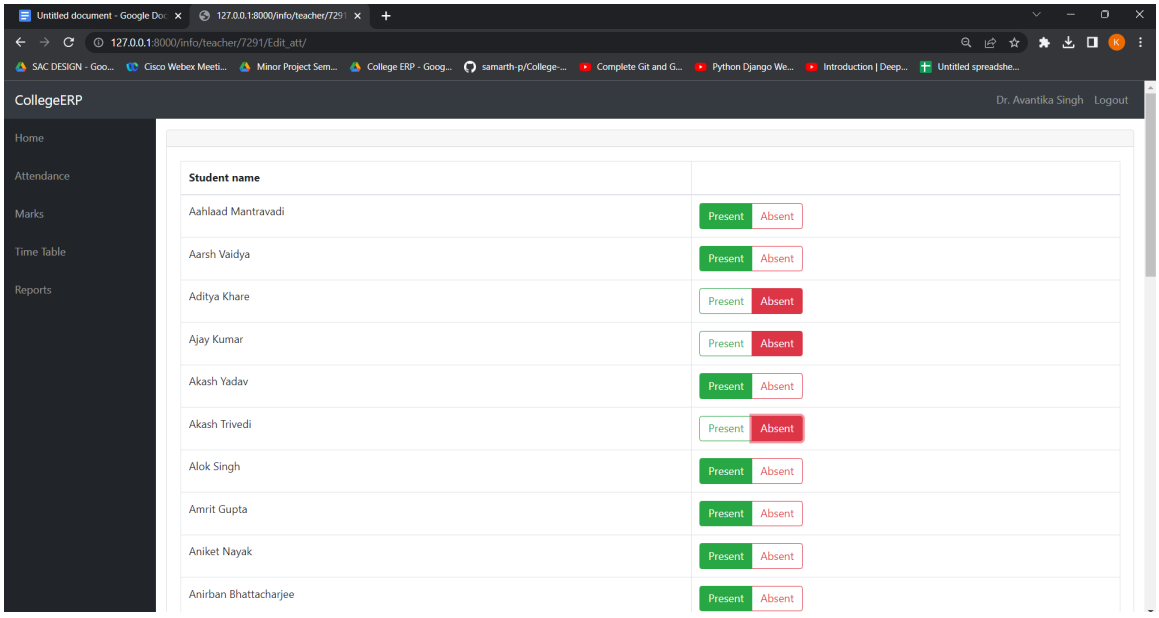
- **Exceedingly scalable:** Some of the busiest sites on the web leverage Django’s ability to quickly and flexibly scale.

- **User-Friendly:** The system has a user-friendly interface, which makes it accessible and easy to use. This reduces the learning curve and makes it easier for staff to adopt the system.

Screenshots:



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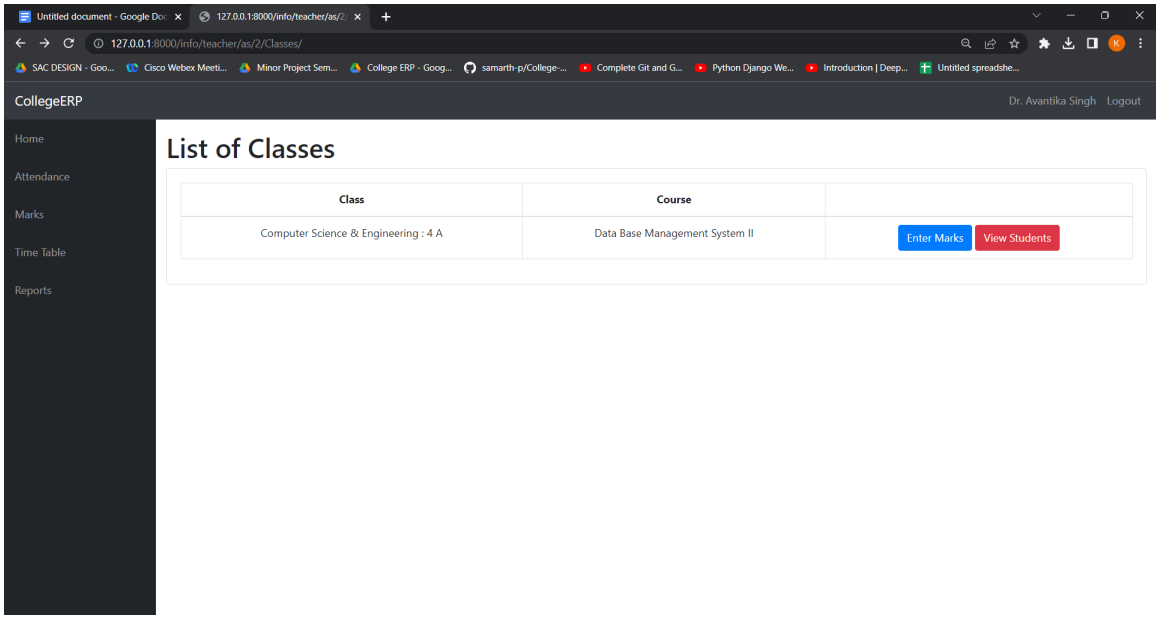
Aarsh Vaidya
Aditya Khare
Ajay Kumar
Akash Yadav
Akash Trivedi
Alok Singh
Amrit Gupta
Aniket Nayak
Anirban Bhattacharjee
Present
Absent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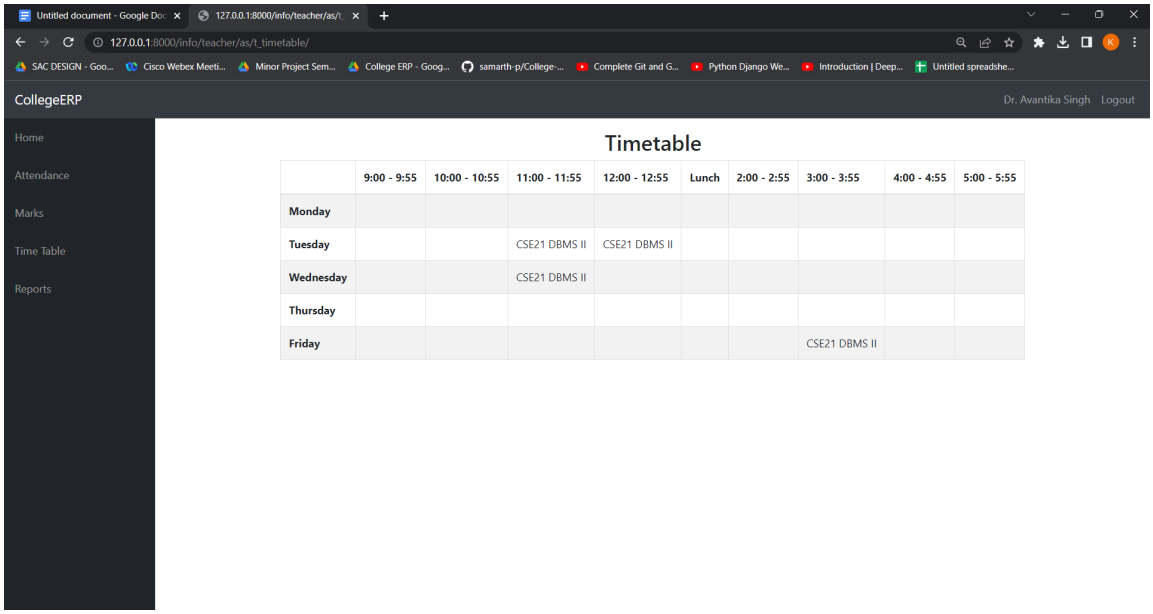
View Students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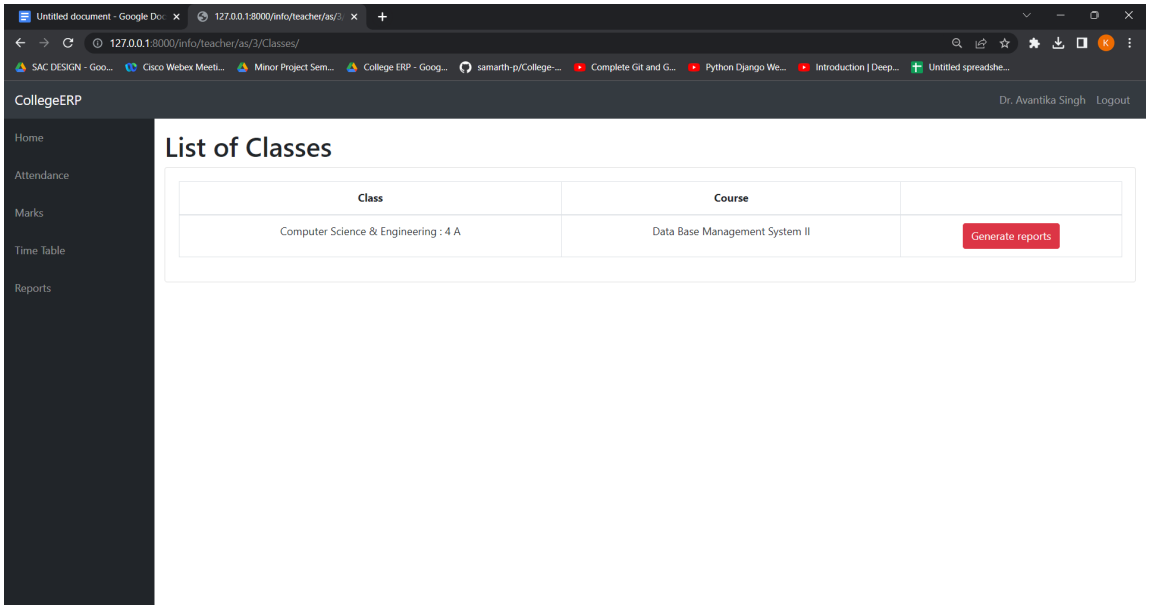
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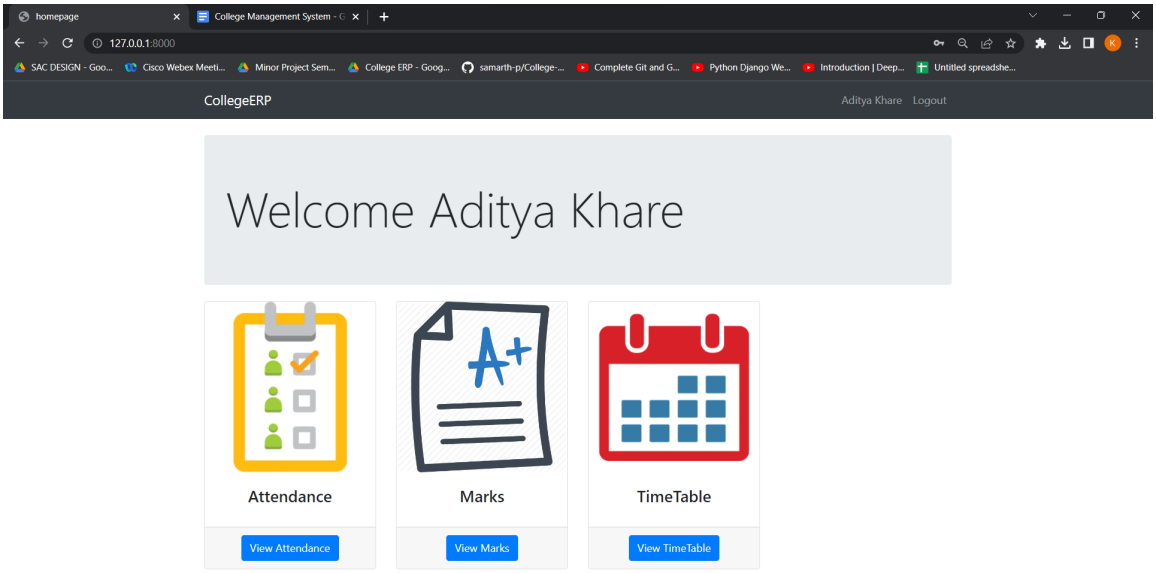
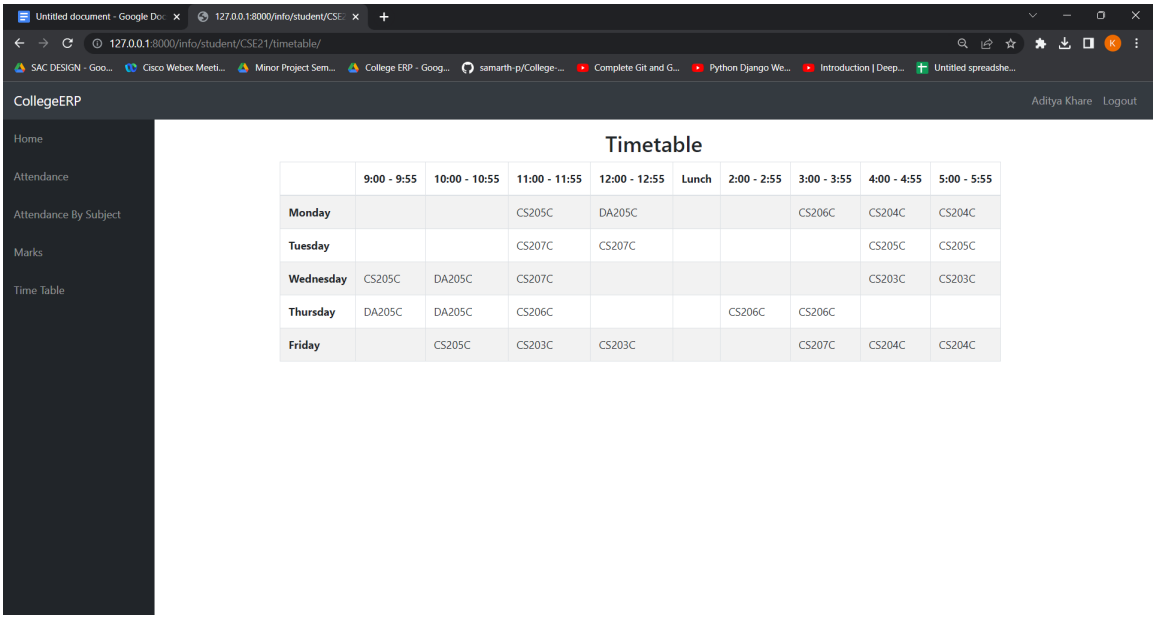
Data Base Management System II
Generate reports





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Thursday	DA205C	DA205C	CS206C			CS206C	CS206C		
Friday		CS205C	CS203C	CS203C			CS207C	CS204C	CS204C