COLLEGE OF APPLIED SCIENCE

KUZHALMANNAM KOTTAYI

Managed by:

THE INSTITUTE OF HUMAN RESOURCE DEVELOPMENT

(Established by Government of Kerala)

A Project Report on

COLLEGE DYNAMIC WEBSITE

Project report submitted on partial fulfillment of the requirements for the award of the degree

of

B.Sc. COMPUTER SCIENCE

University of Calicut

MARCH 2023

Guided by: Ms. SUNITHA.S

ASSISTANT PROFESSOR IN COMPUTER SCIENCE

Submitted By
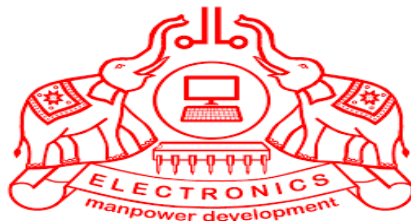
ASWIN K.L   -   CZAUSCS023

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<u>CERTIFICATE</u>

This is to certify that the project work entitled "**COLLEGE DYNAMIC WEBSITE**" is bonafide of the original work done by Aswin k L(CZAUSCS023) final year BSc Computer science in fulfilment of the requirements for degree in Bachelor of Computer Science under the University of Calicut

ASWIN K.L   -   **CZAUSCS023**

GUIDE: PRINCIPAL:

INTERNAL EXAMINER   EXTERNAL EXAMINER

<u>DECLARATION</u>

I hereby declare that the project entitled "COLLEGE DYNAMIC WEBSITE" submitted to Calicut University in partial fulfillment of the requirements for award of Bachelor of Science Degree in Computer Science is a record of original work done by under the guidance of Ms. SUNITHA.S , Assistant Professor, Department of Computer Science,

ASWIN K.L   -   CZAUSCS023

I certified that the declaration made above by the candidates is true

DATE: Signature of the guide,

PLACE: KOTTAYI   Ms. SUNITHA .S

                                                                                   Assistant professor in computer science

ACKNOWLEDGEMENT

I have great pleasure in acknowledging our sincere gratitude to all who have been given the helping hands in successful project.

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I are most likely to give our sincere gratitude to Ms. SUNITHA.S guide of our project for all valuable advices & support given to us. I would also like to extend our sincere thanks to Ms. DURGA, Ms. SANITHA Assistant professor in department of COMPUTER SCIENCE for their support & guidance. I would like to thanks Mrs.SHANI KB laboratory assistant, for all the help given to us.

Finally, I express my everlasting thanks to all my friends whose valuable suggestions, criticism and encouragement that helped to make this project a great success. I also thank my parents for their prayer through which my project was successfully completed

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1. ABSTRACT

Colleges have lot of activities to deal with the new admission student and parents always have lot of things to ask. Normally a person will be allotted to clear all the enquiries. Teachers want to keep the student attendance and internal marks properly, also students need to know these information's. College website can solve lot of common enquiries like Courses, Fee structure, collage facilities, and previous year performance. Most of the colleges have their own website, it includes the needed information's of the enquires. It will be better if it can solve the other problems like attendance taking, student internal mark storing. Through this project the website will include the college information and attendance and internal mark storing feature

2. INTRODUCTION

The college website is necessary for students as well as persons who are looking to know about the collage. This will help to reduce the collage management work, otherwise lot of Phone calls will reach to enquire the basic information. The college must take attendance of every student's, keep their internal marks and students knew about their attendance and mark finally from teacher. Through this project its make's all the process make easier. Teachers can make student attendance through the college website with their profile, Students can know their attendance and internal mark from the website also mark the reason for taking leave from the class.

Early websites had only text, and soon after, images. Web browser plug-ins were then used to add audio, video, and interactivity (such as for a rich Web application that mirrors the complexity of a desktop application like a word processor). Examples of such plug-ins are Microsoft Silverlight, Adobe Flash Player, Adobe Shockwave Player, and Java SE. HTML 5 includes provisions for audio and video without plugins. JavaScript is also built into most modern web browsers, and allows for website creators to send code to the web browser that instructs it how to interactively modify page content and communicate with the web server if needed. The browser's internal representation of the content is known as the Document Object Model (DOM).

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2.1 Objectives of project

- In order keep attendance and other information's

- Helps students to track their attendance and internal mark

- To learn about college website making and use of database

3. SYSTEM ANALYSIS

3.1. Existing System

Static website is the basic type of website that is easy to create. You don't need the knowledge of web programming and database design to create a static website. Its web pages are coded in HTML. The codes are fixed for each page so the information contained in the page does not change and it looks like a printed page.

.**Drawbacks of existing system:-**

- Limited scalability

- Limited user experience

3.2. Proposed System

Dynamic website is a collection of dynamic web pages whose content changes dynamically. It accesses content from a database or Content Management System (CMS). Therefore, when you alter or update the content of the database, the content of the website is also altered or updated.

Dynamic website uses client-side scripting or server-side scripting, or both to generate dynamic content.

Client side scripting generates content at the client computer on the basis of user input. The web browser downloads the web page from the server and processes the code within the page to render information to the user.

In server side scripting, the software runs on the server and processing is completed in the server then plain pages are sent to the user.

Advantages of Proposed System:-

- Better user experience

- Easier maintenance

- Easy updating

- Professional-looking

- Futuristic

4. FEASIBILITY STUDY

A feasibility study is an assessment of the practicality of a project or system. A feasibility study aims to objectively and rationally uncover the strengths and weaknesses of an existing business or proposed venture, opportunities and threats present in the natural environment, the resources required to carry through, and ultimately the prospects for success. In its simplest terms, the two criteria to judge feasibility are cost required and value to be attained.

A well-designed feasibility study should provide a historical background of the business or project, a description of the product or service, accounting statements, details of the operations and management, marketing research and policies, financial data, legal requirements and tax obligations. Generally, feasibility studies precede technical development and project implementation. A feasibility study evaluates the project's potential for success; therefore, perceived objectivity is an important factor in the credibility of the study for potential investors and lending institutions. It must therefore be conducted with an objective, unbiased approach to provide information upon which decisions can be based.

4.1. TECHNICAL FEASIBILITY

This assessment is based on an outline design of system requirements, to determine whether the company has the technical expertise to handle completion of the project. When writing a feasibility report, the following should be taken to consideration:

- A brief description of the business to assess more possible factors which could affect the study

- The part of the business being examined

- The human and economic factor

- The possible solutions to the problem

At this level, the concern is whether the proposal is both technically and legally feasible (assuming moderate cost).

The technical feasibility assessment is focused on gaining an understanding of the present technical resources of the organization and their applicability to the expected needs of the proposed system. It is an evaluation of the hardware and software and how it meets the need of the proposed system

4.2. OPERATIONAL FEASIBILITY

Operational feasibility is the measure of how well a proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development.

The operational feasibility assessment focuses on the degree to which the proposed development project fits in with the existing business environment and objectives with regard to development schedule, delivery date, corporate culture and existing business processes.

To ensure success, desired operational outcomes must be imparted during design and development. These include such design-dependent parameters as reliability, maintainability, supportability, usability, productivity, disposability, sustainability, affordability and others. These parameters are required to be considered at the early stages of design if desired operational behaviours are to be realised. A system design and development requires appropriate and timely application of engineering and management efforts to meet the previously mentioned parameters. A system may serve its intended purpose most effectively when its technical and operating characteristics are engineered into the design. Therefore, operational feasibility is a critical aspect of systems engineering that needs to be an integral part of the early design phases.

4.3. ECNOMICAL FEASIBILITY

In case of a new project, financial viability can be judged on the following parameters:

- Total estimated cost of the project

- Financing of the project in terms of its capital structure, debt to equity ratio and promoter's share of total cost

- Existing investment by the promoter in any other business

- Projected cash flow and profitability.

5. SYSTEM SPECIFICATION

A system specification describes the operational and performance requirements of a system, such as a computer**.** It is considered a high-level document that dictates global functions.

System specifications help to define the operational and performance guidelines for a system. It may outline how the system is expected to perform, and what that may include. Key specifications may include interface definitions, document design rules and functional areas.

When purchasing software or a computer, system specifications may be outlined during the evaluation process and agreed upon during the payment process. The specifications may determine security access. Many organizations will offer templates and resources to help facilitate the adherence of system specifications. In some cases, system specifications can be quite specific and difficult to follow without these guidelines.

6.SYSTEM REQUIREMENTS

To be used efficiently, all Computer Software needs certain hardware components or other software resources to be present on a computer. These prerequisites are known as (computer) system requirements and are often used as a guideline as opposed to an absolute rule. Most software defines two sets of system requirements: minimum and recommended. With increasing demand for higher processing power and resources in newer versions of software, system requirements tend to increase over time. Industry analysts suggest that this trend plays a bigger part in driving upgrades to existing computer systems than technological advancements. A second meaning of the term of system requirements is a generalisation of this first definition, giving the requirements to be met in the design of a system or sub-system.

6.1.   HARDWARE REQUIREMENTS

The most common set of requirements defined by any operating system or software application is the physical computer resources, also known as hardware. A hardware requirements list is often accompanied by a hardware compatibility test (HCL), especially in case of operating systems. An HCL lists tested, compatible, and sometimes incompatible hardware devices for a particular operating system or application. The following sub-sections discuss the various aspects of hardware requirements.

Processor	:	Intel COREi3
Hard Disk	:	100 RAM: 4GB or above
Monitor	:	Standard Colour Monitor
Keyboard	:	Standard Keyboard
Mouse	:	Standard Mouse

6.2. SOFTWARE REQUIREMENTS

Software requirements deal with defining software resource requirements and prerequisites that need to be installed on a computer to provide optimal functioning of an application. These requirements or prerequisites are generally not included in the software installation package and need to be installed separately before the software is installed.

Operating System   : Windows 10

IDE   : VS Code

Frontend   : Html, CSS, JavaScript, Bootstrap

Backend   : Node JS, Mongo DB.

7.SOFTWARE DESCRIPTION

7.1. OPERATING SYSTEM

❖ WINDOWS 10

Windows 10 is a major release of Microsoft's Windows NT operating system. It is the direct successor to Windows 8.1, which was released nearly two years earlier. It was released to manufacturing on July 15, 2015, and later to retail on July 29, 2015. Windows 10 was made available for download via MSDN and TechNet, as a free upgrade for retail copies of Windows 8 and Windows 8.1 users via the Windows Store, and to Windows 7 users via Windows Update. Windows 10 receives new builds on an on going basis, which are available at no additional cost to users, in addition to additional test builds of Windows 10, which are available to Windows Insiders. Devices in enterprise environments can receive these updates at a slower pace, or use long-term support milestones that only receive critical updates, such as security patches, over their ten-year lifespan of extended support. In June 2021, Microsoft announced that support for Windows 10 editions which are not in the Long-Term Servicing Channel (LTSC) will end on October 14, 2025.

Windows 10 received generally positive reviews upon its original release. Critics praised Microsoft's decision to provide the desktop-oriented interface in line with previous versions of Windows, contrasting the tablet-oriented approach of Windows 8, although Windows 10's touch-oriented user interface mode was criticized for containing regressions upon the touch-oriented interface of its predecessor. Critics also praised the improvements to Windows 10's bundled software over Windows 8.1, Xbox Live integration, as well as the functionality and capabilities of the Cortana personal assistant and the replacement of Internet Explorer with Microsoft Edge. However, media outlets have been critical of the changes to operating system behaviours, including mandatory update installation, privacy concerns over data collection performed by the OS for Microsoft and its partners, and adware-like tactics used to promote the operating system on its release.

Microsoft initially aimed to have Windows 10 installed on over one billion devices within three years of its release; that goal was ultimately reached almost five years after release on March 16, 2020 and is by now most used version in virtually all countries. By January 2018, Windows 10 surpassed Windows 7 as the most popular version of Windows worldwide. As of August 2022, Windows 10 is estimated to have a 72% share of Windows PCs still $6.2\times$ the

share of its successor Windows 11 (and 6.0× of Windows 7). The share has been declining from a January 2022 peak of 82%,since Windows 11, which is now the second most popular Windows version in many countries. Windows 10 has a 58% share of all PCs (the rest being other Windows editions and other operating systems such as mac OS and Linux), and a 22% share of all devices (including mobile, tablet and console) are running Windows 10. On June 24, 2021, Microsoft announced Windows 10's successor, Windows 11, which was released on October 5, 2021.

Windows 10 is the final version of Windows that supports 32-bit processors (IA-32 and ARMv7-based) and devices with BIOS firmware. Its successor, Windows 11, requires a device that uses UEFI firmware and a 64-bit processor in any supported architecture (x86-64 for x86 and ARMv8 for ARM).

FEATURES

Windows 10 makes its user experience and functionality more consistent between different classes of device, and addresses most of the shortcomings in the user interface that were introduced in Windows 8. Windows 10 Mobile, the successor to Windows Phone 8.1, shared some user interface elements and apps with its PC counterpart.

Windows 10 supports universal apps, an expansion of the Metro-style first introduced in Windows 8. Universal apps can be designed to run across multiple Microsoft product families with nearly identical code including PCs, tablets, smartphones, embedded systems, Xbox One, Surface Hub and Mixed Reality. The Windows user interface was revised to handle transitions between a mouse-oriented interface and a touchscreen-optimized interface based on available input devices particularly on 2-in-1 PCs. Both interfaces include an updated Start menu which incorporates elements of Windows 7's traditional Start menu with the tiles of Windows 8. Windows 10 also introduced the Microsoft Edge web browser, a virtual desktop system, a window and desktop management feature called Task View, support for fingerprint and face recognition login, new security features for enterprise environments, and DirectX 12.

The Windows Runtime app ecosystem was revised into the Universal Windows Platform (UWP). These universal apps are made to run across multiple platforms and device classes, including smartphones, tablets, Xbox One consoles, and other devices compatible with Windows 10. Windows apps share code across platforms, have responsive designs that adapt to the needs of the device and available inputs, can synchronize data between Windows

10 devices (including notifications, credentials, and allowing cross-platform multiplayer for games), and are distributed through the Microsoft Store (rebranded from Windows Store since September 2017). Developers can allow "cross-buys", where purchased licenses for an app apply to all of the user's compatible devices, rather than only the one they purchased on (e.g., a user purchasing an app on PC is also entitled to use the smartphone version at no extra cost). The ARM version of Windows 10 allows running applications for x86 processors through 32-bit software emulation.

On Windows 10, the Microsoft Store serves as a unified storefront for apps, video content, and eBooks. Windows 10 also allows web apps and desktop software (using either Win32 or .NET Framework) to be packaged for distribution on the Microsoft Store. Desktop software distributed through Windows Store is packaged using the App-V system to allow sandboxing.

7.2. IDE

❖ VS CODE

Visual Studio Code, also commonly referred to as VS Code, is a source-code editor made by Microsoft with the Electron Framework, for Windows, Linux and mac S. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. Users can change the theme, keyboard shortcuts, preferences, and install extensions that add functionality.

In the Stack Overflow 2022 Developer Survey, Visual Studio Code was ranked the most popular developer environment tool among 71,010 respondents, with 74.48% reporting that they use it.

Visual Studio Code is a source-code editor that can be used with a variety of programming languages, including C, C#, C++, Fortran, Go, Java, JavaScript, Node.js, Python, Rust. It is based on the Electron framework, which is used to develop Node.js web applications that run on the Blink layout engine. Visual Studio Code employs the same editor component (codenamed "Monaco") used in Azure DevOps (formerly called Visual Studio Online and Visual Studio Team Services).

Out of the box, Visual Studio Code includes basic support for most common programming languages. This basic support includes syntax highlighting, bracket matching, code folding, and configurable snippets. Visual Studio Code also ships with IntelliSense for JavaScript,

Typescript, JSON, CSS, and HTML, as well as debugging support for Node.js. Support for additional languages can be provided by freely available extensions on the VS Code Marketplace.

Instead of a project system, it allows users to open one or more directories, which can then be saved in workspaces for future reuse. This allows it to operate as a language-agnostic code editor for any language. It supports many programming languages and a set of features that differs per language. Unwanted files and folders can be excluded from the project tree via the settings. Many Visual Studio Code features are not exposed through menus or the user interface but can be accessed via the command palette.

Visual Studio Code can be extended via extensions, available through a central repository. This includes additions to the editor and language support. A notable feature is the ability to create extensions that add support for new languages, themes, debuggers, time travel debuggers, perform static code analysis, and add code linters using the Language Server Protocol.

Source control is a built-in feature of Visual Studio Code. It has a dedicated tab inside of the menu bar where users can access version control settings and view changes made to the current project. To use the feature, Visual Studio Code must be linked to any supported version control system (Git, Apache Subversion, Perforce, etc.). This allows users to create repositories as well as to make push and pull requests directly from the Visual Studio Code program.

Visual Studio Code includes multiple extensions for FTP, allowing the software to be used as a free alternative for web development. Code can be synced between the editor and the server, without downloading any extra software.

Visual Studio Code allows users to set the code page in which the active document is saved, the newline character, and the programming language of the active document. This allows it to be used on any platform, in any locale, and for any given programming language.

Visual Studio Code collects usage data and sends it to Microsoft, although this can be disabled.] Due to the open-source nature of the application, the telemetry code is accessible to the public, who can see exactly what is collected.

7.3. FRONTEND

❖ HTML

The Hyper Text Mark up Language or HTML is the standard mark up language for documents designed to be displayed in a web browser. It is often assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as Java Script. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for its appearance.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes, and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as <image /> and <input /> directly introduce content into the page. Other tags such as <p> and </p> surround and provide information about document text and may include sub-element tags. Browsers do not display the HTML tags but use them to interpret the content of the page.

HTML can embed programs written in a scripting language such as JavaScript, which affects the behaviour and content of web pages. The inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), former maintainer of the HTML and current maintainer of the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997.A form of HTML, known as HTML5, is used to display video and audio, primarily using the <canvas> element, together with JavaScript.

❖ CSS

Cascading style sheets (CSS) is a style sheet language used for describing the presentation of a document written in a mark-up language such as HTML or XML (including XML dialects such as SVG, Math ML or XHTML). CSS is a cornerstone technology of the world wide web, alongside HTML and JavaScript.

CSS is designed to enable the separation of content and presentation, including layout, colors, and fonts. This separation can improve content accessibility; provide more flexibility and control in the specification of presentation characteristics; enable multiple web pages to share

formatting by specifying the relevant CSS in a separate .css file, which reduces complexity and repetition in the structural content; and enable the .css file to be cached to improve the page load speed between the pages that share the file and its formatting.

Separation of formatting and content also makes it feasible to present the same mark-up page in different styles for different rendering methods, such as on-screen, in print, by voice (via speech-based browser or screen reader), and on Braille-based tactile devices. CSS also has rules for alternate formatting if the content is accessed on a mobile device.

The name cascading comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable.

The CSS specifications are maintained by the World Wide Web Consortium (W3C). Internet media type (MIME type) text/css is registered for use with CSS by RFC 2318 (March 1998). The W3C operates a free CSS validation service for CSS documents.

In addition to HTML, other mark-up languages support the use of CSS including XHTML, plain XML, SVG, and XUL. CSS is also used in GTK widget toolkit.

❖ JavaScript

JavaScript , often abbreviated as JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. As of 2022, 98% of websites use JavaScript on the client side for webpage behaviour, often incorporating third-party libraries. All major web browsers have a dedicated JavaScript engine to execute the code on users' devices. JavaScript is a high-level, often just-in-time compiled language that conforms to the ECMA Script standard. It has dynamic typing, prototype-based object-orientation, and first-class functions. It is multi-paradigm, supporting event-driven, functional, and imperative programming styles. It has application programming interfaces (APIs) for working with text, dates, regular expressions, standard data structures, and the Document Object Model (DOM).

The ECMA Script standard does not include any input/output (I/O), such as networking, storage, or graphics facilities. In practice, the web browser or other runtime system provides JavaScript APIs for I/O.

JavaScript engines were originally used only in web browsers, but are now core components of some servers and a variety of applications. The most popular runtime system for this usage is Node.js.

Although Java and JavaScript are similar in name, syntax, and respective standard libraries, the two languages are distinct and differ greatly in design.

- Imperative and structured

- Weakly typed

- Dynamic Typing, Dynamic Run-time evaluation

- Object-orientation

- Functional

- Delegate

- Miscellaneous

- Vendor-specific extensions

❖ BOOTSTRAP

Bootstrap is a free and open-source tool collection for creating responsive websites and web applications. It is the most popular HTML, CSS, and JavaScript framework for developing responsive, mobile-first websites. Nowadays, the websites are perfect for all browsers (IE, Firefox, and Chrome) and for all sizes of screens (Desktop, Tablets, Phablets, and Phones). All thanks to Bootstrap developers – Mark Otto and Jacob Thornton of Twitter, though it was later declared to be an open-source project.

By using this framework we can easily manipulate the styling of any web page, like font style, text colour, background colour, flex, grid system, etc. Bootstrap Version 4 & Version 5 are the most popular versions. There are lots of other CSS frameworks like Tailwind CSS, Bulma, and Foundation but among them, this framework is the most popular because of below mentioned features:

• It is Faster and Easier way for Web-Development.

• It creates Platform-independent web-pages.

• It creates Responsive Web-pages.

• It designs responsive web pages for mobile devices too.

• It is a free and open-source framework.\

7.4. BACKEND

❖ NODE JS

Node.js is a cross-platform, open-source server environment that can run on Windows, Linux, Unix, mac OS, and more. Node.js is a back-end JavaScript runtime environment, runs on the V8 JavaScript Engine, and executes JavaScript code outside a web browser.Node.js lets developers use JavaScript to write command line tools and for server-side scripting. The ability to run JavaScript code on the server is often used to generate dynamic web page content before the page is sent to the user's web browser. Consequently, Node.js represents a "JavaScript everywhere" paradigm, unifying web-application development around a single programming language, as opposed to using different languages for the server- versus client-side programming.

Node.js has an event-driven architecture capable of asynchronous I/O. These design choices aim to optimize throughput and scalability in web applications with many input/output operations, as well as for real-time Web applications (e.g., real-time communication programs and browser games).

The Node.js distributed development project was previously governed by the Node.js Foundation, and has now merged with the JS Foundation to form the Open JS Foundation. Open JS Foundation is facilitated by the Linux Foundation's Collaborative Projects program

❖ MONGODB

Mongo DB was created in 2009 as an open-source, highly scalable, robust, and free No SQL database. It also has a commercial version. You can find Mongo DB's source code on Git Hub.

Mongo DB has cultivated a reputation as a versatile, flexible database and is currently used today as the backend data store of many high-profile businesses and organizations such as Forbes, Facebook, Google, IBM, Twitter, and many more.

Mongo DB is a non-relational database system. There are two primary database types: SQL (relational) and No SQL (non-relational). Relational databases store data in columns and rows. Organizations like Microsoft SQL Server Oracle and Sybase use the relational database management system (RDBMS).

On the other hand, No SQL databases store schema-less, unstructured data in multiple collections and nodes. Non-relational databases don't need fixed table sachems. No SQL databases are scaled horizontally and support limited join queries.

Incidentally, No SQL is short for "Not Only SQL."

There are four major reasons why Mongo DB is being deployed more often. They are:

- Flexibility

- Flexible Query Model

- Native Aggregation

- Schema-less model

The Benefits of Mongo DB

Mongo DB brings a host of benefits to the table. Its advantages include:

- No SQL databases are cheaper and easier to maintain. No SQL databases have features like easier data distribution, simpler data models, and automatic repair. These benefits require less administrative costs and, consequently, are less expensive.

- It's open-source and incurs fewer server costs. Open-source is free. No SQL databases use cheaper servers, so the price of data storage and processing per gig is significantly lower.

- It's easily and highly scalable. Since No SQL databases like Mongo DB expand horizontally, you can scale by adding more machines to your resource pool.

- It supports integrated caching. System memory caching boosts data output performance.

- Mongo DB has no schema hassles. You can place data into a No SQL database without requiring a predefined schema, so you can change the data model and formats without disrupting applications.

- It's user-friendly. Mongo DB offers plenty of useful features (Ad-hoc queries, aggregation, capped collection, file storage, indexing, load balancing, replication, server-side JavaScript execution) that makes it a user-friendly database.

8.PROJECT DESCRIPTION

In our project we mainly introduce three logins mainly Admin login, Teachers login and Student login. Admin login is for website creators and principal, Teacher login is for teachers and student login is for the students. Admin assigns username to students and teachers and the password is auto generated for all the three logins. Teachers and admin can mark attendance and internal marks of students and the given data will be stored in the database. Once a student or a teacher enters a website, from the second time onwards the website recognize the id of the student or a teacher and it acts according to it. Admin and teacher can record attendance of the students based on their attendance of students based on their performance in the class. Admin can add new recruitments to the website. In our website there will be a homepage.

In our collage website homepage there will be a total of six sections

- ❖ **COURSES**

- ❖ **FACULTIES**

- ❖ **EVENTS**

- ❖ **STAFFS**

- ❖ **ALUMINIES**

- ❖ **CONTACT US**

8.1.PROJECT MODULES

❖ ADMIN LOGIN

Admin login is the core of our College Dynamic Website project. Admin login is assigned to honourable principal and the website creators. In admin login admin can analyse every activity that happens in our website. In our website only admin can edit the homepage and can add information's afterwards. In our website admin can create the username to teachers and to the students. And the password given to the teachers and students is auto generated. Admin can add the internal marks of the students based on their overall performance in the class. Admin can also mark the attendance of the students and a basic attendance percentage is validated.

❖ TEACHER LOGIN

Teacher login is the 2nd class in our College Dynamic Website project. Teacher's login is assigned for our respected teachers. There is only a small difference between admin login and the teacher's login. In Teacher login username is assigned by the admin and the password is auto generated In teachers login; a teacher can add the internal marks of the students based on their overall performance in the class. Teachers can also mark the hourly attendance of the students in the class.

❖ STUDENT LOGIN

Student login is the 3rd and the last class in our College Dynamic Website project. In student login username is assigned by the admin and the password is auto generated. Student login is assigned for students. In student login; a student can view their internal marks and students can also access their attendance percentage. If a student needs to mark the reason why he is absent then he can mark the reason through this student login.

9.SOFTWARE DESIGN

9.1 DATA FLOW DIAGRAM

DFD are commonly used during problem analysis. A DFD shows the flow of data through the system. It views a system as function that transforms the input into desired output. The DFD aims to capture the transformation that takes place within a system to the input data so that eventually the output data is produced. DFD are central to most structured design. It can be used to show current physical activities and for the logical model of the system. DFD's are directed graphs in which nodes specify processing activities and arc specify data items transmitted between processing. nodes. It may be portioned into levels that represent increasing information flow and functional details. DFD can be used at any described level of abstraction. A DFD represent data flow between individual statements or blocks of statements in a routine, data flow in a distributed computing system where each nozzle represents a graphically remote processing unit. DFD do not indicate decision logic or conditions under which various processing nodes in the diagrams might be activated.

Basic DFD symbols

      A DFD flow is a route, which enables packets of data to travel from one point to another. Data may flow from a source to a processor and from a data store or process
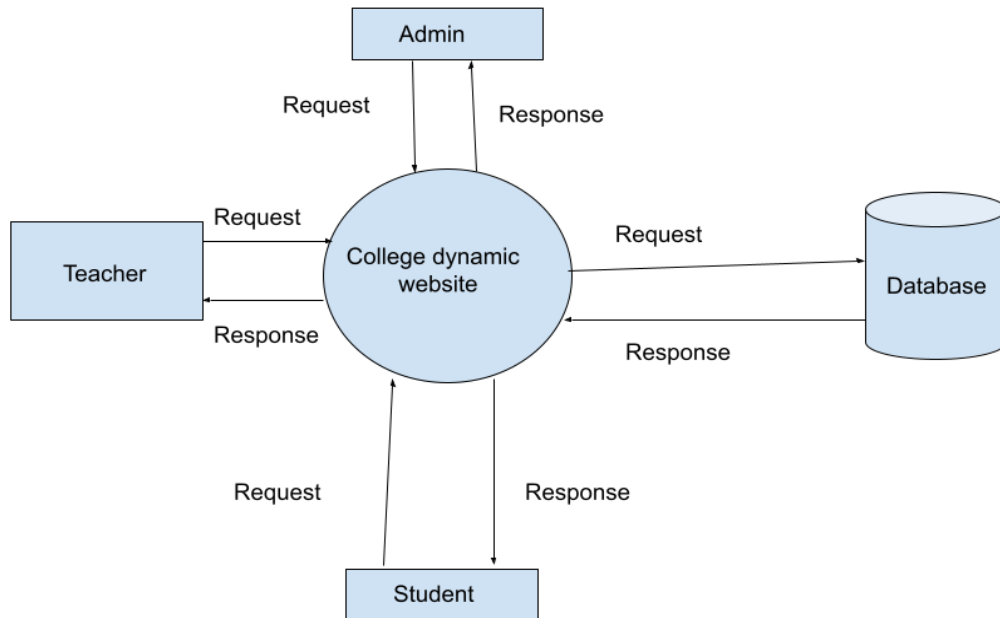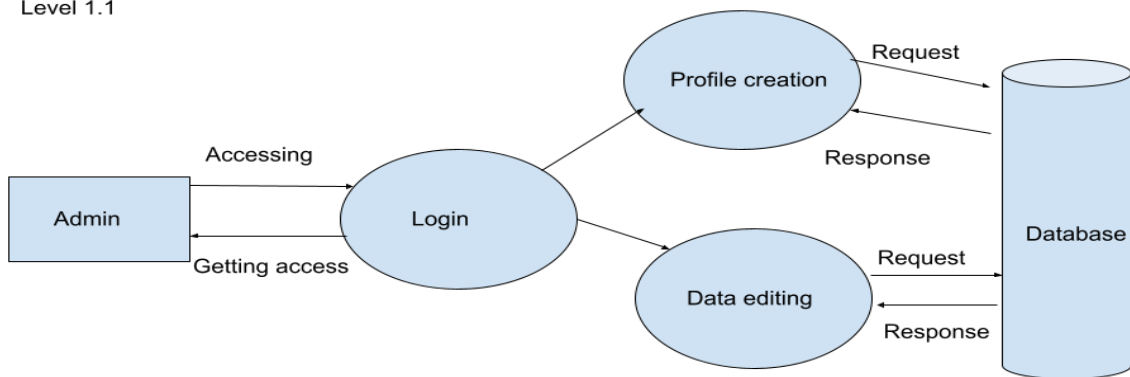
The symbols used are:

Flow

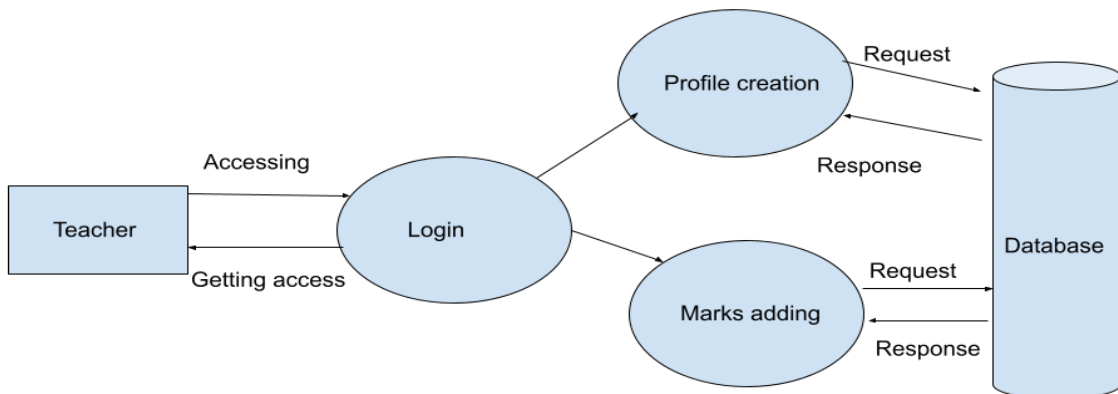Process

Input/output
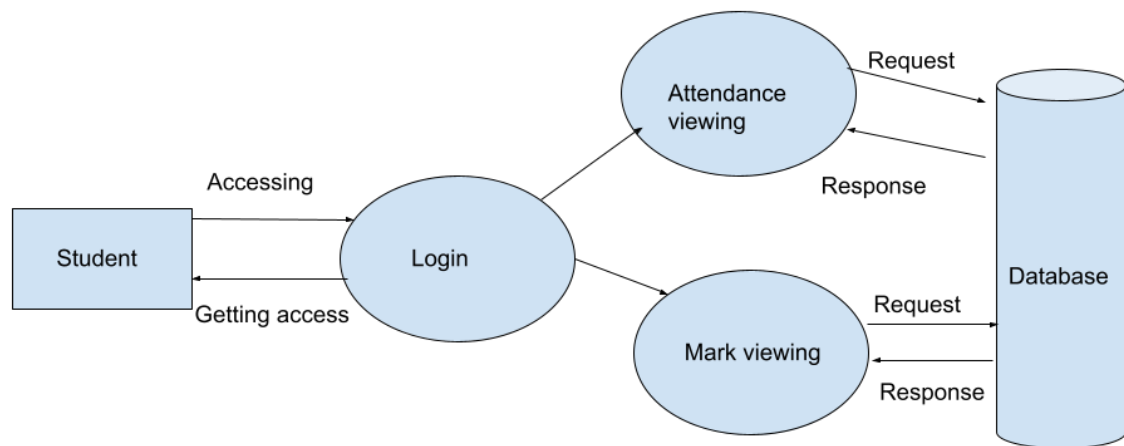
Database
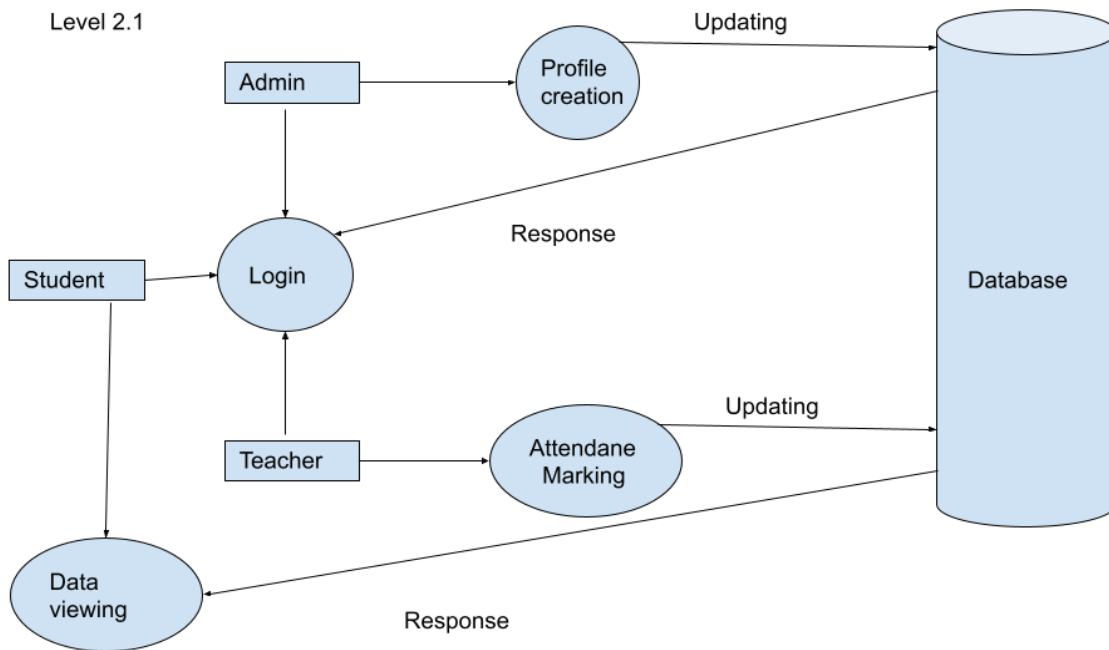
Level 0

Level 0

Level 1.1

Level 1.2 Teacher

Level 1.2

Level 1.3 Student

Level 1.3

25

Level 2

Level 2.1

Admin → Profile creation → Updating → Database

Login

Response

Student

Teacher → Attendane Marking → Updating → Database

Data viewing ← Response

9.2. DATABASE DESIGN

The database design is a logical development in the method used by the computer to access and manipulates data stored in the various parts of the computer system. Database id defined as an integrated collection of data .The overall objective in the development of database technology has been to treat data as organization resources and as an integrated while. The main objective of database is data integration, data integrity and data independence.

9.2.1   TABLES

❖ STUDENT TABLE

```
_id: ObjectId('640991f19832c680e8ad2b33')
name: "PRAYAGA K P"
course: "Bsc Computer science"
email: "aswinmass944@gmail.com"
collageid: "CZAUSCS023"
password: "$2b$10$iSi0nnJiKxgixaUx.jAMJeftVbHQopZDDB.zPDV.x36wZnBI7fdJ."
createDate: 2023-03-09T07:39:28.423+00:00
studentNumber: 7896543218
__v: 6
sem: 1
internals: Array
  0: Object
    subject: "HTML"
    test1: "3"
    test2: "3"
    attendence: "3"
    assignment: "3"
    seminar: "3"
    total: "15"
    outoff: "111"
  fee: "0"
```

❖ SUBJECT TABLE

```
_id: ObjectId('641b24b49a7bf04062d88324')
course: "Bsc Computer science"
details: Array
  0: Object
    sem: "1"
    subject: Array
      0: "HTML"
      1: "MALAYALAM"
  1: Object
__v: 1
```

❖ TEACHER TABLE

```
_id: ObjectId('640a23c57164974864c6ea56')
name: "sunitha"
email: "nuzhumaki9@gmail.com"
phoneNumber: 7654321894
password: "$2b$10$B.ho4Q6/VbQ9ykUlQlypM.nXms.97V.ooPG0yqX.eOcZr5CVLFkPm"
__v: 0
```

❖ ATTENDANCE TABLE

```
_id: ObjectId('641718968f03dabbf4104501')
course: "Bsc Computer science"
__v: 12
HTML: Array
  0: Object
     date: "17/04/2023,"
     absentees: Array
        0: "CZAUSCS023"
        1: "CZAUSCS021"
        2: "CZAUSCS022"
  sem: 1
```

9.3 SOURCE CODE

❖ HOME PAGE

```html
<!DOCTYPE html>

<html lang="en">

<head>

   <meta charset="UTF-8">

   <meta http-equiv="X-UA-Compatible" content="IE=edge">

   <meta name="viewport" content="width=device-width, initial-scale=1.0">

   <title>College of applied science,Kuzhalmannam kottayi</title>


   <link                              href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha1/dist/css/bootstrap.min.css"          rel="stylesheet"          integrity="sha384-
GLhlTQ8iRABdZLl6O3oVMWSktQOp6b7In1Zl3/Jr59b6EGGoI1aFkw7cmDA6j6gD"
crossorigin="anonymous">

   <link href="https://unpkg.com/aos@2.3.1/dist/aos.css" rel="stylesheet">

   <link rel="stylesheet" href="./css/line-awesome.min.css">

   <link rel="stylesheet" href="./css/style.css">

   <link          rel="stylesheet"          href="https://kit.fontawesome.com/ec5b5f237d.css"
crossorigin="anonymous">


</head>

<body data-bs-spy="scroll" data-bs-target=".navbar">


<!-- Navigation bar-->


<nav class="navbar navbar-expand-md flex-column-lg  navedit fixed-top" >

   <div class="container flex-lg-column bar">
```

```
<button class="navbar-toggler" data-bs-toggle="collapse" data-bs-target="#nav" aria-controls="nav" aria-label="Expand Navigation">
    <span class="navbar-toggler-icon"></span>
</button>


<div class="collapse navbar-collapse" id="nav">
  <ul class="navbar-nav flex-lg-column">
  <li class="nav-item">
    <a href="#home" class="nav-link">Home</a>
  </li>
  <li class="nav-item">
    <a href="#course" class="nav-link">Course</a>
  </li>
  <li class="nav-item">
    <a href="#facilities" class="nav-link">Facilities</a>
  </li>
  <li class="nav-item">
    <a href="#events" class="nav-link">Events</a>
  </li>
  <li class="nav-item">
    <a href="#staff" class="nav-link">Staff</a>
  </li>
  <li class="nav-item">
    <a href="#alumnis" class="nav-link">Alumnis</a>
  </li>
```

```html
        <li class="nav-item">

          <a href="#contact" class="nav-link">Contact us</a>

        </li>

         </ul>

      </div>


   </div>

  </nav>


<!--//Navigation  bar-->


<!--Content wrapper-->

<div id="content-wrapper">


 <section id="home">


<div class="container">

   <div class="row">

     <div class="col">

       <img class="ihrd-image" src="./images/1671454522604.png" alt="not working">


       <button class="login-btn">Login</button>


     </div>

   </div>
```

```
    <div class="row">

        <h1     class="welcome-header">Welcome     to     College     of     applied     science
kuzhalmannam,<br> kottayi</h1>

    </div>


    <div class="row">

        <p class=" text-light">

            The College of Applied Science, Kuzhalmannam, Kottayi managed by Institute

            of Human Resources Development (IHRD), a Kerala Government Undertaking is
situated in Kottayi

            village near by Kottayi Panchayat Office in Palakkad district. This is a self-financing
institution

            and is affiliated to the University of Calicut. Established in July 2008 – the

            college offers UG programs in B.Sc. Electronics, B. Sc. Computer Science and B
Com with Computer

            Applicationunder Choice Based Credit Semester System (CUCBCSS) .

        </p>

    </div>


    </section>


<!--Courses-->
    <section id="course" class="full-height">

        <div class="container">

            <div class="row gy-3">

                <div class="col-md-4">
```

```
<div>

    <h2>Bsc Computer science</h2>

</div>

<div class="courses p-4 bg-base rounded-4 shadow-effect">

    <div class="iconbox rounded-3">

        <i class="fa-sharp fa-solid fa-computer"></i>

    </div>

    <p class="text-light course-dis mt-2">Candidates who have passed (eligible
<br> for higher studies)

        the HSE or an

        <br> equivalent

        examination with <br> Mathematics / Statistics / Computer Science/ <br>
Computer Application/

        Information Technology/

        Additionalb <br> Mathematics as one of the subjects <br> are eligible for
admission.

    </p>

</div>



</div>




<div class="col-md-4">


<div>

    <h2>Bsc Electronics</h2>

</div>
```

```
<div class="courses p-4 bg-base rounded-4 shadow-effect">

  <div class="iconbox rounded-3">

    <i class="fa-solid fa-microchip"></i>

  </div>

  <p class="text-light course-dis mt-2">Students who have  studied <br>
Electronics/Physics/Mathematics

     as one of the optional subjects

     at <br> Higher Secondary Examination level <br> and passed (eligible for
higher studies)

     are eligible for <br> admission. <br>

     (U.O.No.GA I/J1/2924/2005(2) dated 28.07.2005)

  </p>

</div>


</div>




<div class="col-md-4">


  <div>

    <h2>B.com with computer Application</h2>

  </div>

  <div class="courses p-4 bg-base rounded-4 shadow-effect">

    <div class="iconbox rounded-3">

      <i class="fa-solid fa-money-check"></i>

    </div>
```

```
                <p class="text-light course-dis mt-2">A pass (eligible for higher studies) in
the

                Higher Secondary Examination or its equivalent,

                with at least one Commerce subject, is the eligibility for admission to the
B.Com. Degree programme.

                Candidates who have not taken at least one Commerce subject for Higher
Secondary or

                an equivalent examination should get at least 45% (in 6 subjects) in that
examination

                to become eligible to seek admission to B.Com programme. A concession
of 5% will be given to OBC/OEC candidates.

                The SC/ST candidates need get only a pass (eligible for higher studies
(U.O.No.

                GA1/A2/1658/2007 dated 28.2.2008)
            </p>
        </div>


        </div>



    </div>

  </div>

 </section>
<!--//Courses-->


<!-- Facilities-->
<section id="facilities" class="full-height">
```

```
<div class="container p-5 d-grid gap-4">

  <div class="facl d-lg-flex gap-3">

    <img    class="Img-csLab    rounded-3"    src="./images/computerLab.jpg"    alt="not-
working">

    <p class="fac-discrip">A degree in computer science prepares the student to participate,
<br>

      direct and benefit from the advantages of the computer revolution already under way.
<br>

        The Department of Computer Science is having computer lab with fully networked
computers <br>

        with internet browsing facility that allow the students to gain

        a sound practical knowledge & live experience. <br>

       The Computer Laboratory is used by students to

      study the various applications of computers and other information technologies</p>


  </div>


  <div class="facl d-lg-flex gap-3 ">

    <img    class="Img-csLab    rounded-4"    src="./images/electronicsLab.jpg"    alt="not-
working">

    <p class="fac-discrip">The Functioning of the General Library of College of Applied
Science Kuzhalmannam, <br>

      Kottayi has started along with the college inception itself. <br>

      General Library is open to all students and members of staff of the college. <br>

      A well stacked library with Extensive collection of Books,Journals and Magzines</p>


  </div>
```

```
    <div class="facl d-lg-flex gap-3  ">

      <img class="Img-Lib rounded-4" src="./images/lib.jpg" alt="not-working">

      <p class="fac-discrip">The Functioning of the General Library of College of Applied
Science Kuzhalmannam, <br>

        Kottayi has started along with the college inception itself. <br>

         General Library is open to all students and members of staff of the college. <br>

        A well stacked library with Extensive collection of Books,Journals and Magzines</p>


    </div>


</div>
</section>
<!--//Facilities-->


<!--Staffs-->
<section id="staff" class="full-height ">
  <div class="container">
    <div class="row ">


        <div class="col">


          <div class="rounded-4 staff-base text-center p-2">
            <img class="rounded-4 staff-img" src="./images/Durga.png" alt="">
            <div class="para">
              <h6>Durga jayakrishnan</h6>
```

```
            <p class="text-light">(Professor)</p>

          </div>

        </div>

      </div>


      <div class="col">


        <div class="rounded-4 staff-base text-center p-2">

          <img class="rounded-4 staff-img" src="./images/principal.jpg" alt="">

          <div class="para">

            <h6>Sidique MM</h6>

            <p class="text-light">(Principal)</p>

          </div>

        </div>

      </div>


      <div class="col">


        <div class="rounded-4 staff-base text-center p-2">

          <img class="rounded-4 staff-img" src="./images/Shafila.png" alt="">

          <div class="para">

            <h6>Shafila E salah</h6>

            <p class="text-light">(Professor)</p>

          </div>

        </div>

      </div>
```

```
          </div>

      </div>

  </section>

  <!--//Staffs-->


  <!--Alumnis-->

  <section id="alumnis" class="full-height">

      <div class="container">

          <div class="row">


              <div class="col">

                  <div class="alumnis-base rounded-3 p-2">

                      <img class="alumni-img" src="./images/Sundar Pichai.jpeg" alt="">

                      <div class="dics-alumnis">

                          <p class="text-light">CEO of Google and Alphabets <br> <span class="fw-
bold"> -Sundar pichai </span></p>


                      </div>

                  </div>

              </div>


              <div class="col">

                  <div class="alumnis-base rounded-3 p-2">

                      <img class="alumni-img" src="./images/Kylin mbappe.jpg" alt="">

                      <div class="dics-alumnis">
```

```html
            <p  class="text-light">Professional  football  player<br>  <span  class="fw-
bold"> -Kylian Mbappe </span></p>


          </div>

        </div>

      </div>


      <div class="col">
        <div class="alumnis-base rounded-3 p-2">

          <img class="alumni-img" src="./images/Shafila.png" alt="">

          <div class="dics-alumnis">

            <p  class="text-light">College  of  applied  science  professor<br>  <span
class="fw-bold"> -Shafila E salah </span></p>


          </div>

        </div>

      </div>




    </div>

  </div>


</section>


<!--//Alumnis-->

<!--Contact us-->
```

```html
<section id="contact" class="full-height bg-dark">

   <div class="container">


      <div class="row justify-content-center text-center pb-4">


         <div class="cont-header col-lg-8 pb-0">

          <h6 class="text-brand">Contact us</h6>

          <h2 class="text-header">You can sent you Querries to us</h2>

         </div>


      </div>



         <form action="#" class="row offset-md-4  gy-3 form-set">


            <div class="form-group ">

               <input type="text" class="form-control" placeholder="Enter your name...">

            </div>

            <div class="form-group">

             <input type="email" class="form-control" placeholder="Enter your e-mail...">

            </div>

            <div>

             <textarea name="" class="form-control col-12 d-grid" placeholder="Enter  your
message"></textarea>

            </div>
```

```
        <div>

            <button    type="submit"    value="submit"    class="sub-button    rounded-2
">Send</button>

        </div>




    </div>

  </div>

</section>


<!--// Contact us-->


</div>

<!--//Content wrapper-->

<script src="https://unpkg.com/aos@2.3.1/dist/aos.js"></script>

<script                              src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha1/dist/js/bootstrap.bundle.min.js"                              integrity="sha384-
w76AqPfDkMBDXo30jS1Sgez6pr3x5MlQ1ZAGC+nuZB+EYdgRZgiwxhTBTkF7CXvN"
crossorigin="anonymous"></script>

<script                            src="https://kit.fontawesome.com/ec5b5f237d.js"
crossorigin="anonymous"></script>

</body>

</html>
```

I.   CSS

```
:root{
```

```css
    --background-color:#BEB4EA;

    --sidebar-width:200px;

    --select-color:#6ADBFF;

    --Button-color:#676ABC;

     --course-bg:#987AC9;

     --icon-background:rgb(222, 191, 236);

     --course-hover:rgb(111, 102, 157);

    --tchr-col-1:#D0B48C;

    --tchr-col-2:#5691B1;

    --tchr-col-3:#C3B492;

    --tchr-shadow:rgb(231, 209, 137);

}


body{

    background-color: var(--background-color);

}



h1,h2,h3,h4,h5,h6{

    color: #fff;

    font-weight: 700;

}


.full-height{


    min-height: 100vh;
```

```css
    height: 100%;

    padding-top: 80px;

    padding-bottom: 80px;

    border-radius: 2px solid rgb(0, 0, 0);


}


.shadow-effect{


    transition: all 0.5s;



}
.shadow-effect:hover{
    box-shadow: -4px 4px 0 0 var(--Button-color);
}


.iconbox{
    height: 60px;

    width: 60px;

    display: flex;

    font-size: 32px;

    align-items: center;

    justify-content: center;

    background-color:var(--icon-background) ;

}
```

```css
/Navbar/

@media(min-width:992px){

   .navbar{

   min-height: 100vh;

   width: var(--sidebar-width);

   background:          linear-gradient(#6B429E,#6B429E),url(../images/wepik-photo-mode-
2022930-131010.png);



   }

     #content-wrapper{

      padding-left: 200px;

   }


}
.navedit{

   font-family: 'Franklin Gothic Medium', 'Arial Narrow', Arial, sans-serif;




}
.navbar{

   background-color: var(--Button-color);

}
```

```css
.navbar .nav-link{

   font-weight: 700;

   text-transform: uppercase;

   color: #fff;

}


.navbar .nav-link:hover{

   color: var(--select-color);

}

.navbar .nav-link.active{

   color:var(--select-color);

}


/* --//Navebar */



/* Home page*/

.ihrd-image{

   width: 100%;

   height: auto;



}


.welcome-header{

   font-family: 'Franklin Gothic Medium', 'Arial Narrow', Arial, sans-serif;
```

```css
    color: black;

}

.login-btn{

width: 90px;

height: 50px;

font-weight: 200px;

font-family: 'Times New Roman', Times, serif;

padding: 10px 20px;

background-color:var(--Button-color);

color: #fff;

border-radius: 8px;

border: none;

position: absolute;

top: 10px;

right: 10px;


}

.login-btn:hover,.login-btn:focus{

    background-color: #383b95;

    color: rgb(206, 199, 199);

}
/* --// Home page--* /


/* Course */


.bg-base{
```

```css
    background-color: var(--course-bg);


}


.bg-base:hover{

    background-color: var(--course-hover);

}



.course-dis{

    font-family: Cambria, Cochin, Georgia, Times, 'Times New Roman', serif;

}


/--// Course/


/* Facilities*/


.Img-csLab{

    height: 300px;

    width: auto;

}

.Img-csLab:hover{

    opacity: 70%;


}
```

```css
    /* Lab image*/

.Img-Lib{

   height: 260px;

   width: auto;


}

.Img-Lib:hover{

   opacity: 70%;

}


/* Lab image*/


.fac-discrip{

   font-weight: 500;

   font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;

}

/--//Facilities/


/Staffs/


#staff{


   align-items: center;

   justify-content: center;
```

```css
}
.staff-base{

  background-color: var(--tchr-col-1);

  position: absolute;

}
.staff-base:hover{

  box-shadow:  -4px 4px 0 0 var(--tchr-col-3);

}


.staff-img{

  height: 200px;

  width: auto;

}



/*--//Staffs--*/


/Alumnis/

.alumnis-base{

  background-color: var(--tchr-col-3);

  position: absolute;

}
.alumnis-base:hover{

  box-shadow: -4px 4px 0 0 var(--course-bg);
```

```css
}




.alumni-img{

  height: 200px;

  width: auto;

  opacity: 90%;

}

.alumni-img:hover{

  opacity: 100%;

}



/--//Alumni base/



/* Contact us*/



.text-brand{

  font-family: monospace;

  color: #FFFFFF;



}

.text-header{

  font-family: system-ui, -apple-system, BlinkMacSystemFont, 'Segoe UI', Roboto, Oxygen,
Ubuntu, Cantarell, 'Open Sans', 'Helvetica Neue', sans-serif;

  color: whitesmoke;
```

```
}

#contact .form-control{

   color: var(--color-iconColor);

   background-color:#636497;

   border-color: #0D0B0E;

}

#contact .form-control::placeholder{

   color: aliceblue;

}

#contact .form-control:focus{

   color: #6ADBFF;

   box-shadow: none;

}

.sub-button{

   color: #fafafa;

   background: #7d56ad;

   width: 100px;

   height: 40px;

   margin-left: 23vh;

}

#contact .sub-button:hover{

   color: #bac1e8;

   background:#6B429E ;

}

/Contact header/
```

```css
.cont-header{

    margin-top: 30vh;

}

.form-set{

    width: 450px;

    }

/* contact us*/
```

II. JS

```javascript
AOS.init();

// You can also pass an optional settings object

// below listed default settings

AOS.init({

  // Settings that can be overridden on per-element basis, by `data-aos-*` attributes:

  offset: 120, // offset (in px) from the original trigger point

  delay: 0, // values from 0 to 3000, with step 50ms

  duration: 700, // values from 0 to 3000, with step 50ms

  easing: 'ease', // default easing for AOS animations

  once: false, // whether animation should happen only once - while scrolling down

  mirror: false, // whether elements should animate out while scrolling past them

  anchorPlacement: 'top-bottom', // defines which position of the element regarding to
window should trigger the animation

});
```

10.SYSTEM TESTING

System testing of software is testing conducted on complete, integrated system to evaluate the system compliance with its specified requirements. System testing falls within the scope of black box testing, and such, should require no knowledge of the inner design of the code or logic. As its input, all of the "integrated" software components that have successfully passed integration testing and also the software system itself integrated with any applicable hardware system. The purpose of integration testing is to detect any inconsistencies between the software units that are integrated together or between any of the assemblages and the hardware. System testing is more limiting type of testing; it seeks to defects both within the "inter-assemblages" and also within the system as whole. System testing is actually done to the entire system against the functional Requirement Specification (FRS) or the System Requirement Specification (SRS).Moreover, the system testing is an investigatory testing phase, where the focus is to have almost a destructive attitude and test not only the design, but also the behaviour and even the believed expectations of the customer. It is also intended to test up to the and beyond the bounds defined in the software /hardware requirements specification. One could view system testing as the final destructive testing phase before user acceptance testing.

- Alpha testing
- Acceptance testing
- Unit testing
- Integration testing
- System testing
- Validation testing

10.1 ALPHA TESTING

It is the most common type of testing used in the Software industry. The objective of this testing is to identify all possible issues or defects before releasing it into the market or to the user. Alpha testing is carried out at the end of the software development phase but before the Beta Testing. Still, minor design changes may be made as a result of such testing. Alpha

testing conducted at the developer's site. Inhouse virtual user environment can be created for this type of testing.

10.2 ACCEPTANCE TESTING

An Acceptance test is performed by the client and verifies whether the end to end the flow of the system is as per the business requirements or not and if it is as per the needs of the end user. Client accepts the software only when all the features and functionalities work as expected.

10.3 UNIT TESTING

It is done to check the individual part of the system each module should be separately tested for errors. So we design test for each module, here we have to consider the following points such as, boundary conditions, independent path, error handling methods and exceptional handling. In the organizations we are required to test our functions before we commit the updating the build. After releasing a build the testing team also tests the new functionalities for errors.

10.4 INTEGRATION TESTING

Integration testing deals with the handling of interfacing errors, there may arise a lot of chances for errors at a time of integration, because different programmers design different modules. In my system, system testing is conducted on complete, integrated system to evaluate the system compliance with its specified requirements. It is conducted within the scope of all variables and the values. The database has also checked for errors and can see that no errors are happening for different values of input. Any user without prior knowledge can operate the system. Team leader is responsible for integration in our system. After committing the individual work he will integrate all the changes and check for the errors and bugs, if found any it will notify with concerning person and it has been fixed.

10.5 SYSTEM TESTING

When a system is developed it is hoped that it perform properly. System testing is the process of checking if the developed system is working according to the original objectives and requirements. In this I have done system testing for ensuring whether the software is friendly to the user. Also we have checked that when we are giving the correct input whether the

output is correct or not. Also we have tested how the system will react to the incorrect inputs. In our organization there is a separate testing team available for testing. Before release of client product they will lock the work and test for any error and report it.

11.SYSTEM IMPLEMENTATION & MAINTANANCE

11.1.SYSTEM IMPLEMENTATION

Implementation is the process of building the web according to its design. A web implementer creates hypertext markup language (HTML), Common Gateway Interface (CGI) programs, and/or Java scripts and/or applets.

The implementation process resembles software development because it involves using a specific syntax for encoding web structures or a programming language in a formal language in computer files. Although there are automated tools to help with the construction of HTML documents, a thorough grounding in HTML enriches the web implementer's expertise.

11.2.SYSTEM MAINTANANCE

Maintenance means restoring something to its original conditions. Enhancement means adding, modifying the code to support the changes in the user specification. System maintenance conforms the system to its original requirements and enhancement adds to system capability by incorporating new requirements.

Thus, maintenance changes the existing system, enhancement adds features to the existing system, and development replaces the existing system. It is an important part of system development that includes the activities which corrects errors in system design and implementation, updates the documents, and tests the data.

12.CONCLUSION & FUTURE ENANCEMENT

12.1.CONCLUSION

This website will be very useful for principal; Teachers and students. Existing system is very boring and annoying. Existing system is made of fixed codes and unless the site developer makes changes, nothing will change on the page. Think of like a brochure for a collage. Static sites give a lot of the same type of information that you could get from a brochure, but it can't just change itself. By the time of implementation of this project, everything from the existing system will change. Proposed system is a site that generates pages in real time, responding to dynamic characteristics such as screen size and device type. The structure and content of a dynamic web page are flexible, allowing you to customize the end-user's experience based on the browser or request.

12.2.FUTURE ENHANCEMENT

Future progress is very bright for our project. There are 2 possible ways to improve the future. If admin finds best programming language to create this website. Admin can change it. Admin can add additional features to the website as per their choice and purpose.
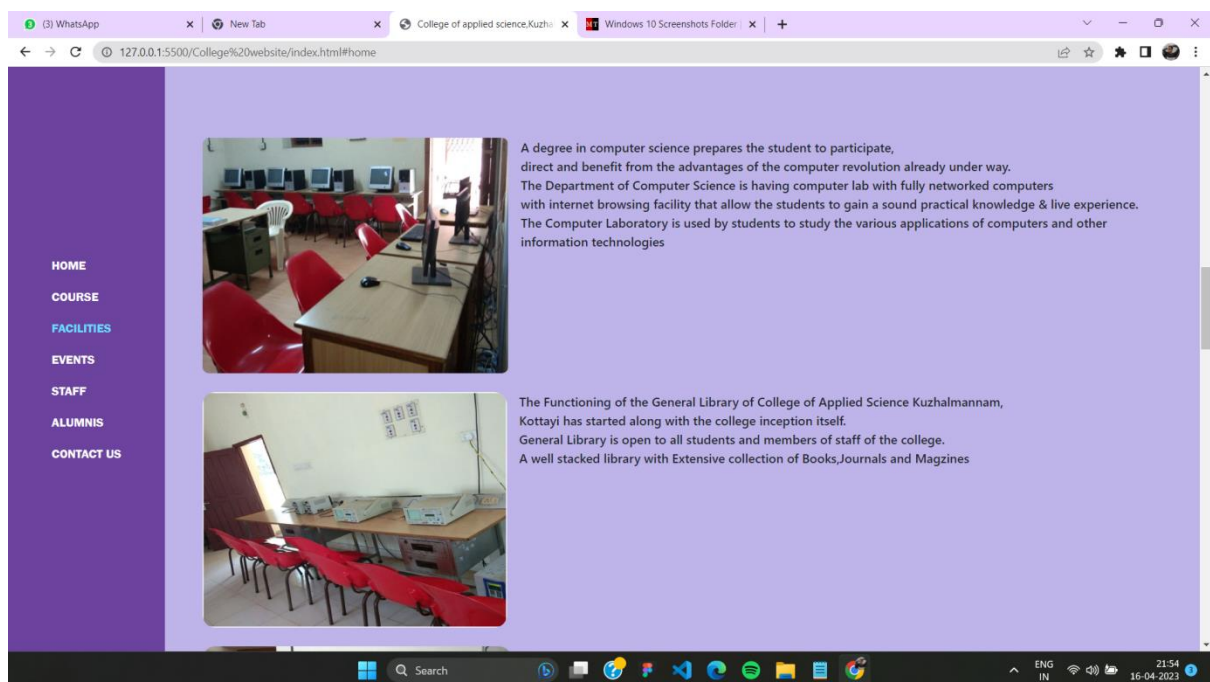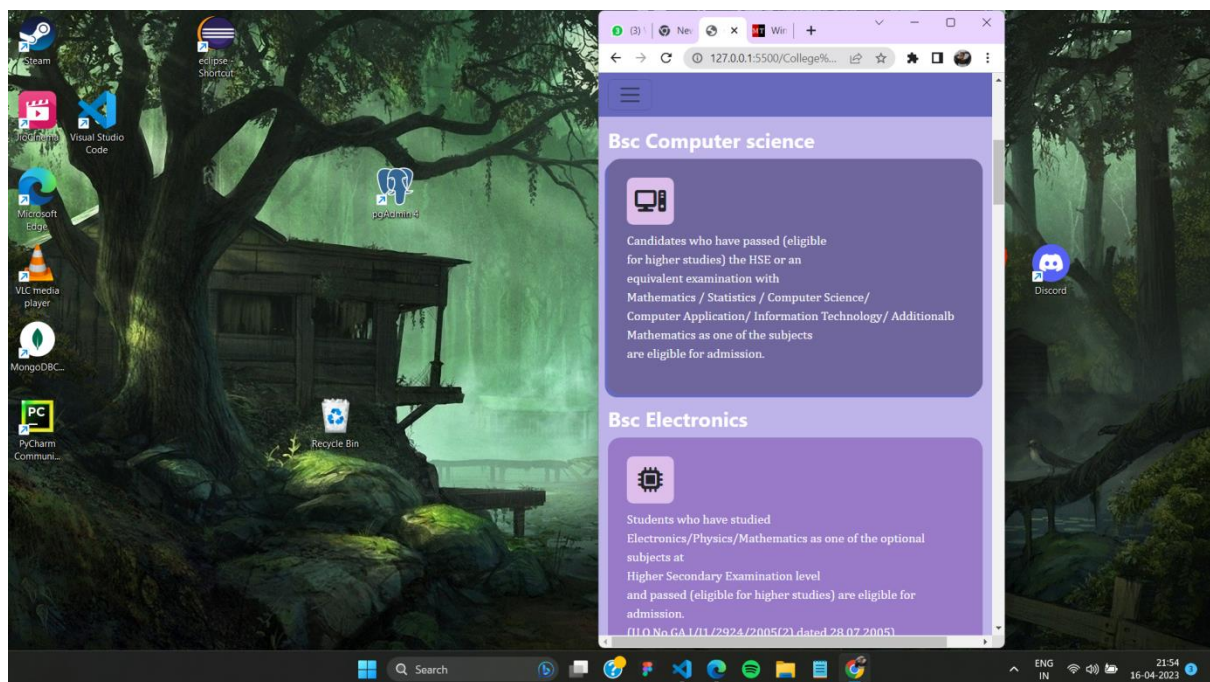
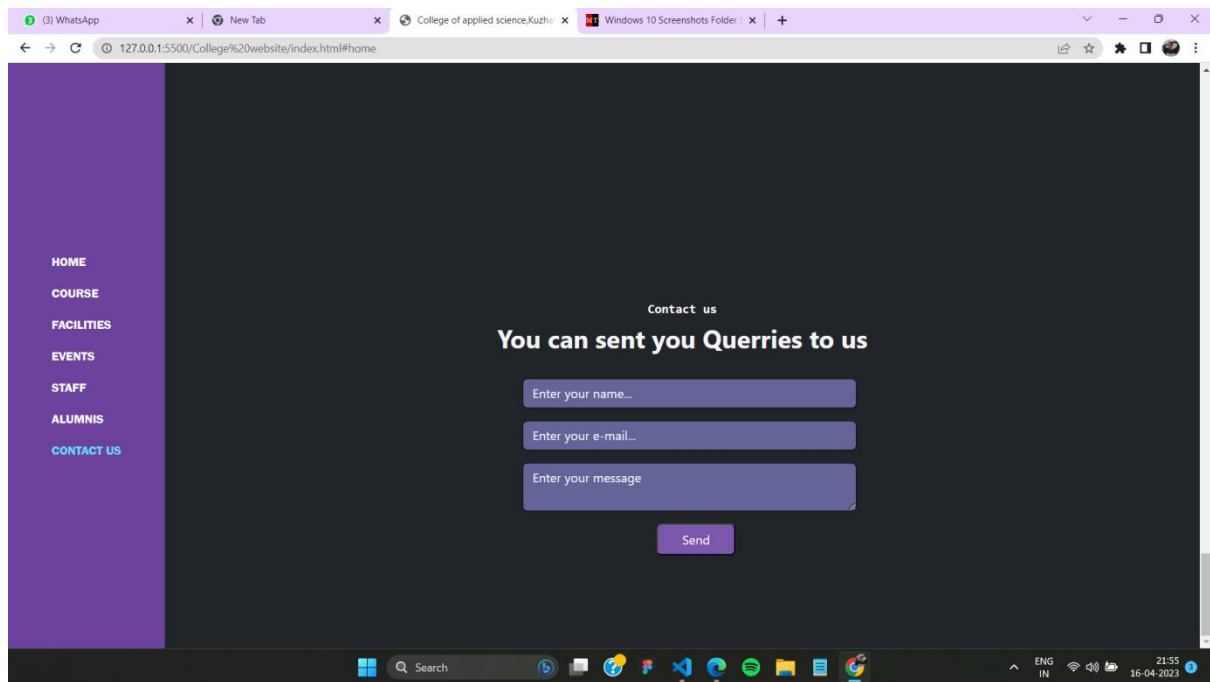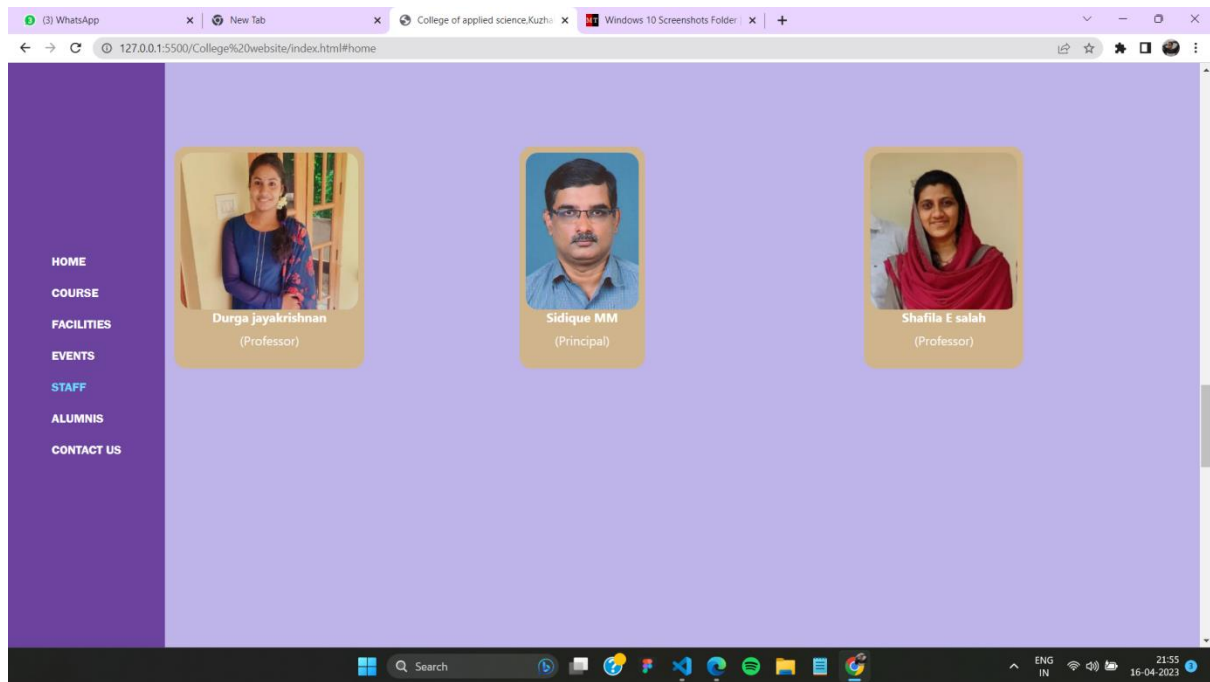Because our project is a Dynamic website
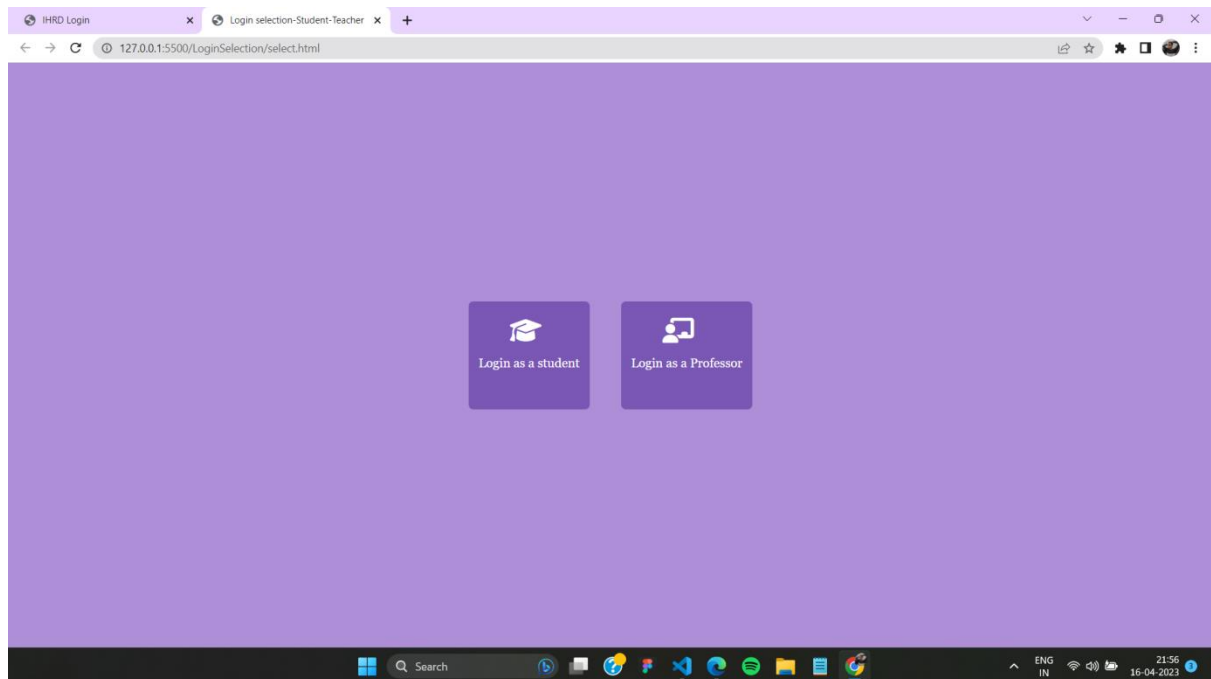
- Biometric Attendance
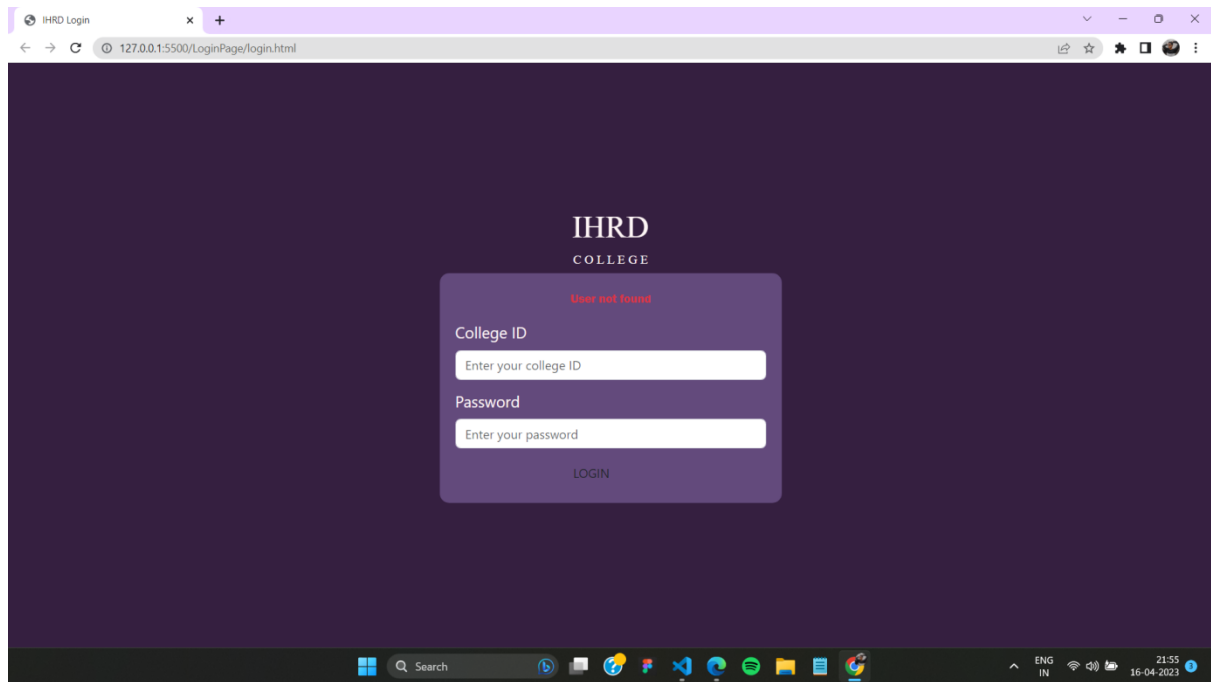- Fee payment portal
- Chat Bot.

13.APPENDIX

13.1. SCREENSHOTS
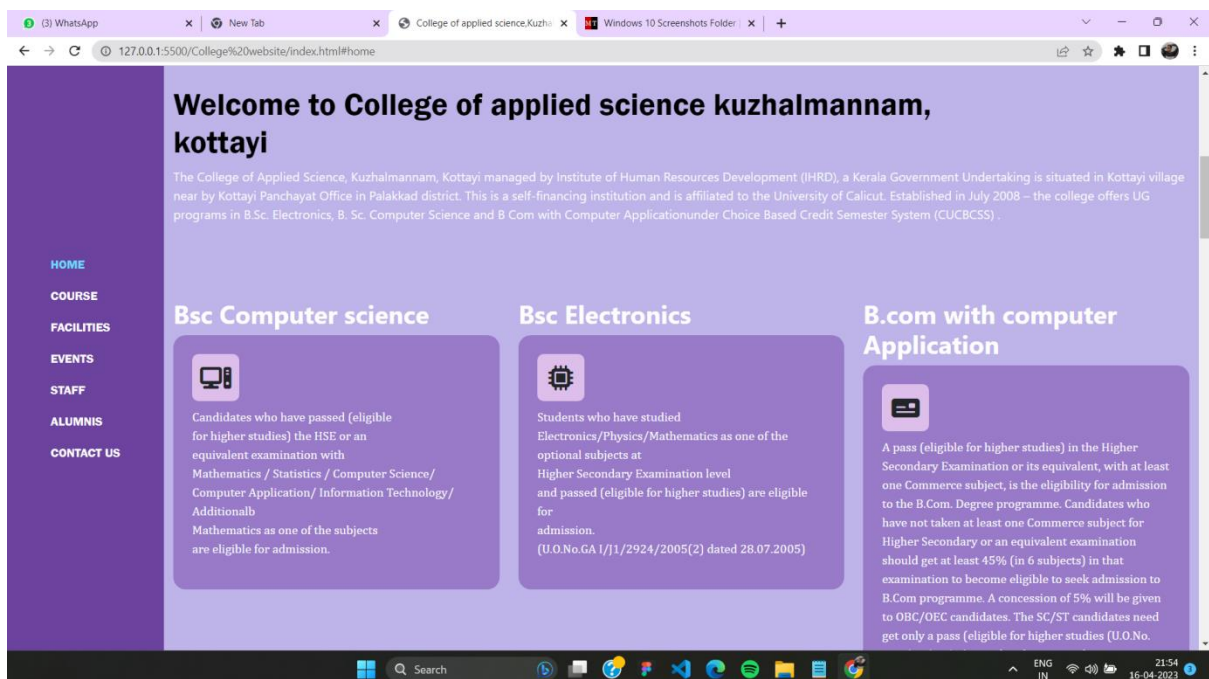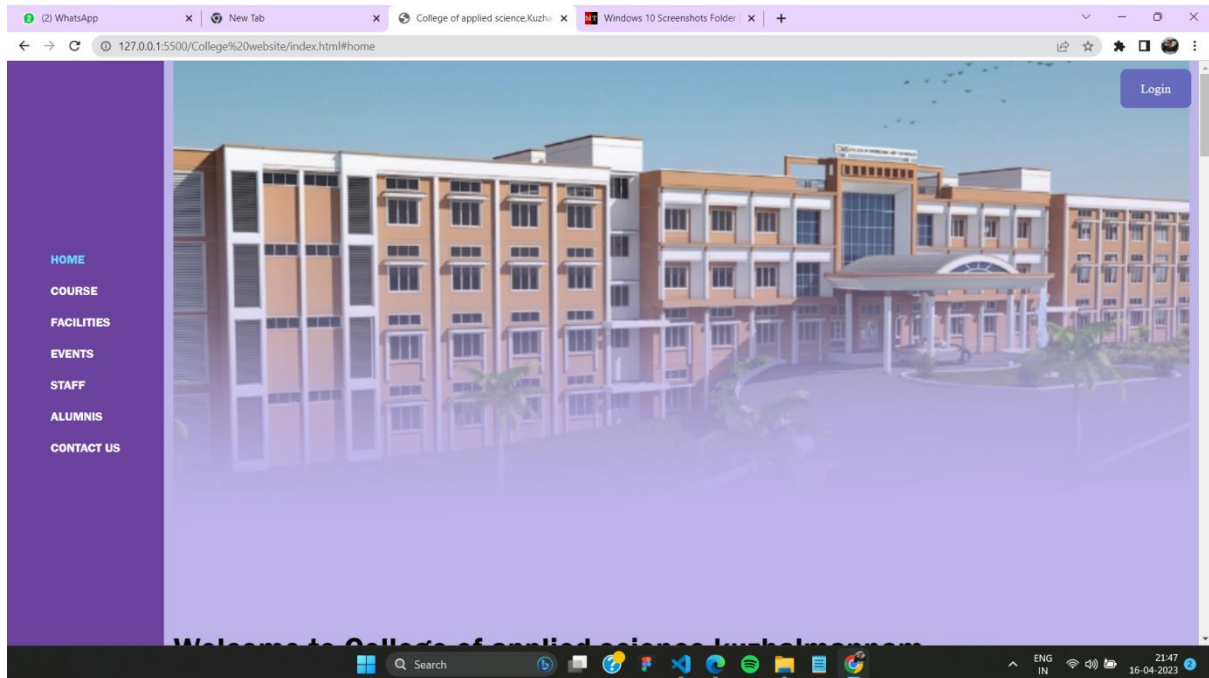
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