

## **Hoos Study Website**

A Technical Report submitted to the Department of Computer Science

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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## **Introduction**

Hoos Study website is an online platform for UVA students to find and connect with other students for study-related purposes. Whether a student wants to find a study buddy to discuss course material or a study group to collaborate on projects, the website allows them to find like-minded students with similar academic interests. Hoos Study website offers a range of services to make the process of finding a study partner easier. The homepage allows students to search for posts by student study preferences or courses to study, and the profile page lets students edit their profile and manage their own study-related posts. The website also includes a messaging service so students can communicate with each other in real time.

## **Motives**

The main motive behind building the Hoos Study website is to create an online platform for students to find and connect with other students for study-related purposes. As a transfer student, I know how difficult it can be to make connections with people who share similar academic interests. I wanted to create a platform that would make it easier for students to find and connect with like-minded individuals.

## **Implementation**

The implementation of the Hoos Study website is done using the Django framework, a web development framework based on the Python language. The first step is to create the project and the application structure. It includes setting up the project directory and creating the base files such as settings.py, urls.py, and views.py. After this is done, the application files are created, including the requests from the web browser.

I started the website by implementing the login function using a Google API and worked on the HTML using some CSS and Bootstrap to make it look nicer. Then, I added a logout function that logs the user out of the application and performs a complete log out of their Google account. Then I started working on the templates for the home page, profile page, registration page, user post, and messaging. The templates are used to display the data in an attractive and organized manner. Bootstrap is used to make the website look nicer, and Django's template tags are used to display the data. Once I complete the templates, I started implementing the functions. The register function checks whether the user has a profile in the application. If the user has a profile, they are redirected to the home page. If not, the function redirects the user to the registration page, where they are prompted to complete their profile. The homepage function fetches all the departments, all posts, and applies any filters or search queries specified by the user then, it renders the homepage HTML template with the appropriate context. The user post function handles the creation of new posts by the user. The edit post function allows users to edit a post they created, and the edit profile lets them edit their profile information. The message function creates a message from the logged-in user to another user and views all the messages sent and received by the user. Finally, the contact function allows the user to contact the representative of the application.

## **Conclusion**

In conclusion, the Hoos Study website is an online platform for UVA students to find and connect with other students for study-related purposes. It offers a range of services to make the process of finding a study partner easier, including a search function, a messaging service, and user profiles. The website is implemented using the Django framework, a web development framework based on Python language. As a software engineer, working on a project like the

Hoos Study website has provided me with a valuable experience in web development using popular frameworks and technologies. Developing a website from scratch requires a deep understanding of web development concepts such as HTTP requests, server-side scripting, database design, and user authentication, and this has been a valuable experience for me as it prepares me for the real world.