

Study Buddy

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Abstract

The Study Buddy platform is an innovative educational tool designed to facilitate collaboration, resource sharing, and effective communication among students. It allows users to register, access study materials, create groups, find study partners, and exchange messages seamlessly. Admins can manage users, upload resources, and send notifications, ensuring the platform remains organized and efficient. By providing a user-friendly interface and essential features, Study Buddy bridges the gap between individual and group learning, promoting academic success. With its scalable architecture and scope for future enhancements, Study Buddy is set to transform traditional learning into an engaging and collaborative experience.

Introduction

Study Buddy is an innovative educational platform designed to bring students together, no matter where they are, for a seamless and interactive learning experience. The platform allows students to register, access, and save study materials from a centralized repository. A unique feature of Study Buddy is the ability for students to connect with peers of the same class or academic level by sending friend requests. Once approved by the admin, they can collaborate through group discussions, virtual study groups, and shared learning sessions, enhancing their knowledge in an interactive way. With its focus on simplicity, collaboration, and resource-sharing, Study Buddy offers a supportive environment for students to engage,

learn, and grow academically. This platform not only addresses the challenges of isolated learning but also provides tools to foster academic partnerships and effective teamwork.

Proposed System

The proposed Study Buddy system addresses these gaps by offering a unified platform where students can search for and download materials, form study groups, find partners based on common academic interests, and communicate seamlessly. Admins can efficiently manage users, materials, and notifications, ensuring a structured and organized environment. By integrating these features into one platform, Study Buddy enhances the learning experience, fosters collaboration, and promotes academic success.

Design

Architecture

Project architecture represents number of components we are using as a part of our project and the flow of request processing i.e. what components in processing the request and in which order. An architecture description is a formal description and representation of a system organized in a way that supports reasoning about the structure of the system. Architecture is of two types. They are:

1. Software Architecture
2. Technical Architecture

Software Architecture

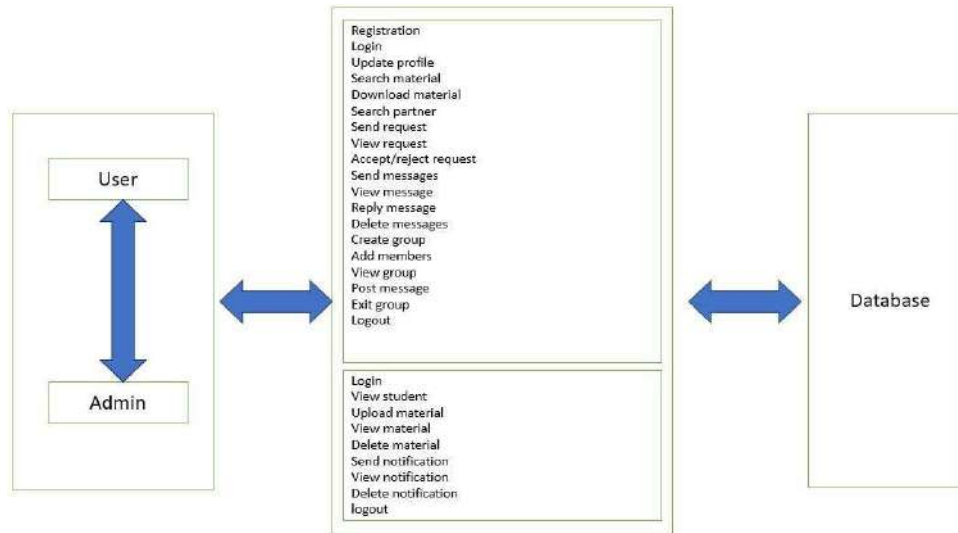


Fig 1 Software Architecture

Technical Architecture:

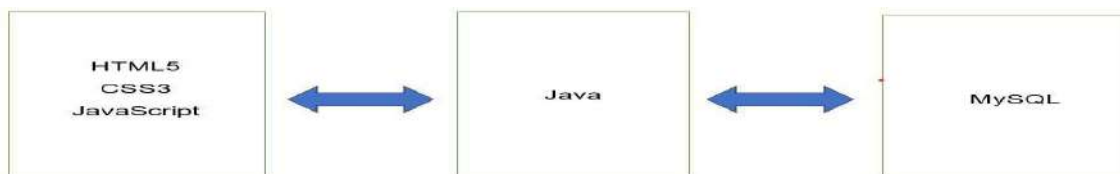


Fig 2 Technical Architecture

Implementation

Technologies

This project is developed using HTML, CSS, JAVASCRIPT as Client-side technologies and MYSQL as server-side technologies in Windows environment. This system provides optimized utilization of resources, improved productivity, and efficient management of resources as it is completely computerized and has centralized database maintenance.

Testing

Overview

Software testing is a process, to evaluate the functionality of a software application with an intent to find whether the developed software met the specified requirements or not and to identify the defects to ensure that the product is defect free in order to produce the quality product.

As per the current trend, due to constant change and development in digitization, our lives are improving in all areas. The way we work is also changed. We access our bank online; we do shop online; we order food

online and many more. We rely on software's and systems. What if these systems turnout to be defective? We all know that one small bug shows huge impact on

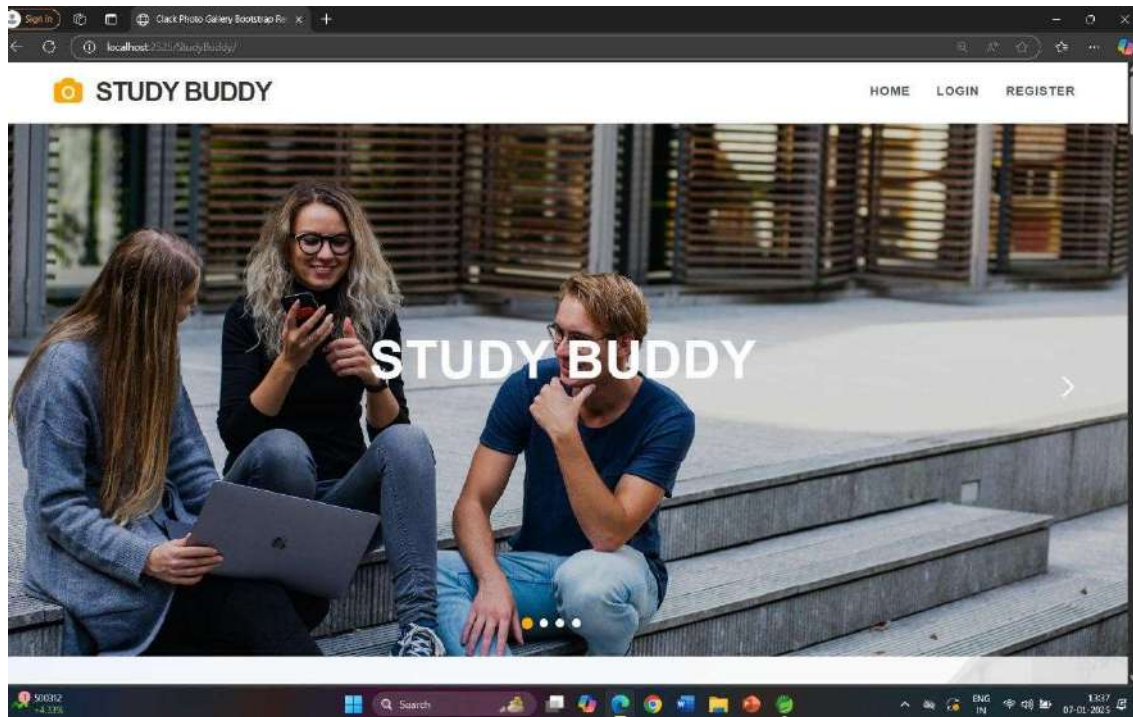
business in terms of financial loss and goodwill. To deliver a quality product, we need to have Software Testing in the Software Development Process.

Test Cases

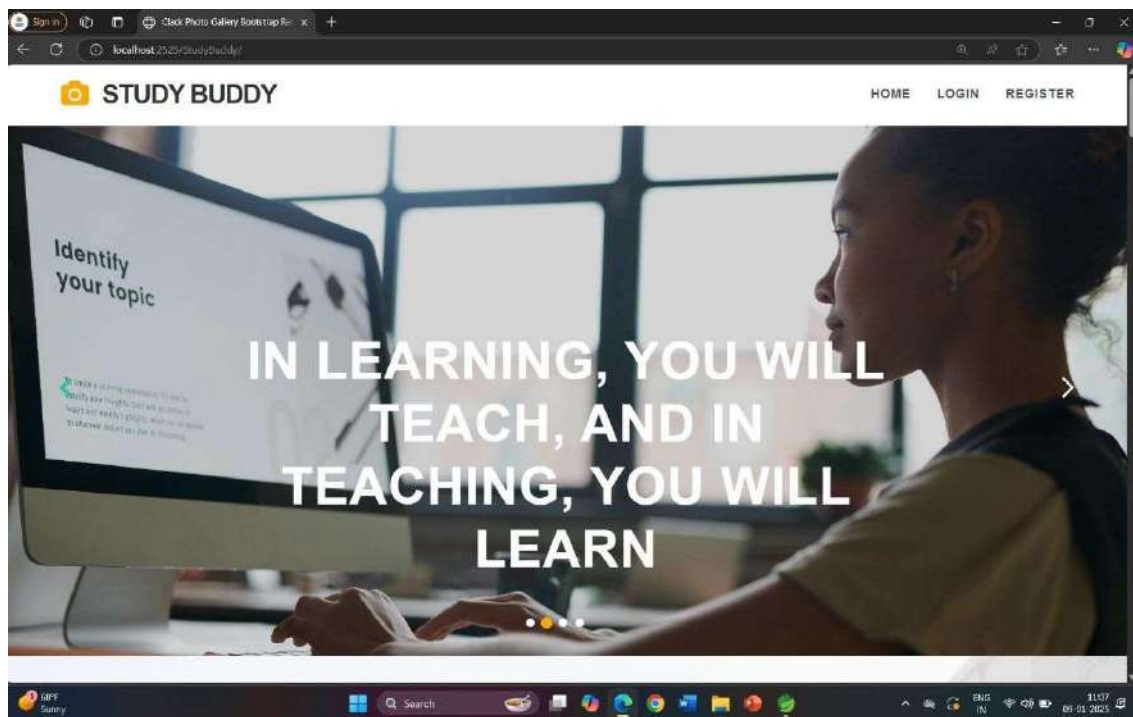
Sl.no	Test Id	Test Name	Expected output	Actual Output	Status
1.	User Registration	Enter valid Password, Username	Registration Successfully	Registration Successfully	Successful
2.	User Registration	Entered with same user name	Already Existed	Already Existed	Successful
3.	User Login	Enter valid Credentials Username, Password	Redirected to dashboard	Redirected to Dashboard	Successful
4.	User Login	Enter invalid Credentials	Login Unsuccessful	Login Unsuccessful	Successful
5.	Search Material	Enter valid Subject course or semester	Relevant Materials are Display	Material Displayed	Successful
6.	Search Material	Enter invalid Credentials	Material are not Displayed	Materials are not Displayed	Successful
7.	Send Study Mate Request	Send request to a valid partner	Valid Partner Displayed	Partner Displayed	Successful
8.	Send Study Mate Request	Send request to the same partner	Request Already Exists	Request Already Exists	Successful
9.	Group Management	Create a new a Group	Group Created	Group Created Successfully	Successful
10.	Add member to Group	Valid user	Member Added	Members Added	Successful
11.	Add Notification	User Id	Notification Added	Notification Added	Successful
12.	Delete Notification	User id	Notification Deleted	Notification Deleted	Successful

Table no 1 Test Cases

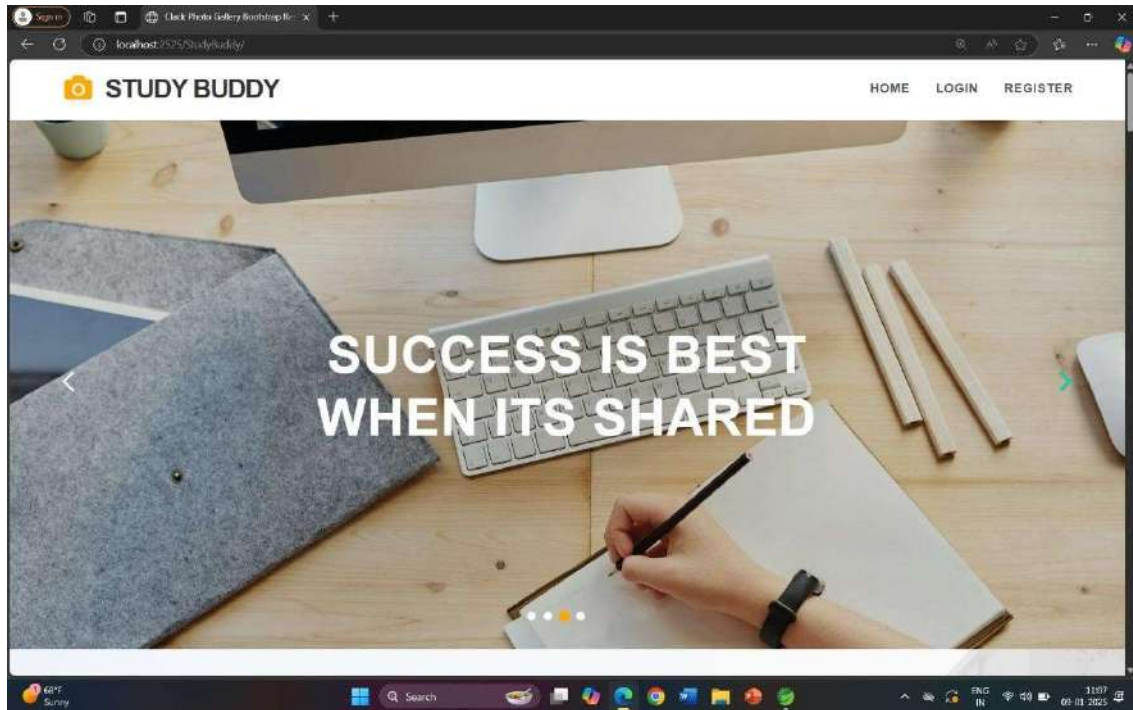
Result



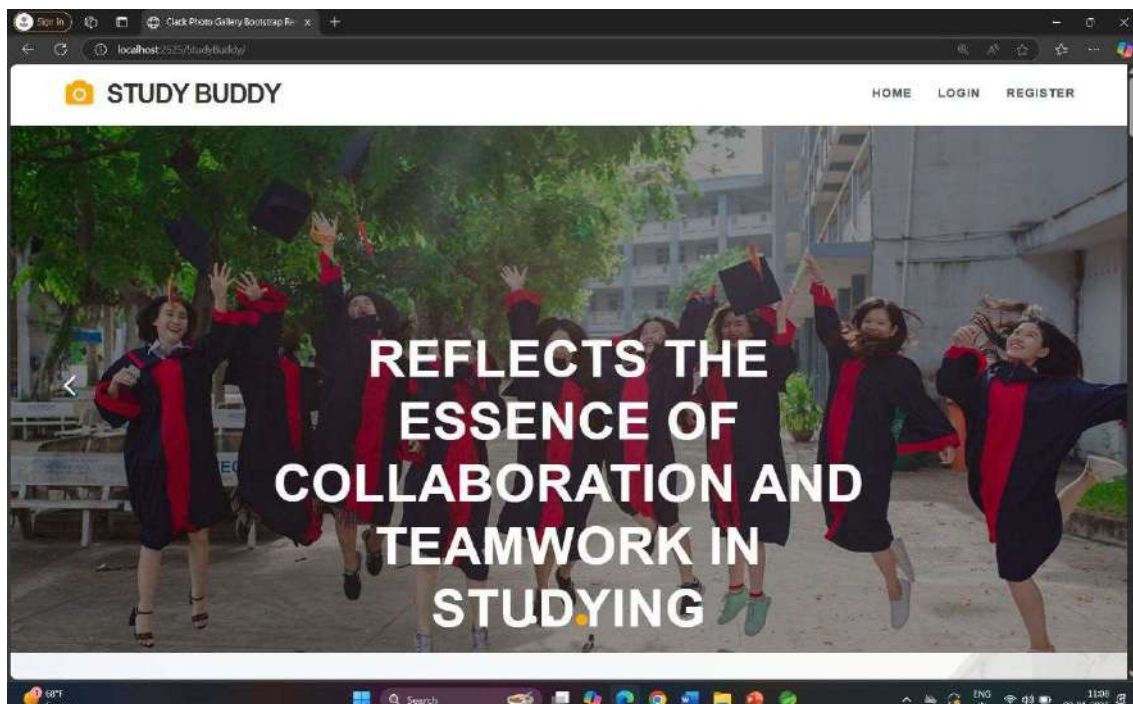
Screenshot 6.1 Home page



Screenshot 6.2 Home Page

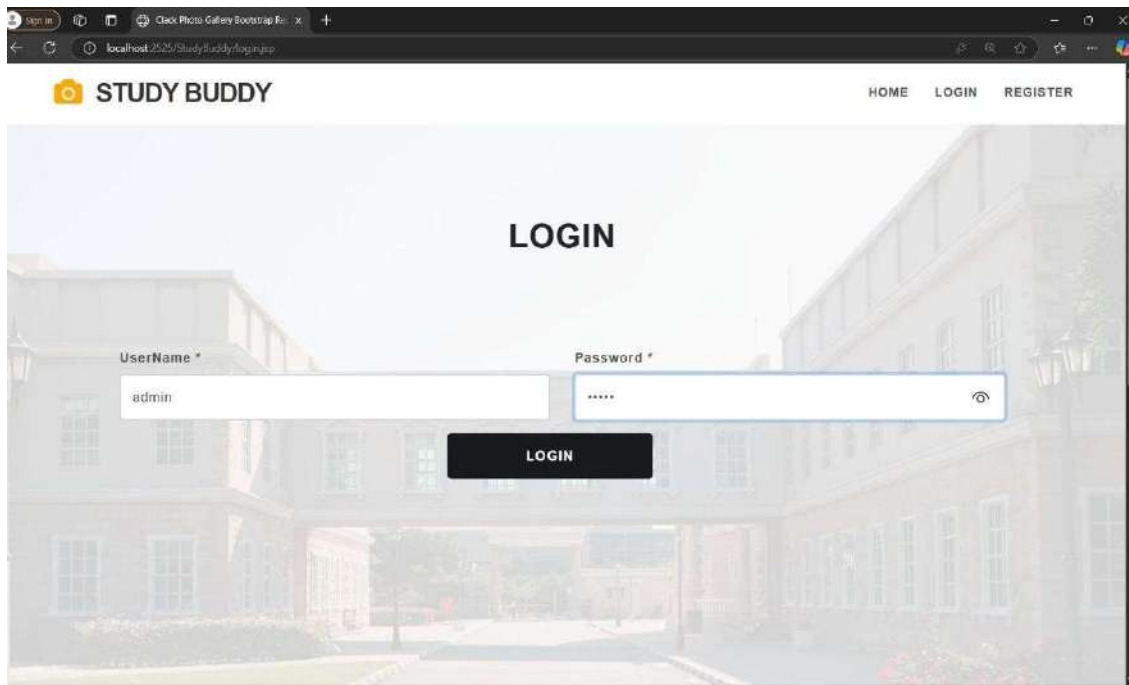


Screenshot 6.3 Home Page

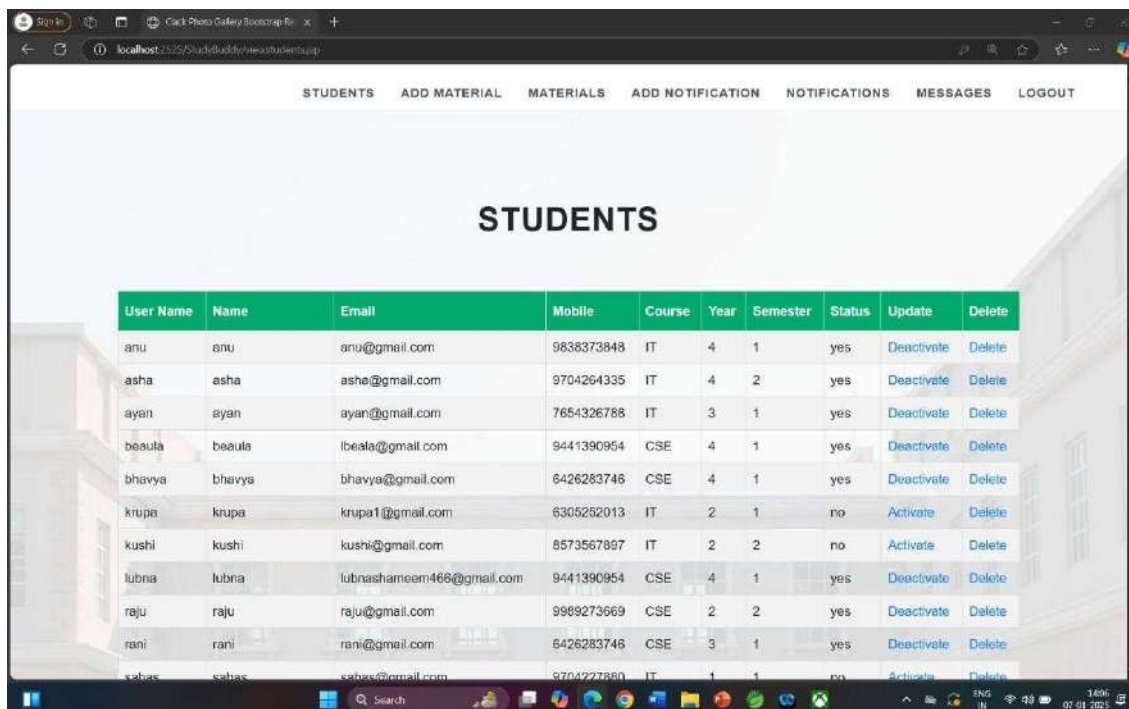


Screenshot 6.4 Home Page

1.1 Admin screenshots

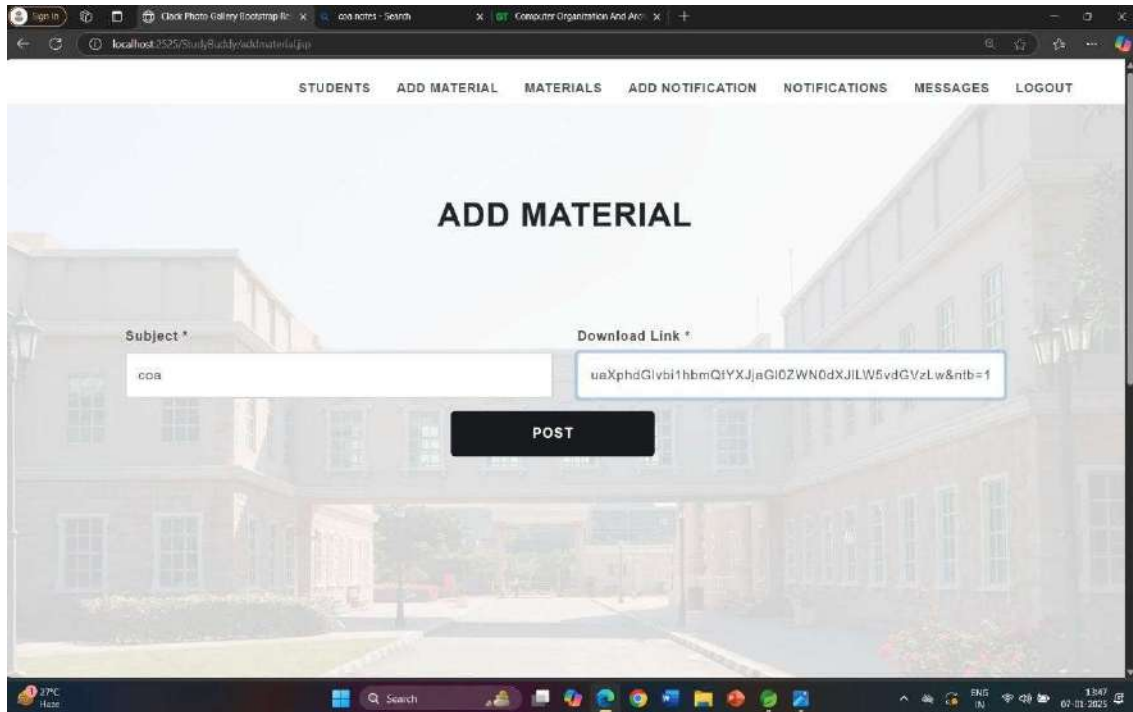


Screenshot 6.5 Admin Login



User Name	Name	Email	Mobile	Course	Year	Semester	Status	Update	Delete
anu	anu	anu@gmail.com	9838373848	IT	4	1	yes	Deactivate	Delete
asha	asha	asha@gmail.com	9704264335	IT	4	2	yes	Deactivate	Delete
ayan	ayan	ayan@gmail.com	7654326788	IT	3	1	yes	Deactivate	Delete
beaula	beaula	lbeaula@gmail.com	9441390954	CSE	4	1	yes	Deactivate	Delete
bhavya	bhavya	bhavya@gmail.com	6426283746	CSE	4	1	yes	Deactivate	Delete
krupa	krupa	krupa1@gmail.com	6305252013	IT	2	1	no	Activate	Delete
kushi	kushi	kushi@gmail.com	8573567897	IT	2	2	no	Activate	Delete
lubna	lubna	lubnashameem466@gmail.com	9441390954	CSE	4	1	yes	Deactivate	Delete
raju	raju	raju@gmail.com	9989273669	CSE	2	2	yes	Deactivate	Delete
rani	rani	rani@gmail.com	6426283746	CSE	3	1	yes	Deactivate	Delete
sahas	sahas	sahas@gmail.com	9704272780	IT	1	1	no	Activate	Delete

Screenshot 6.6 Students Page



STUDENTS ADD MATERIAL MATERIALS ADD NOTIFICATION NOTIFICATIONS MESSAGES LOGOUT

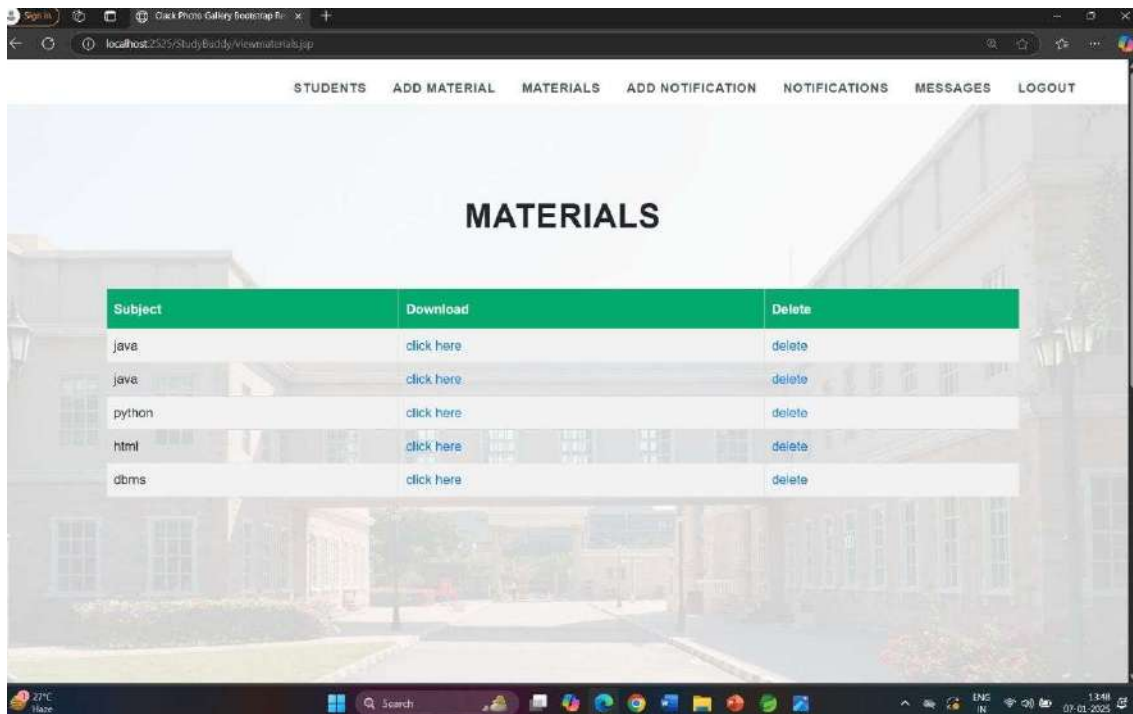
ADD MATERIAL

Subject *
coa

Download Link *
uaXphdGlvbi1hbmQlYXJjaGI0ZWNoZDdXJILW5vdGVzLw&ntb=1

POST

Screenshot 6.7 Adding Material

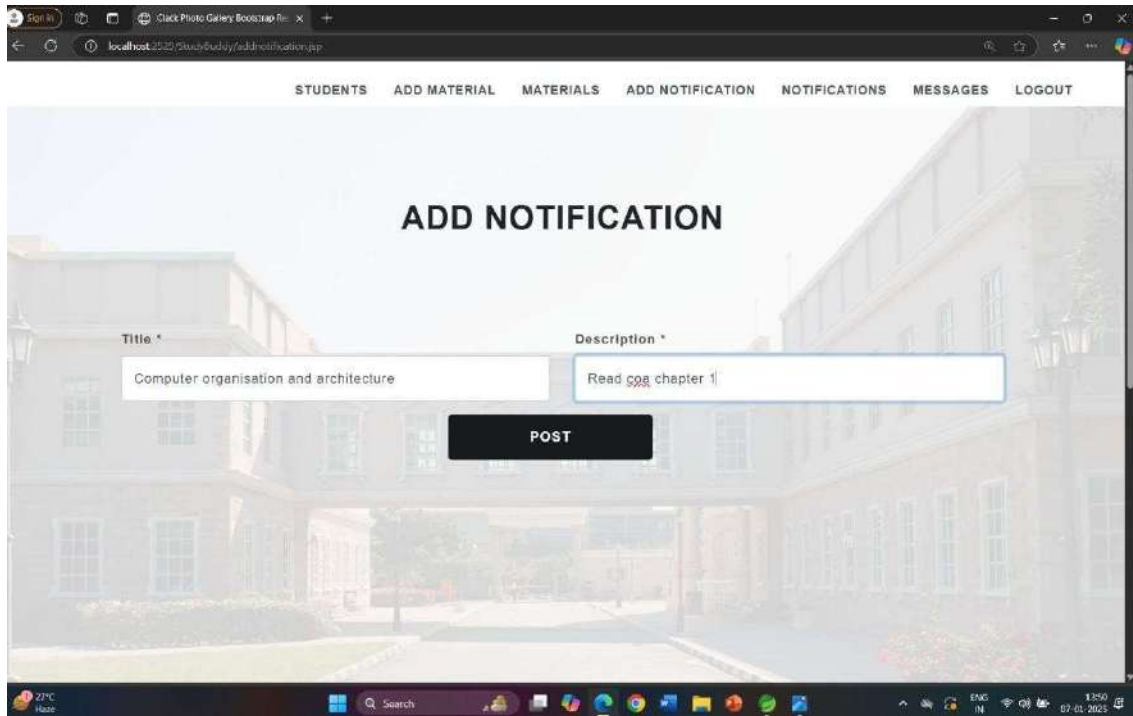


STUDENTS ADD MATERIAL MATERIALS ADD NOTIFICATION NOTIFICATIONS MESSAGES LOGOUT

MATERIALS

Subject	Download	Delete
java	click here	delete
java	click here	delete
python	click here	delete
html	click here	delete
dbms	click here	delete

Screenshot 6.8 Materials



STUDENTS ADD MATERIAL MATERIALS ADD NOTIFICATION NOTIFICATIONS MESSAGES LOGOUT

ADD NOTIFICATION

Title *

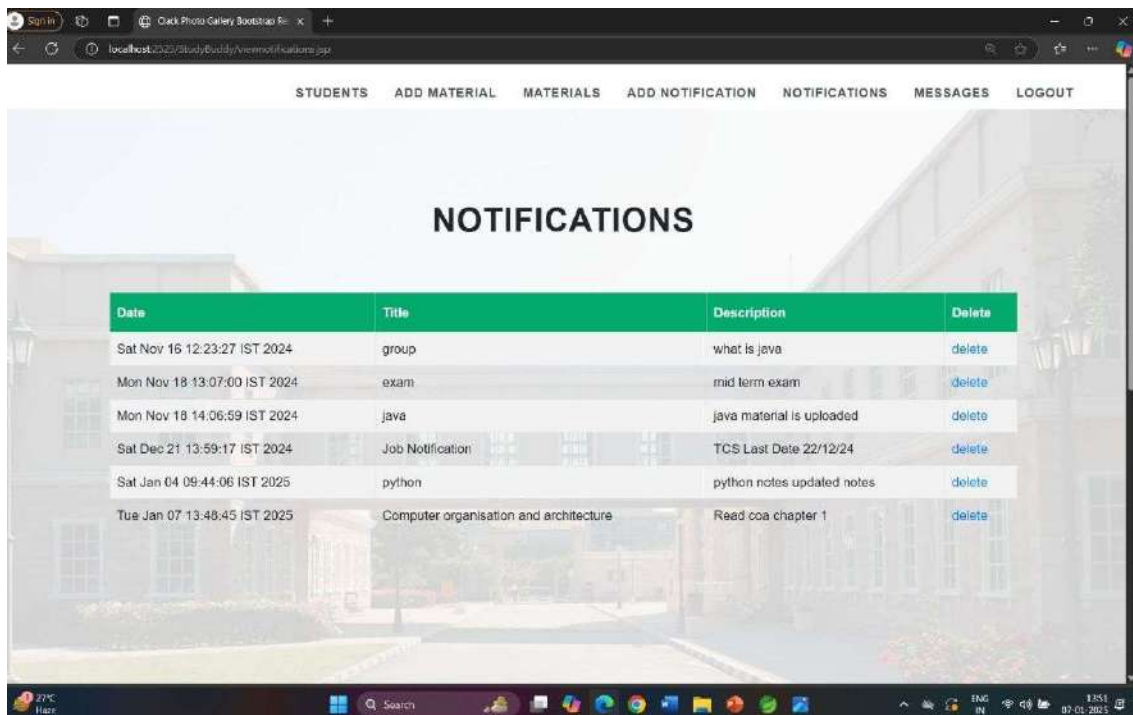
Computer organisation and architecture

Description *

Read coa chapter 1

POST

Screenshot 6.9 Adding Notification

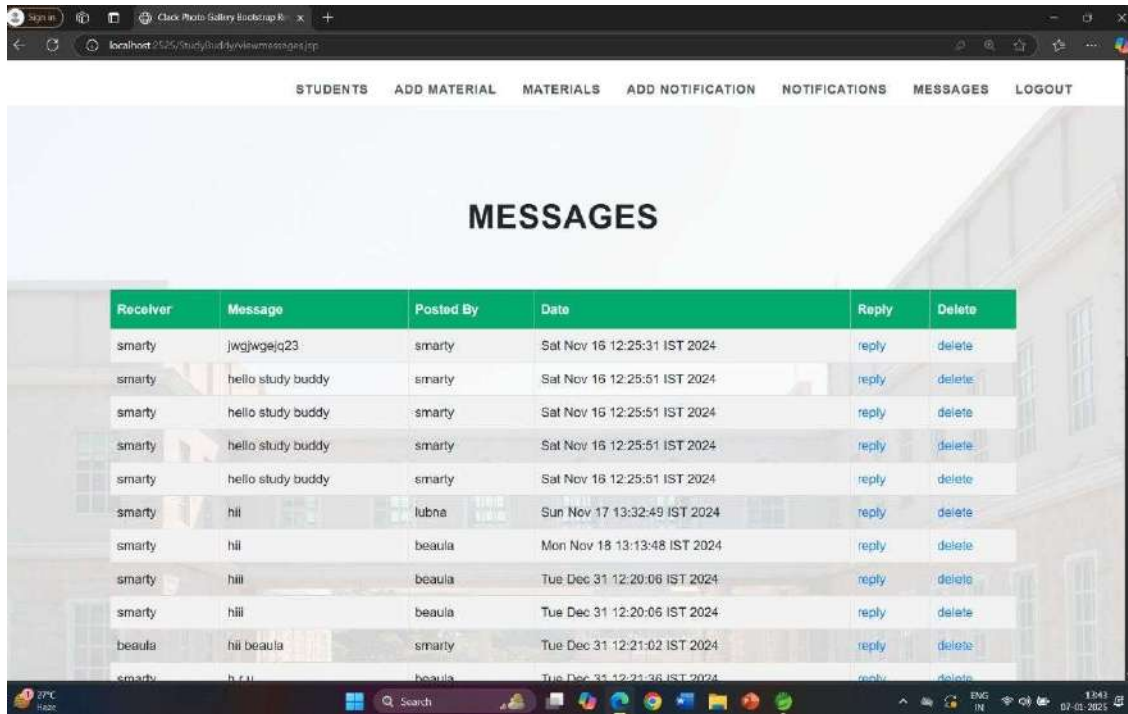


STUDENTS ADD MATERIAL MATERIALS ADD NOTIFICATION NOTIFICATIONS MESSAGES LOGOUT

NOTIFICATIONS

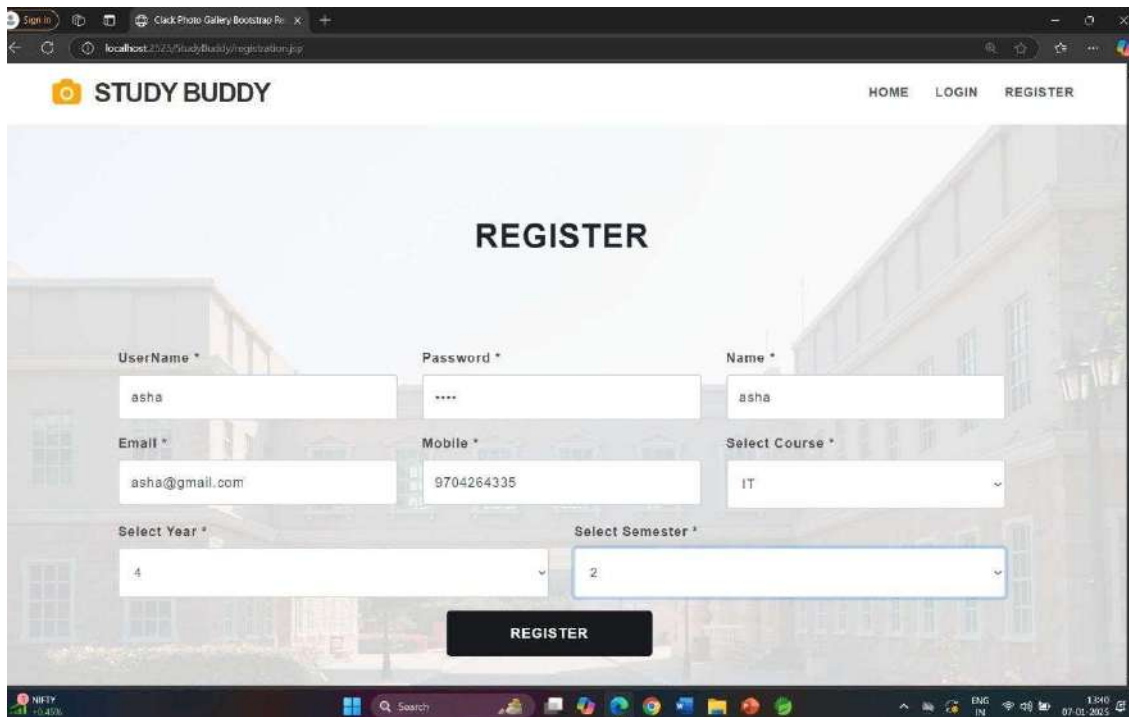
Date	Title	Description	Delete
Sat Nov 16 12:23:27 IST 2024	group	what is java	delete
Mon Nov 18 13:07:00 IST 2024	exam	mid term exam	delete
Mon Nov 18 14:06:59 IST 2024	java	java material is uploaded	delete
Sat Dec 21 13:59:17 IST 2024	Job Notification	TCS Last Date 22/12/24	delete
Sat Jan 04 09:44:06 IST 2025	python	python notes updated notes	delete
Tue Jan 07 13:48:45 IST 2025	Computer organisation and architecture	Read coa chapter 1	delete

Screenshot 6.10 Notifications



Receiver	Message	Posted By	Date	Reply	Delete
smarty	jwgjwgejq23	smarty	Sat Nov 16 12:25:31 IST 2024	reply	delete
smarty	hello study buddy	smarty	Sat Nov 16 12:25:51 IST 2024	reply	delete
smarty	hello study buddy	smarty	Sat Nov 16 12:25:51 IST 2024	reply	delete
smarty	hello study buddy	smarty	Sat Nov 16 12:25:51 IST 2024	reply	delete
smarty	hello study buddy	smarty	Sat Nov 16 12:25:51 IST 2024	reply	delete
smarty	hi!	lubna	Sun Nov 17 13:32:49 IST 2024	reply	delete
smarty	hi!	beaula	Mon Nov 18 13:13:48 IST 2024	reply	delete
smarty	hi!!	beaula	Tue Dec 31 12:20:06 IST 2024	reply	delete
smarty	hi!!!	beaula	Tue Dec 31 12:20:06 IST 2024	reply	delete
beaula	hi! beaula	smarty	Tue Dec 31 12:21:02 IST 2024	reply	delete

Screenshot 6.11 Messages



STUDY BUDDY HOME LOGIN REGISTER

REGISTER

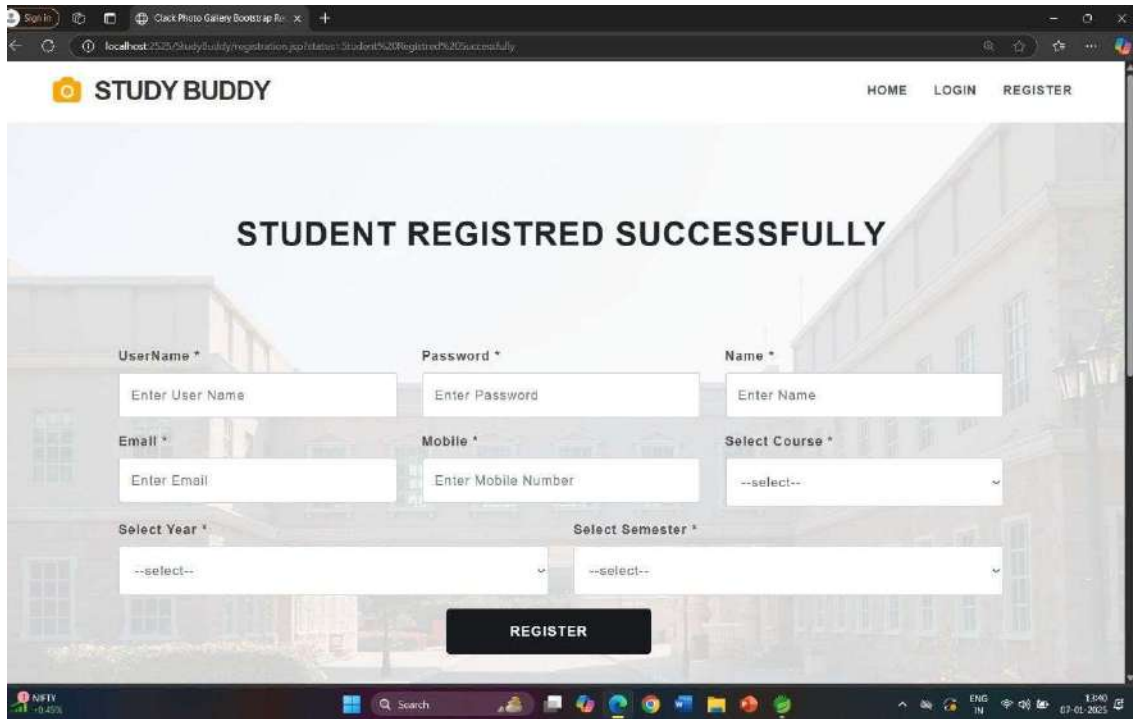
UserName *
 Password *
 Name *

Email *
 Mobile *
 Select Course *

Select Year *
 Select Semester *

REGISTER

Screenshot 6.12 Registration

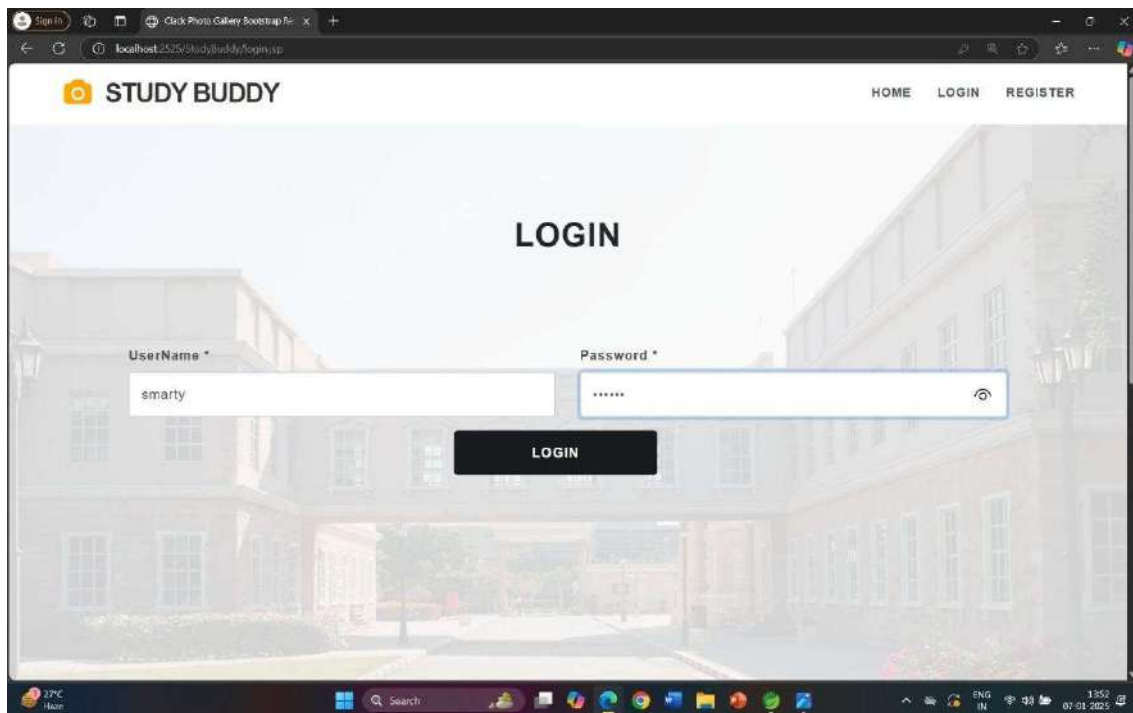


The screenshot shows a web browser window with the URL `localhost:2525/StudyBuddy/registration.php?status=Student%20Registered%20Successfully`. The page header includes the "STUDY BUDDY" logo and navigation links for "HOME", "LOGIN", and "REGISTER". The main content area displays the message "STUDENT REGISTERED SUCCESSFULLY" in large, bold, black text. Below this message is a registration form with the following fields:

- UserName ***: Input field with placeholder text "Enter User Name".
- Password ***: Input field with placeholder text "Enter Password".
- Name ***: Input field with placeholder text "Enter Name".
- Email ***: Input field with placeholder text "Enter Email".
- Mobile ***: Input field with placeholder text "Enter Mobile Number".
- Select Course ***: Dropdown menu with "--select--" as the selected option.
- Select Year ***: Dropdown menu with "--select--" as the selected option.
- Select Semester ***: Dropdown menu with "--select--" as the selected option.

A black "REGISTER" button is positioned below the form fields. The browser's taskbar at the bottom shows the system clock as 1:40 on 07-01-2025.

Screenshot 6.13 Registration Successfully

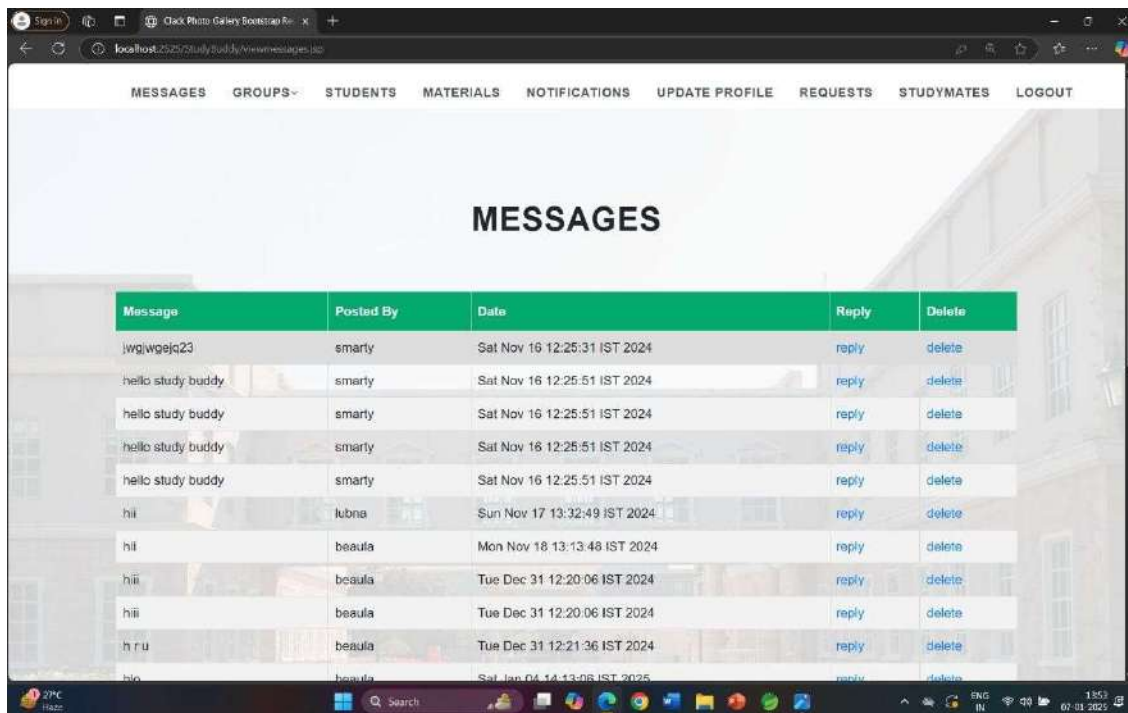


The screenshot shows a web browser window with the URL `localhost:2525/StudyBuddy/login.php`. The page header includes the "STUDY BUDDY" logo and navigation links for "HOME", "LOGIN", and "REGISTER". The main content area displays the message "LOGIN" in large, bold, black text. Below this message is a login form with the following fields:

- UserName ***: Input field containing the text "smarty".
- Password ***: Input field with placeholder text "*****" and a toggle icon for password visibility.

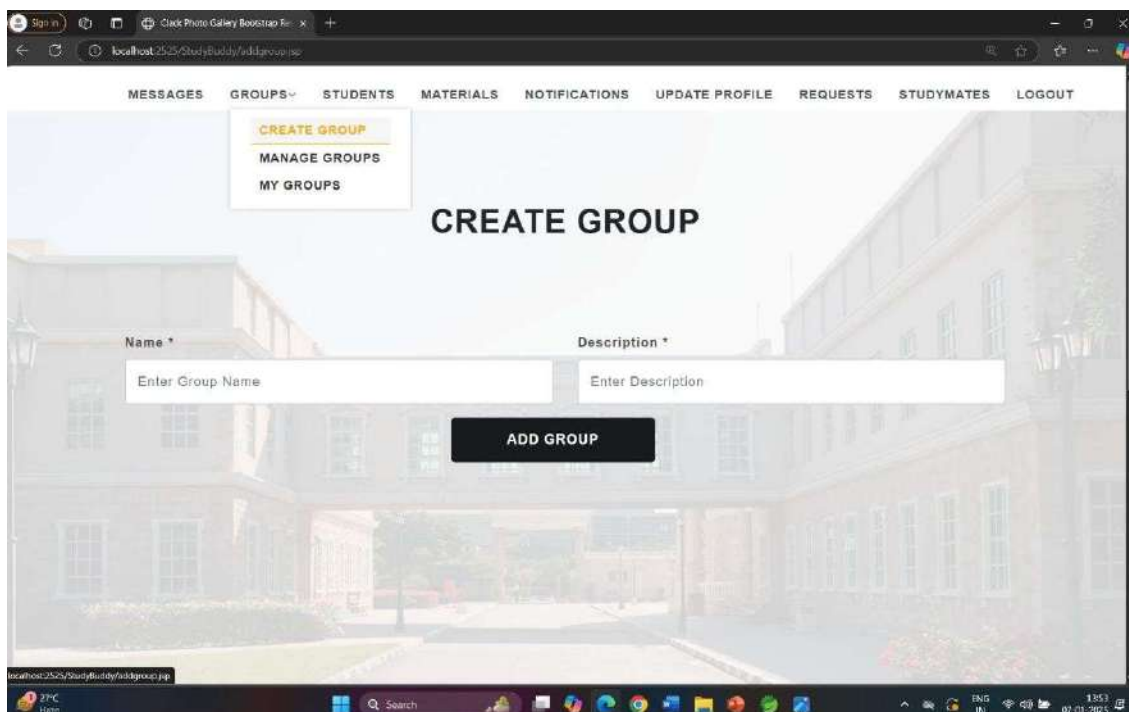
A black "LOGIN" button is positioned below the form fields. The browser's taskbar at the bottom shows the system clock as 1:52 on 07-01-2025.

Screenshot 6.14 Login Page



Message	Posted By	Date	Reply	Delete
lwqlwgejq23	smarty	Sat Nov 16 12:25:31 IST 2024	reply	delete
hello study buddy	smarty	Sat Nov 16 12:25:51 IST 2024	reply	delete
hello study buddy	smarty	Sat Nov 16 12:25:51 IST 2024	reply	delete
hello study buddy	smarty	Sat Nov 16 12:25:51 IST 2024	reply	delete
hello study buddy	smarty	Sat Nov 16 12:25:51 IST 2024	reply	delete
hi	lubna	Sun Nov 17 13:32:49 IST 2024	reply	delete
hi	beaula	Mon Nov 18 13:13:48 IST 2024	reply	delete
hi	beaula	Tue Dec 31 12:20:06 IST 2024	reply	delete
hi	beaula	Tue Dec 31 12:20:06 IST 2024	reply	delete
h r u	beaula	Tue Dec 31 12:21:36 IST 2024	reply	delete
hi	beaula	Sat Jan 04 14:43:08 IST 2025	reply	delete

Screenshot 6.15 Messages



[MESSAGES](#)
[GROUPS](#)
[STUDENTS](#)
[MATERIALS](#)
[NOTIFICATIONS](#)
[UPDATE PROFILE](#)
[REQUESTS](#)
[STUDYMATES](#)
[LOGOUT](#)

[CREATE GROUP](#)
[MANAGE GROUPS](#)
[MY GROUPS](#)

CREATE GROUP

Name *

Description *

Enter Group Name

Enter Description

ADD GROUP

Screenshot 6.16 Create Group Page

Conclusion

The Study Buddy platform fosters seamless collaboration and knowledge-sharing among students by integrating features like user authentication, study groups, shared study materials, notifications, and real-time communication. By connecting learners from diverse backgrounds, Study Buddy promotes teamwork and interactive learning experiences.

Future Scope

The future scope of Study Buddy holds immense potential to revolutionize academic collaboration and learning. By integrating AI, the platform can offer personalized learning experiences, adaptive study schedules, and customized resource recommendations.

References

- [1] Sharma, S. (2019). Cloud Computing in Education. *International Journal of Education and Management Studies*, 9(4), 379-388.
- [2] Underwood, S. (2016). Blockchain beyond bitcoin.
- [3] Karale, A., & Khanuja, H. (2019). Blockchain Technology in Education System: *International Journal of Computer Applications*, 975, 8887.
- [4] Javed Kutty, R., & Javed, N. (2021). Secure Blockchain for Admission Processing in Educational Institutions. 2021 International Conference on Computer Science Communication and Informatics (ICCCI), IEEE.
- [5] Sommerville, I. (2011). *Software Engineering*, 7th Edition, Pearson Education.
- [6] Roy, U. K. (2017). *Web Technologies*. Oxford University Press.
- [7] Laudon, K. C., & Laudon, J. P. (2018). *Management Information Systems: Managing the Digital Firm*, 15th Edition. Pearson Education.

- [8] Gheorghe, M. (2020). Web-based learning platforms and educational mobile apps: A comparative review. *Journal of Education and Learning Technologies*, 5(2), 57-64.
- [9] Ma, Y., & Yang, J. (2019). Deep Learning Techniques in Education Systems: A Review. *International Journal of Educational Technology*.