15CSE376 Net Centric Programming Term I Project Evaluation

Group No: 4

Time table management-Details collection

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ABSTRACT

The project is the design and implementation of an interactive World Wide Web-based Leave Approval System. The Leave Approval System automates the process of managing, tracking and approving multiple types of leaves. Students will able to submit the leave form, cancel previously submitted leave requests, check the status of leave requests and view completed leave transactions. The Leave Approval System maintains a database to keep a running balance of each student's leaves. It provides wardens with an interface to approve single passes, approve batch passes, lookup student details and an automated email service for easier email dispatch.

MODULE DESCRIPTION

After analysis the system has been identified to have the following modules:

1. Student Module:

- Students can choose an elective and give preference order based on which subject they give highest preference.
- Students can change their personal details.
- Students can view courses allotted to them.

2. Teacher Module

- Teacher can choose subject they prefer to teach.
- Teachers can look up the all the details of a particular student.
- Teachers can see the subject allotted to them.

3. Admin Module

- Admin can allot courses to both teachers and students based on their preference.
- Admin can add new student and teachers.

INTRODUCTION TO WEB DESIGNING

Web technologies is a general term referring to the many languages and multimedia packages that are used in conjunction with one another, to produce dynamic web sites such as this one. Each separate technology is fairly limited on its own, and tends to require the dual use of at least one other such technology. Therefore, we can conclude that all of the components that make up a site are interdependent on one another.

A Web application is a web site with dynamic functionality on the server. Google, Facebook, Twitter are examples of web applications.

HTML

HTML is at the core of every web page, regardless the complexity of a site or number of technologies involved. HTML stands for HyperText Markup Language. "Markup language" means that, rather than using a programming language to perform functions, HTML uses tags to identify different types of content and the purposes they each serve to the webpage.

Every web page is made up of a bunch of these HTML tags denoting each type of content on the page. Each type of content on the page is "wrapped" in, i.e. surrounded by, HTML tags.

CSS

CSS stands for Cascading Style Sheets. This programming language dictates how the HTML elements of a website should actually appear on the frontend of the page. HTML provides the raw tools needed to structure content on a website. CSS, on the other hand, helps to style this content so it appears to the user the way it was intended to be seen. These languages are kept separate to ensure websites are built correctly before they're reformatted.

Whereas HTML was the basic structure of your website, CSS is what gives your entire website its style. This language affects the entire mood and tone of a web page, making it an incredibly powerful tool.

Bootstrap 4

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It focuses on simplifying the development of informative web pages. The primary factor is whether the developers in charge find those choices to their liking. Once added to a project, Bootstrap provides basic style definitions for all HTML elements. The end result is a uniform appearance for prose, tables and form elements across web browsers. In addition, developers can take advantage of CSS classes defined in Bootstrap to further customize the appearance of their contents.

JavaScript (ECMAScript v6)

JavaScript is a high level, dynamic, untyped, and interpreted programming language. It has been standardized in the ECMAScript language specification.

Alongside HTML and CSS, it is one of the three essential technologies of World Wide Web content production; the majority of websites employ it and it is supported by all modern web browsers without plug-ins.

JavaScript is a very powerful tool that can do many things for a website. For one, it powers the site's general interactivity. JavaScript makes it possible to build rich UI components such as image sliders, pop-ups, site navigation mega menus, form validations, tabs, accordions, and much more.

JavaScript allows webpages to respond to user activity and dynamically update themselves, and all without requiring a page reload to change its appearance.

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Software Requirements Specification

for

Time table management-Details collection

Version 1.0 approved

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Revision History

Name	Date	Reason For Changes	Version

1. Introduction

1.1 Purpose

The purpose of this document is to build a seamless **Data collection and subject allocation system** for the use in the university.

1.2 Document Conventions

DB	Database
UI	User interface
ER	Entity relationship

1.3 Intended Audience and Reading Suggestions

The project is the design and implementation of an interactive World Wide Webbased Data collection and subject allocation system. The Data collection and subject allocation system automates the process of collecting, tracking and allocating subjects to teachers also choose an elective and allocate the elective based on preference to the students.

1.4 Product Scope

The product provides separate login for students and teachers. Students will able to submit the

Elective form, change their details, view attendance and view elective allotted. It provides teachers with an interface to choose subject they prefer to teach, Put attendance for students, lookup student details and view subjects allotted to them.

1.5 References

IEEE Template for System Requirement Specification Documents:

https://goo.gl/nsUFwy

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2. Overall Description

2.1 Product Perspective

The product is a seamless solution to the tedious process of subject allocation to teachers based on their preferences and also for students to choose preferred elective with extra features which will make the process less tedious.

2.2 Product Functions

TBD

2.3 User Classes and Characteristics

The primary users of the application will be teachers and students.

The characteristics of the application include subject allocation to teachers based on their preferences and also for students to choose preferred elective. The teachers can know their students detail also know the subject allotted tot hem so they can prepare for that subject.

2.4 Operating Environment

OS - Windows 10

RAM - 8 GB

2.5 Design and Implementation Constraints

TBD

2.6 User Documentation

The following user documentation components will be delivered along with the software.

FAQs

These components along with the easy-to-use interface will be sufficient for the user to

maneuver through the application

2.7 Assumptions and Dependencies

TBD

3. External Interface Requirements

3.1 User Interfaces

All the users, including the administrators and the sponsors, will interact with the software with

the help of a web browser, specifically Google Chrome or Mozilla Firefox.

3.2 Hardware Interfaces

A xampp server will be used to host the application.

3.3 Software Interfaces

Windows 10 will be the operating system used. For efficient data storage, MySql will be used as the database. HTML, CSS and Javascript will be the frameworks used.

3.4 Communications Interfaces

All the communication between the users and the system will be through a web browser.

HTTPS protocol will be used to fetch and send information.

4. System Features

4.1 Table 1: Course allocation Features

Screen name	Description
Student login	Student is authenticated and logged in into the system
Teacher login	Teacher is authenticated and logged in into the system
Admin login	Student is authenticated and logged in into the system
Add students	Student details are filled into the system by admin and details are validated before entering it.
Add teachers	Teacher details are filled into the system by admin and details are validated before entering it.
Choose elective	Based on the elective given students can give preference to each elective
Choose subject	Teachers can choose the subject they prefer tot each
Allocate elective	Based on count of students taken the elective and preference elective is allotted to students.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The server should be able to handle a definite number of requests at a time with minimal

crashes.

5.2 Safety Requirements

If there is a damage to the hard disk resulting in data loss of the database, the backup database

must be used to restore the DB..

5.3 Security Requirements

All the data transfer should take place with the HTTPS protocol. Also, admins are required to

prove their identities by logging in with the credentials of an admin account. Similarly, sponsors

are also expected to do so.

5.4 Software Quality Attributes

Availability, Maintainability, Portability, Robustness

5.5 Business Rules

TBD

6. Other Requirements

TBD

Appendix A: Glossary

TBD

Appendix B: Analysis Models

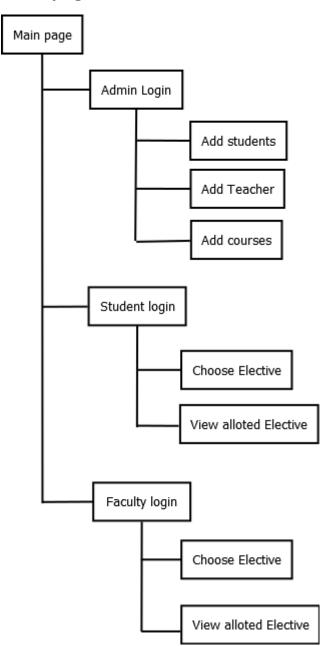
TBD

Appendix C: To Be Determined List

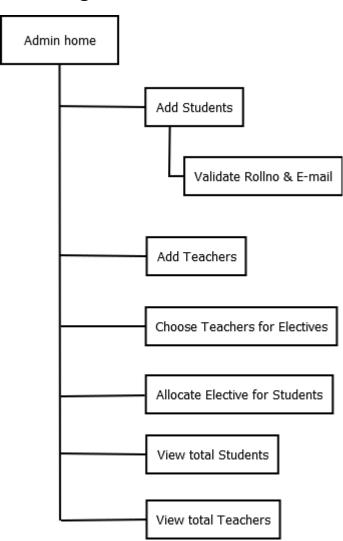
TBD

Design Diagrams

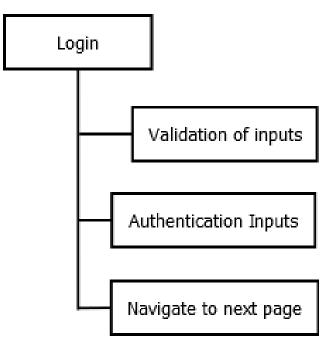
Main page



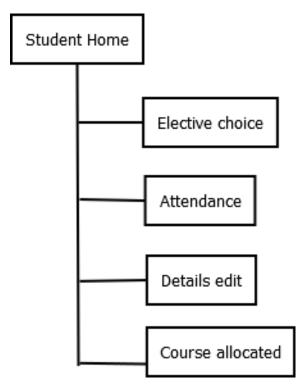
Home Page



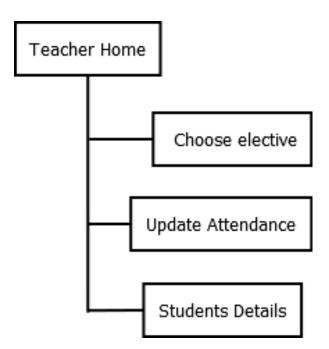
Login Page



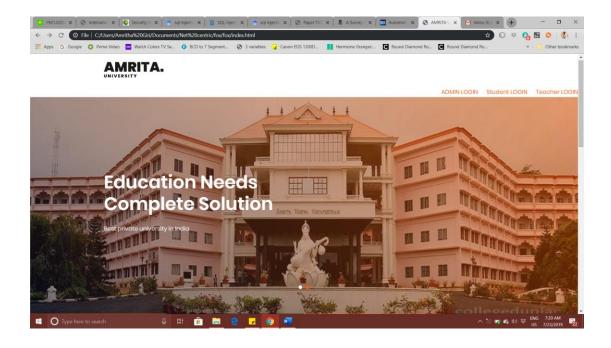
Student page



Faculty page



Intro Page



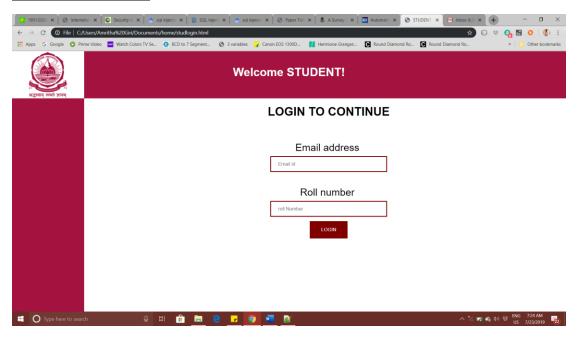
Description:

The main page of the website. It is the front page from which everyone accesses the website. Students can log in to their learning management system from this page while professors have different entry to their Learning management system. And admin can login to the admin page from where he controls the access to learning management system.

Code:

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Student Login Page



Description:

This is the login page for students which can be accessed validation of their email address and roll number is done. After validation they are given access to the student home page from which they can choose electives and all.

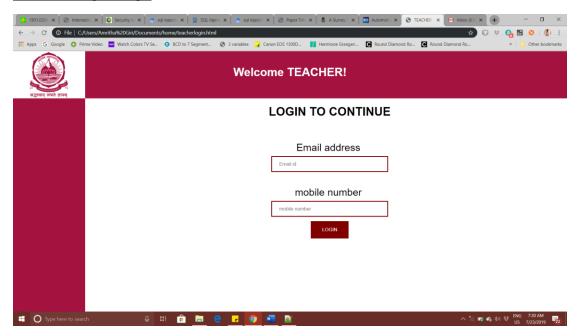
Code:

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validstud.js

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Teacher Login Page

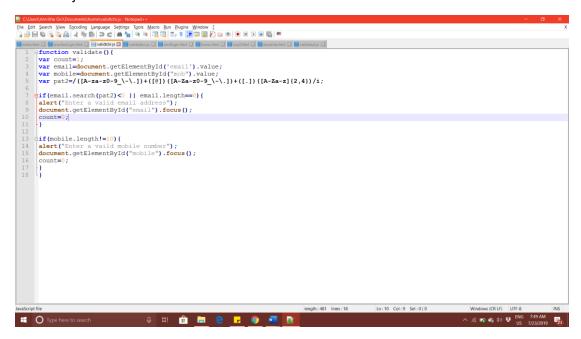


Description:

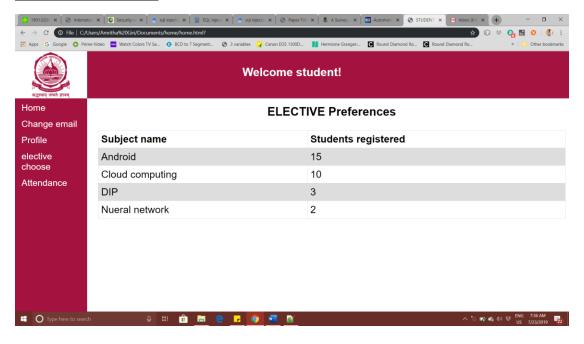
This is the login page for teachers accessed through validation of their email address and mobile number. After validation they are given access to the teacher home page from which they can choose subjects they prefer to teach and all.

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Validtchr.js



Student home Page



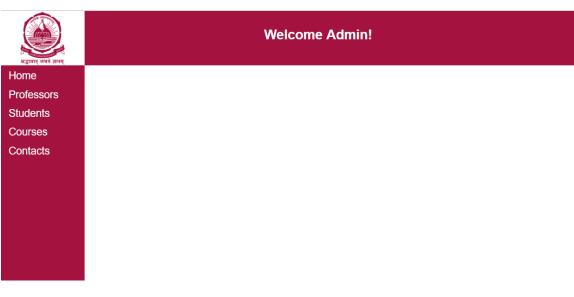
Description:

This is the home page for the learning management system for students from which they can choose their elective. They can see which elective has more students and also can see the result of the elective allotted to them.

Code:

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| Page | East | Sear Very Recording | Language | Sear | Record | Recording | Record | Record
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Admin home Page



Description:

This page displays the home page of the admin. They will be able to update the information about the students ,teachers and the course details.

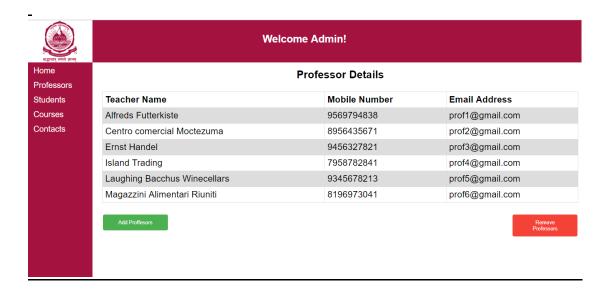
The Contacts of all the Heads of the departments and the Chairperson are visible to the admin so that he can communicate all the updating that he has made or going to make.

Any notifications will be sent to them through mail.

code:

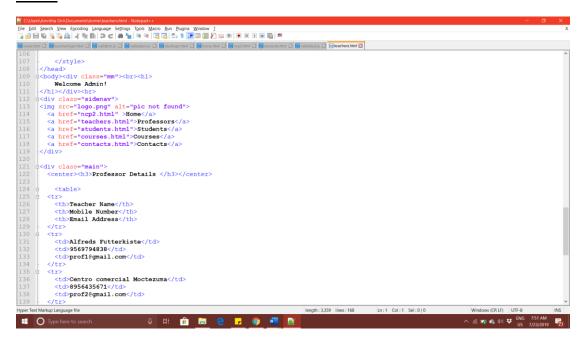
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| Control | Cont
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Faculty page:

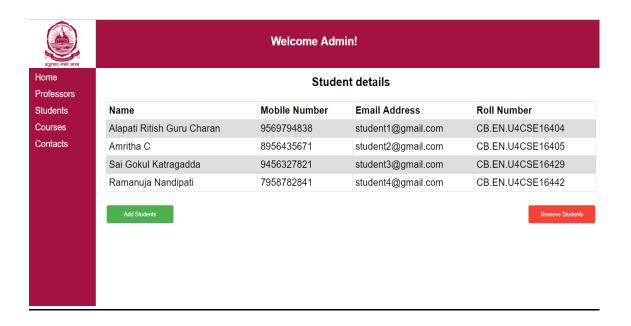


Description:

The details of all professors are stored and displayed in this page and the admin can add or remove any faculty members.



Student page:

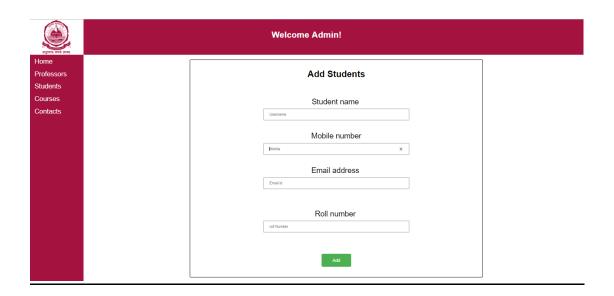


Description:

The student details are displayed to the admin and he can add or remove or update any information about the students.

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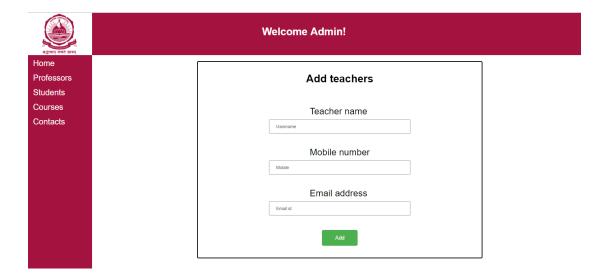
Student updation page:



Description:

This page helps the admin to add the student details. Validation of roll number and email address is done using JavaScript and the details are stored in the database.

Faculty updation page:



Description

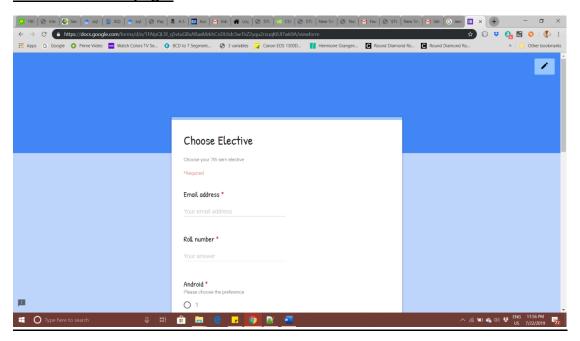
This page helps the admin to add the teacher details. Validation of phone number and email address is done using javascript and the details are stored in the database.

<u>Code</u>

```
var reg = /^([A-Za-z0-9_\-\.])+\@([A-Za-z0-9_\-\.])+\.([A-Za-z]{2,4})$/i;

if(name.length==0){
    alert("Enter the name ");
    count=0;
}
if(mobile.length!=10){
    alert("Enter a vaild mobile number");
    count=0;
}
if(email.search(reg)<0 || email.length==0){
    alert("Enter a valid email address");
    count=0;
}</pre>
```

Student Elective page:



Description

The students are given google form from which they are supposed to choose the elective by the order of their preference.

Field	Input Given	Success/Failure	Reason for Failure
Name		Failure	Name can not be null
Roll No.	CB.EN.U4CSE16429	Success	
Phone No.	01234567890	Failure	Phone No can only have 10 digits
Email	gokul@gmail.com	Success	

Roll No	Technology	Max	Marks
	HTML	10	
	CSS	10	
	JS	10	
CB.EN.U4CSE16405	VIVA	10	
	HTML	10	
	CSS	10	
	JS	10	
CB.EN.U4CSE16404	VIVA	10	
	HTML	10	
	CSS	10	
	JS	10	
CB.EN.U4CSE16429	VIVA	10	
	HTML	10	
	CSS	10	
	JS	10	
CB.EN.U4CSE16442	VIVA	10	
	Project Documentation	10	
	Total	50	