Department of Information Science and Engineering

A Minor Project Report On

"Web Application For Co-curricular NIE"

IS6C06

Submitted By

ANANTHA BHARATH	**4NI20IS017**
MAHESH S	**4NI20IS058**
MOHAN KUMAR KALMANI	**4NI20IS064**
YASHWANTH K S	**4NI20IS127**

Under the guidance of

Ms. ASHWINI M

Assistant Professor

Dept. of IS&E, NIE Mysuru.

The National Institute of Engineering

(Autonomous Institution under Visvesvaraya Technological University)

MYSORE – 570008

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The National Institute of Engineering

Department of Information Science and Engineering

Manandavadi Road, MYSURU-570008

Certificate

Certifies that the minor project titled "**Web Application for Co-curricular NIE**" is presented by **ANANTHA BHARATH, MAHESH S**, **MOHAN KUMAR KALAMANI, YASHWANTH K S** bearing USN **4NI20IS017, 4NI20IS058, 4NI20IS064, 4NI20IS127** in partial fulfilment for the requirements of the sixth semester BE in Information Science & Engineering prescribed by The National Institute of Engineering, Autonomous Institution under Visvesvaraya Technological University, Belagavi, It is certified that all correction/suggestions indicated for Internal Assessment have been incorporated. The project report has been approved as it satisfies the academic requirements in respectof the Minor Project prescribed for the sixth semester.

Signature of Guide	Signature of HOD	Signature of the Principal
Ashwini M	Dr.Girish	Dr. Rohini Nagapadma

Chapter 4

SYSTEM DESIGN AND ARCHITECTURE

4.1 System Design

Software design sets at the technical kernel of the software engineering process and is applied regardless of the development paradigm and area of application. Design is the first step in the development phase for any engineered product or system. The designer's goal is to produce a model or representation of an entity that will later be built.
System design is the first of the three technical activities- design, code and test that is required to build and verify software. The importance can be stated with a single word "Quality". Design is the place where quality is fostered in software development. Design provides us with representations of software that can assess for quality. Design is the only way that we can accurately translate a customer's view into a finished software product or system. System design serves as a foundation for all the software engineering steps that follow. Without a strong design we risk building an unstable system- one that will be difficult to test, one whose quality cannot be assessed until the last stage.

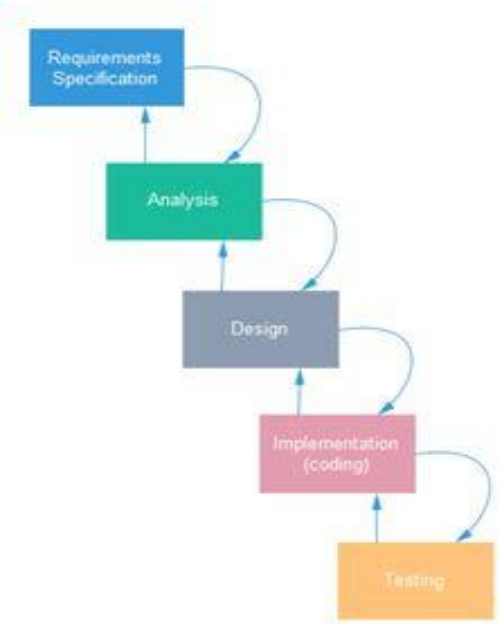


Fig 4.1 System design

4.2 Database Design

The data in the system has to be stored and retrieved from database. Designing the database is part of system design. Data elements and data structures to be stored have been identified at analysis stage. They are structured and put together to design the data storage and retrieval system. A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make database access easy, quick, inexpensive and flexible for the user. Database used in this system is MySql which is a relational database management system.

The database structure is organized into physical files optimized for speed. The logical data model, with objects such as data tables, views, rows, and columns, offers a flexible programming environment.

4.3 Database schema

MySql database is being used in this project , it is basically used here to store the information about the students that have been signed up and the information of the faculty and the respective courses they teach , their contact information. Students who are not signed in can sign up and this info will be stord in the database by verifying their college provided email address by the otp sent to the mail address of the college that is validated .
Here are the schema of the tables used in the project, the tables are namely sign in/sign up table and contact fetcher table.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(11)			No	None		AUTO_INCREMENT	Change Drop More
2	userName	varchar(150)	latin1_swedish_ci		Yes	NULL			Change Drop More
3	emailId	varchar(150)	latin1_swedish_ci		Yes	NULL			Change Drop More
4	ContactNumber	bigint(12)			Yes	NULL			Change Drop More
5	userPassword	varchar(200)	latin1_swedish_ci		Yes	NULL			Change Drop More
6	regDate	timestamp			No	current_timestamp()			Change Drop More
7	emailOtp	int(6)			Yes	NULL			Change Drop More
8	isEmailVerify	int(1)			Yes	NULL			Change Drop More
9	lastUpdationDate	timestamp			Yes	NULL		ON UPDATE CURRENT_TIMESTAMP()	Change Drop More

Fig 4.3.1 Sign in/Sign up table schema.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	varchar(30)	utf8_unicode_ci		No	None			Change Drop More
2	name	varchar(30)	utf8_unicode_ci		No	None			Change Drop More
3	course	varchar(30)	utf8_unicode_ci		No	None			Change Drop More
4	email	varchar(50)	utf8_unicode_ci		No	None			Change Drop More
5	phone	varchar(30)	utf8_unicode_ci		No	None			Change Drop More

Fig 4.3.2 Contact Fetcher table schema.

4.4 UI Design

The user can login to the page and view the page. It contains the navbar which contains the Home page, Sports Page, Placements page, cultural activities page and the contact us page. The Home page contains the Student Activities that is it contains information about the placement and training department, cultural activities and Sports activities. The Sports page contains the details of recent sports and the Accolades by Students and it contains the attendance form by which students can the email to the faculty that they have participated in the sports. The Placement and Training page contains the details of Placement related Activities and it contains the attendance form by which students can the email to the faculty that they have participated in the Placement activities. And it is same for the cultural activities. And the Attendance form the sign up page which contains the sign up page through which only NIE students can send the email and this can provide a secure connection. And if we login to the sign up page it contains the course id by which we can get the faculty email-id and we can copy the email id and the send the email to respective faculty that we have participated in

4.6 Sequence Diagram

The student accesses the website and navigates to the sign-up page. The server opens the sign-up page, and the student clicks on the sign-up button. The student is prompted to enter a password for the specified email. Upon entering the password, the server displays the login page. The student enters their username and password on the login page. The server verifies the username and password for authentication. If the username and password match, the attendance form is displayed. The attendance details entered by the student are stored in the database. The server prompts the student with a security question. The student provides the answer to the security question. The server verifies the security question answer. Upon successful verification, the attendance details are displayed. The student has the option to log out of the system.

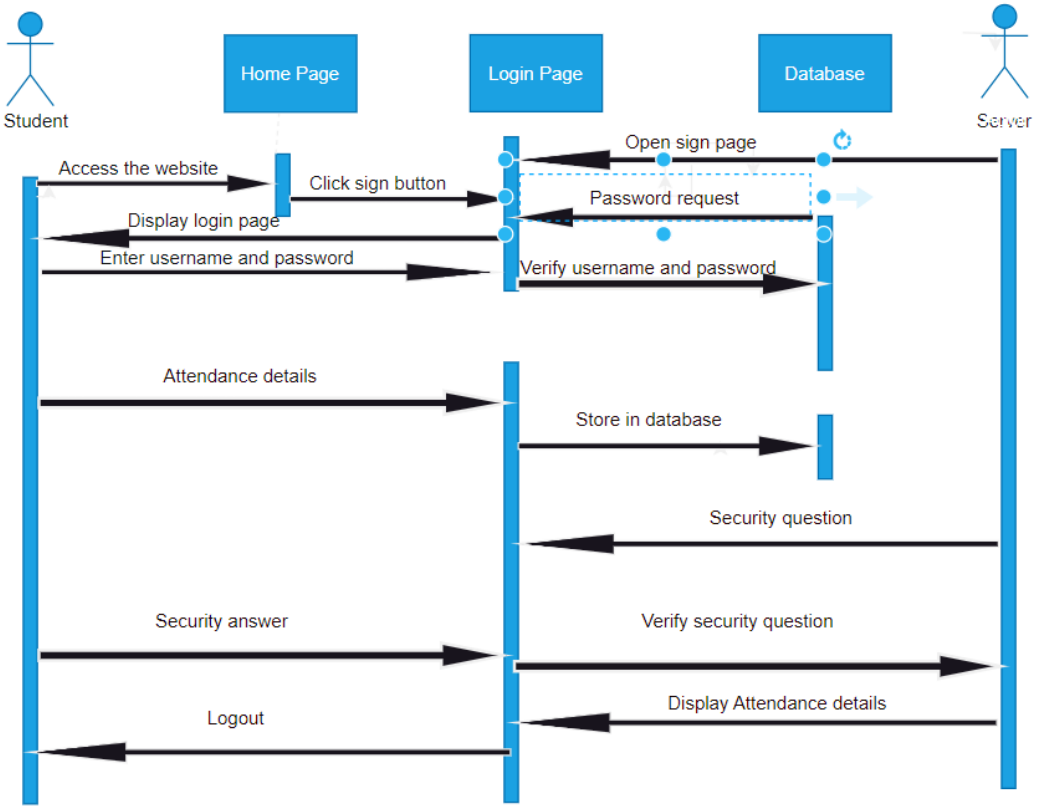


Fig 4.6 Sequence Diagram

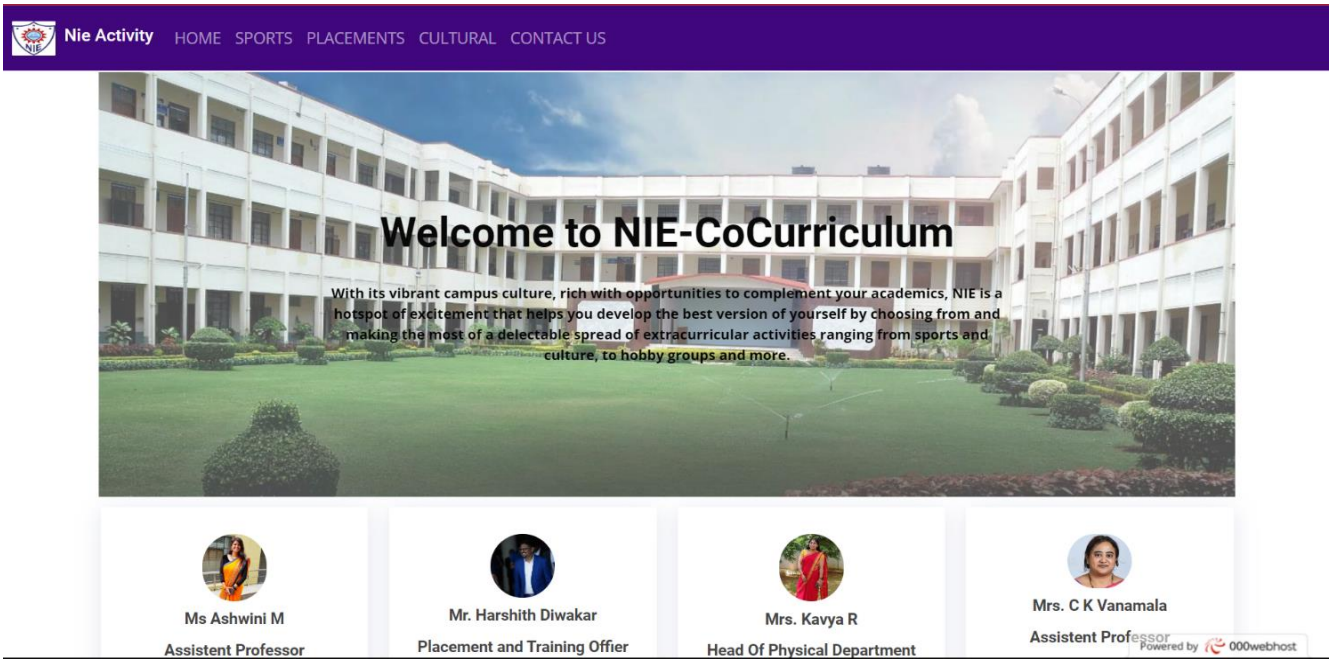
4.7 Client Server Architecture

The client-server architecture is the most common distributed system architecture which decomposes the system into two major subsystems or logical processes . In this project the students are the clients who sign in the web application although the home page isn't required to signed in for viewing , the students should sign in for their attends purpose when they do they are able to obtain the information about the related faculty for application of the attendance. Hence they perform as a client and the web application as a server which provides the client with services based on their requests . hence client server architecture is used in this project.

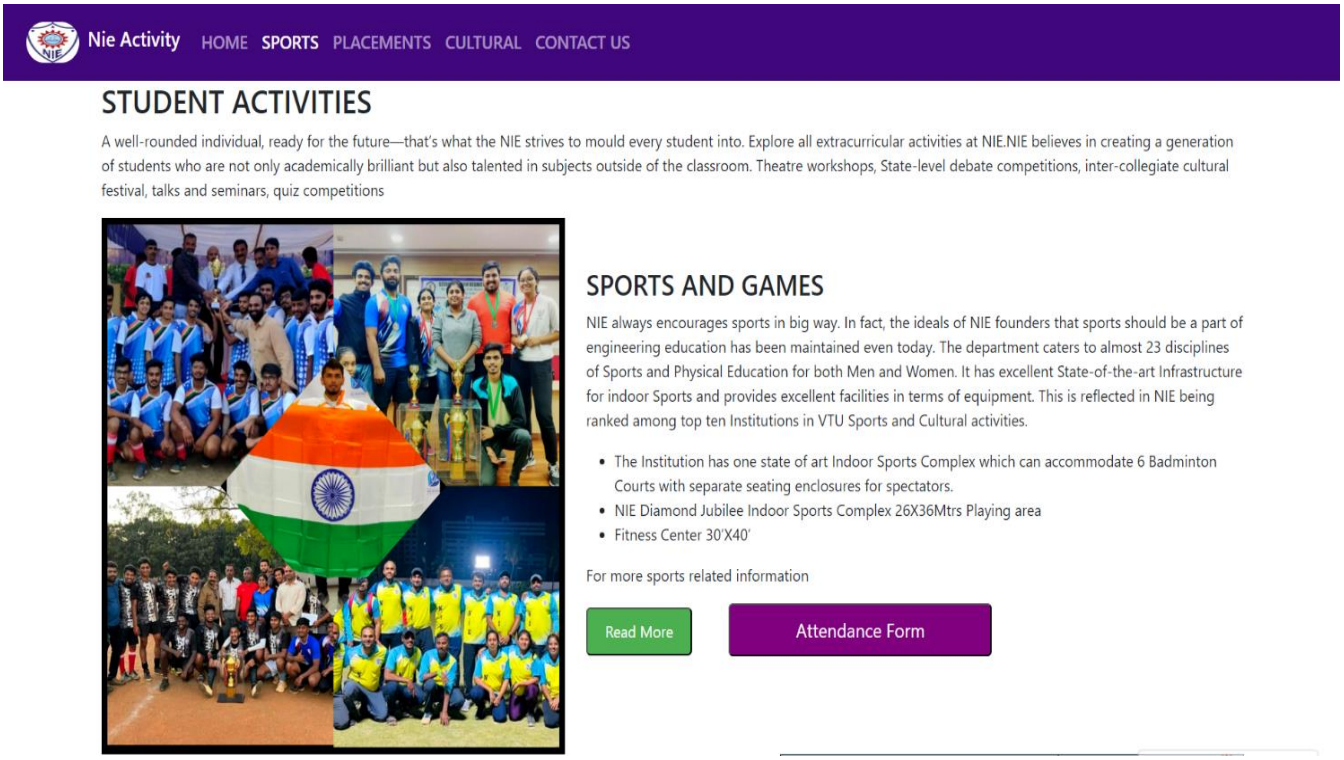
Chapter 7

RESULTS OF WEB PAGE

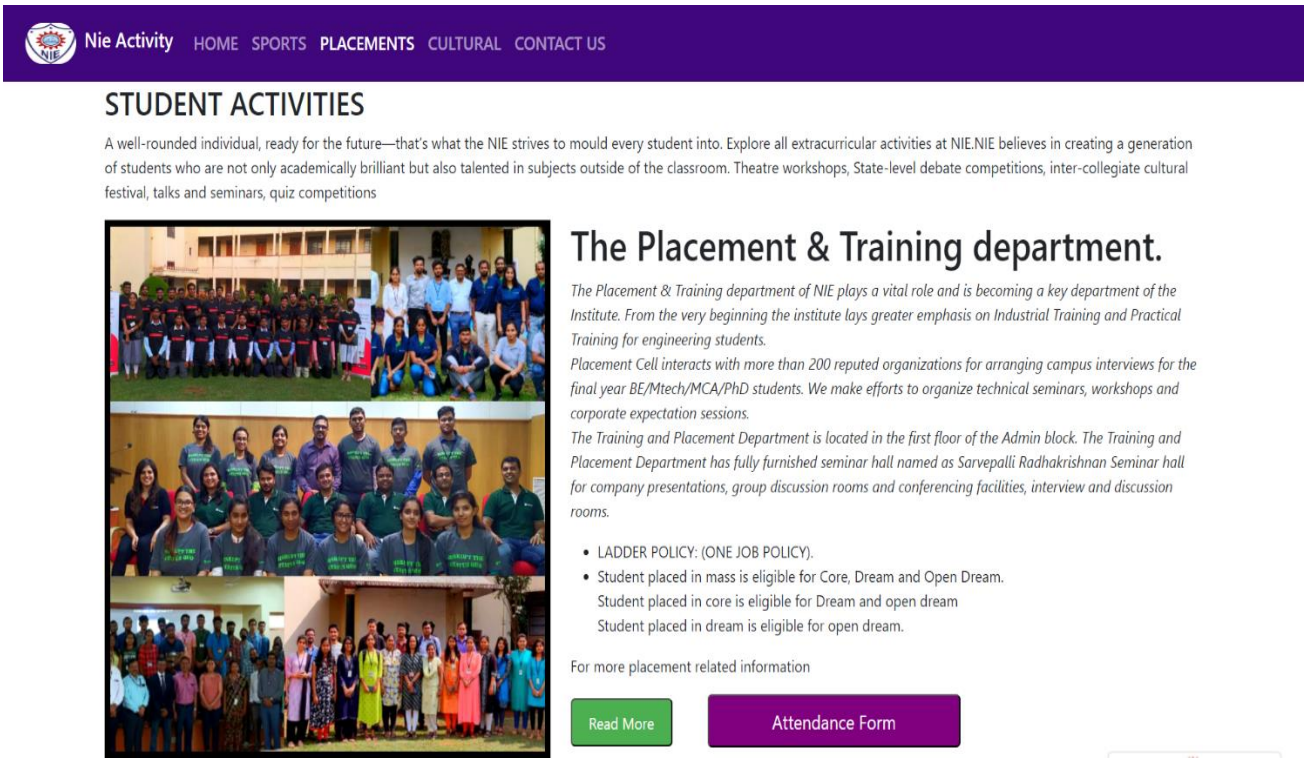
7.1 Home Page



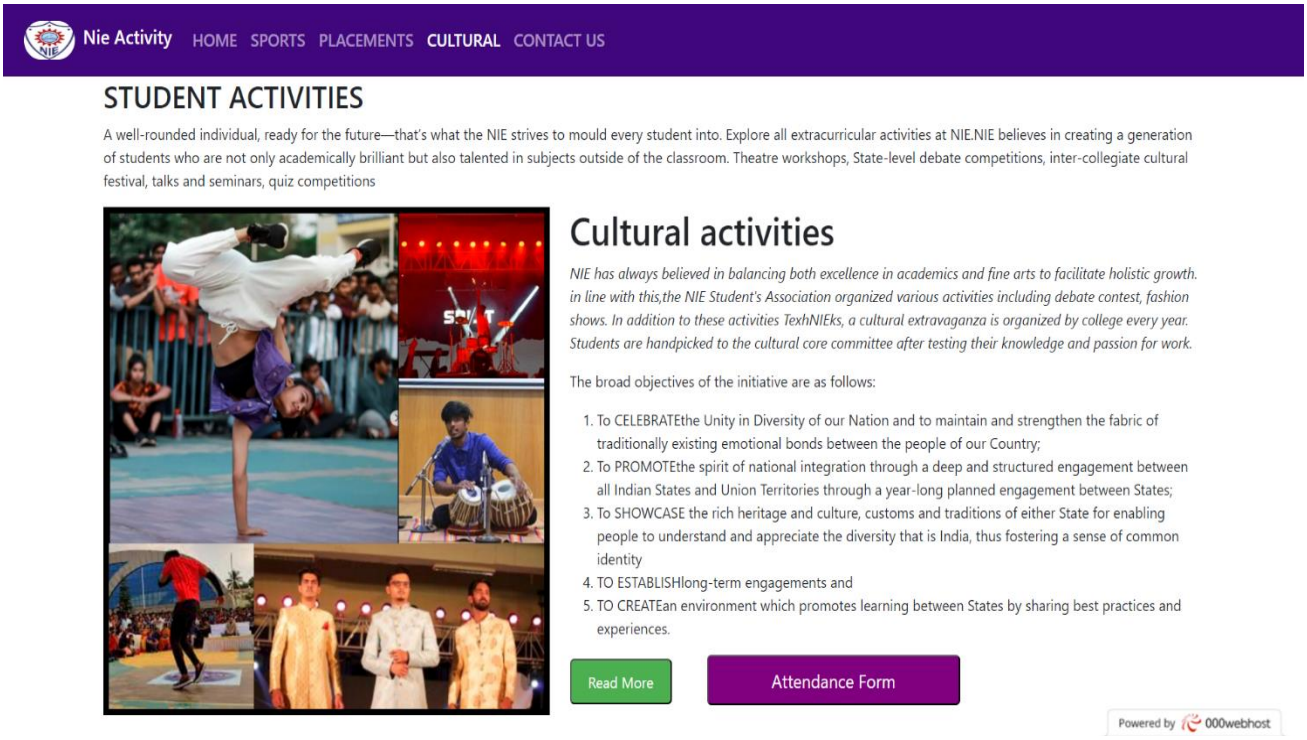
7.2 Sports Activities



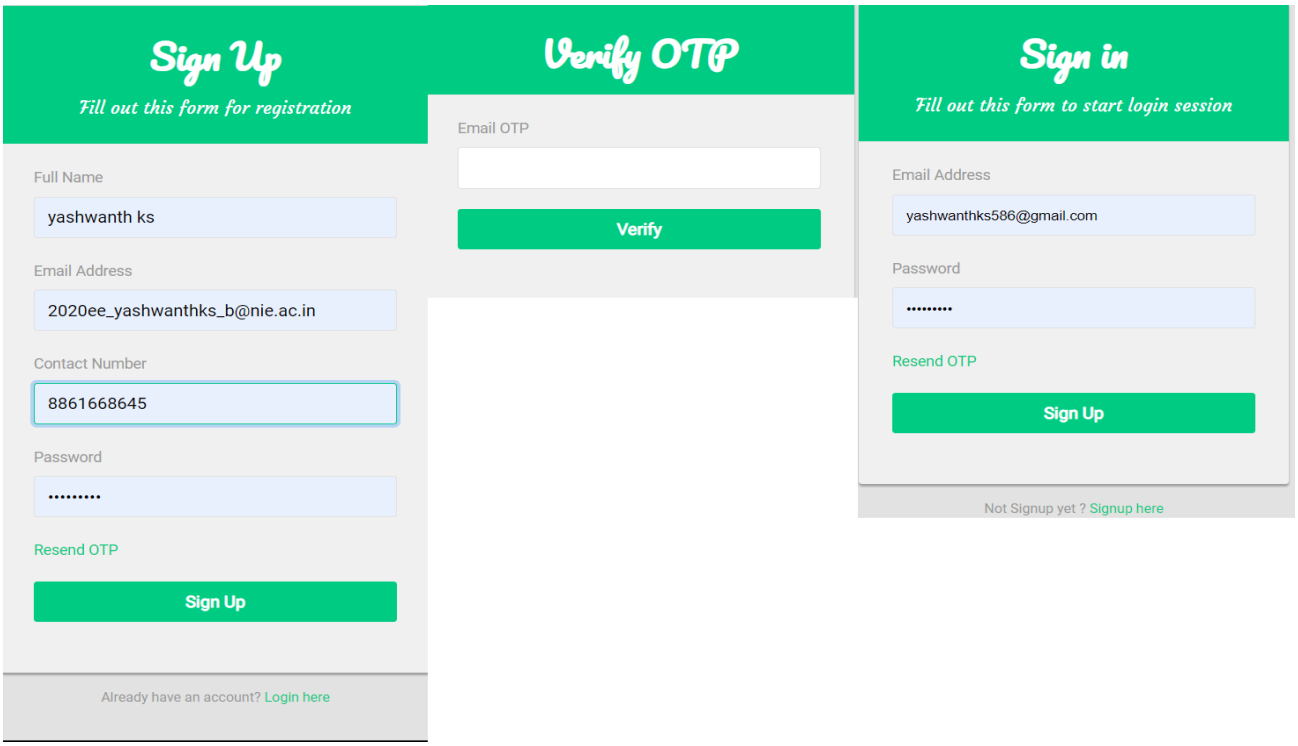
7.3 Placement and Training Activities



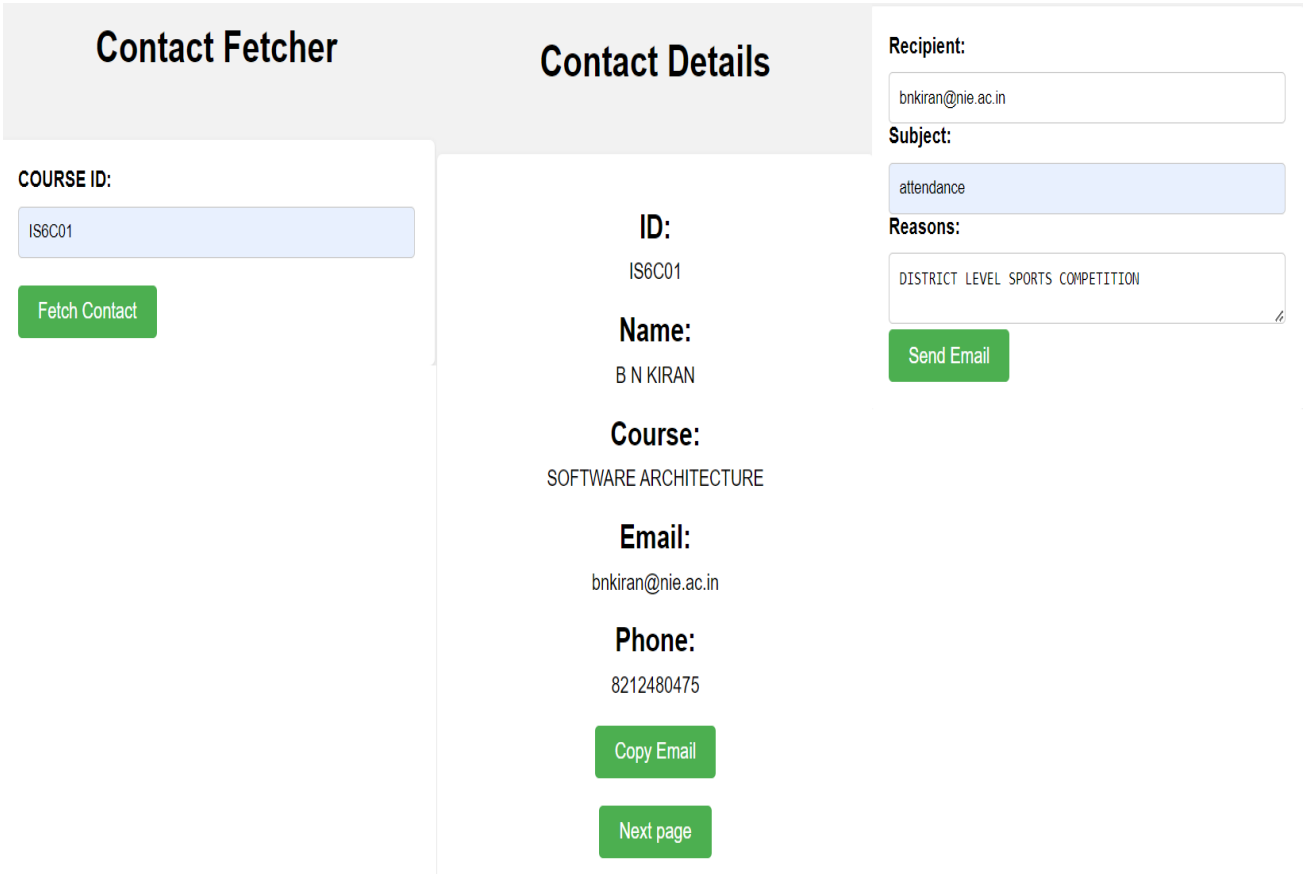
7.4 Cultural Activities



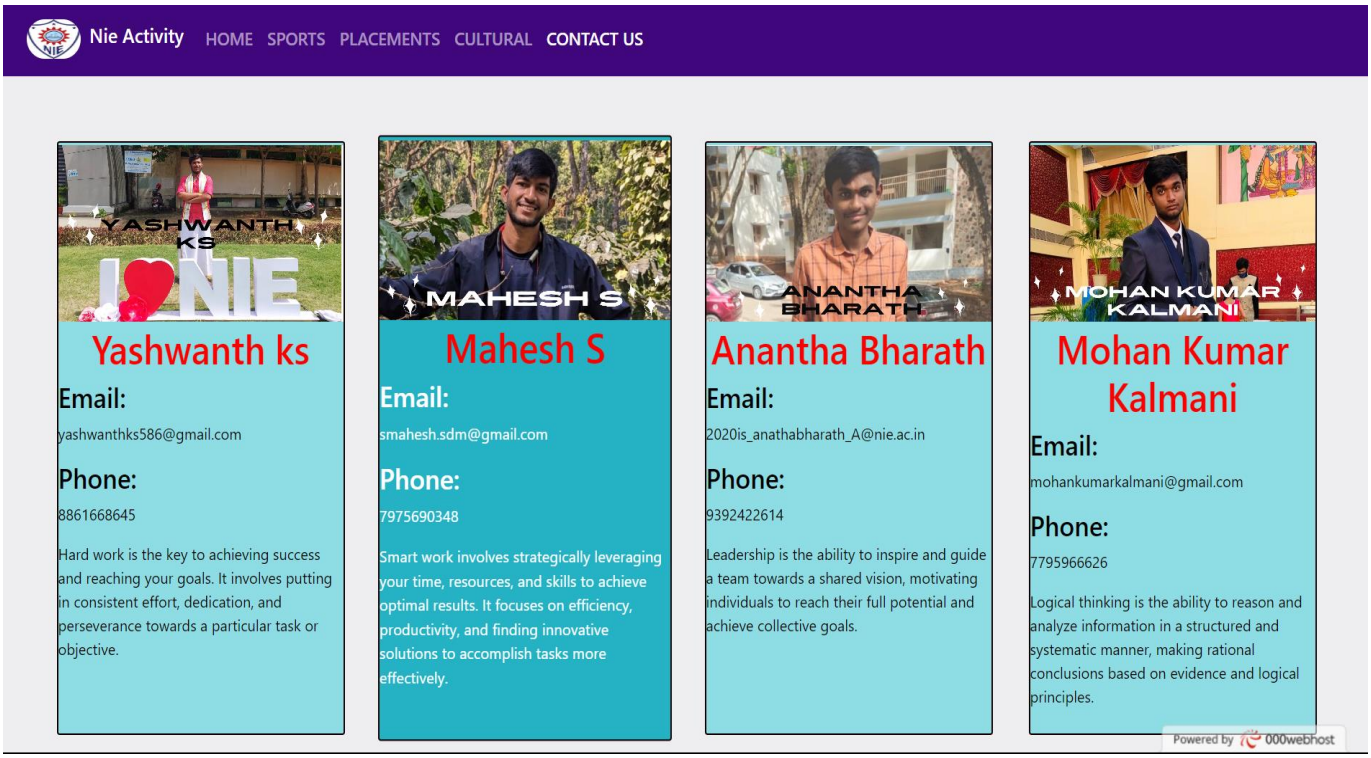
7.5 Sign Up Page



7.6 Contact Details



7.7 Contact Us



7.8 Attendance Form