E-MAGAZINE

PROJECT REPORT

submitted by

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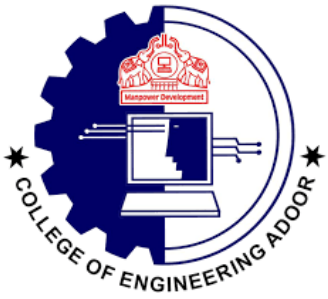
to

APJ Abdul Kalam Technological University

in partial fulfillment of the requirements for the award of B.Tech Degree in

Computer Science & Engineering



DEPARTMENT OF COMPUTER ENGINEERING

COLLEGE OF ENGINEERING ADOOR,PATHANAMTHITTA

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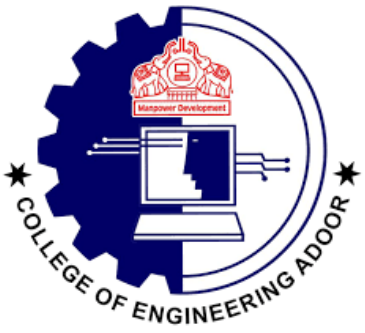

CERTIFICATE

This is to certify that, the project report titled ***E-MAGAZINE*** *is a bonafide record of the* ***CSL 334 PROJECT*** *presented by* ***MOHEMMAD ALI*** *(ADR20CS033) ,* ***SNEHA K S*** *(ADR20CS047),* ***AMRITHA TAVEENDRAN*** *(LADR20CS056) six Semester B. Tech. Computer Science and Engineering student, under our guidance and supervision, in partial fulfillment of the requirements for the award of the degree,* ***B. Tech. Computer Science and Engineering*** *of* ***APJ Abdul Kalam Technological University****.*

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Guide	Project Coordinator	
Assistant Professor	Assistant Professor	
Dept.of CS	Dept.of CS	

DECLARATION

We undersigned hereby declare that the project report "**E-MAGAZINE**" , submitted for partial fulfillment of the requirements for the award of degree of Bachelor of Technology of the APJ Abdul Kalam Technological University, Kerala is a bonafide work done by us under supervision of **Smt. Jyothi Vijayan**. This submission represents our ideas in my own words and where ideas or words of others have been included,We have adequately and accurately cited and referenced the original sources also declare that, have adhered to ethics of academic honesty and integrity and have not misrepresented or fabricated any data or idea or fact or source in our submission.we understand that any violation of the above will be a cause for disciplinary action by the institute and/or the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been obtained. This report has not been previously formed the basis for the award of any degree, diploma or similar title of any other University.

Place: Adoor

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MOHEMMAD ALI (ADR20CS033)

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This work would not have been possible without the support of many people. First and foremost, I give thanks to Almighty God who gave us the inner strength, resources, and ability to complete our project successfully.

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ABSTRACT

This project aims to revolutionize an existing blogging platform by addressing its shortcomings and enhancing user engagement and content quality. The current system lacks critical features such as user ”likes” and comments, diminishing interaction and community building. Furthermore, the absence of an approval mechanism permits unregulated content posting, leading to potential misuse and reduced credibility. The proposed solution involves the development of a new blogging application that empowers users with likes, comments, and admin approval functionalities. This transformation promises a dynamic and engaging user experience, fostering a vibrant online community while ensuring content integrity and relevance. The project's successful execution underscores the significance of creating a user-centric and responsible digital space.

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CHAPTER 1

INTRODUCTION

E-MAGAZINE is a platform for students to exhibit their talent through the online college magazine website by submitting their articles. We appreciate the power of social media in this digital era.It is a boon to students as hard copies leads to wastage of paper and are cumbersome to carry. It's the age where people prefer writing blogs and staying in touch through the internet. It provides our youngsters to speak their mind out and thus instills in them a sense of independence and individuality.

In the context of the E-Magazine project, conducting a thorough feasibility study is essential to make informed decisions and ensure the project's successful execution. The feasibility study typically assesses the following dimensions:

1. **Technical Feasibility:** This dimension evaluates whether the technology required for the project is available and feasible to implement. Here it involves assessing the technical capabilities of the chosen development tools (Angular, TypeScript, HTML, CSS) to build the platform. It also considers the compatibility of these technologies with different devices and browsers to ensure a seamless user experience.
2. **Financial Feasibility:** Financial feasibility assesses whether the project is financially viable and within the budget constraints. It involves estimating the costs associated with development, hosting, maintenance, and any potential licensing fees for third-party tools or services. The study also considers potential revenue streams, such as advertising or premium subscriptions, to determine if the project can generate sustainable income.
3. **Operational Feasibility:** Operational feasibility evaluates whether the project aligns with the organization's goals, resources, and existing processes.It involves analyzing whether the platform can be integrated into the existing educational ecosystem, whether there are sufficient resources to manage user engagement, and whether the project aligns with the institution's mission.
4. **Environmental and Ethical Feasibility:** In the case of the E-Magazine project, it might involve evaluating the platform's carbon footprint, its alignment with sustainable practices, and ensuring that user-generated content adheres to ethical guidelines.

1.1 Project Area

In the modern educational landscape, the fusion of technology and academia has paved the way for innovative platforms that transcend the limitations of physical boundaries. This project focuses on the development of an E-Magazine platform, designed to function as an online college magazine, providing students with an interactive space for self-expression, knowledge sharing, and community building.

Traditional college magazines have long served as outlets for students to exhibit their creativity, intellect, and individuality. However, the limitations of print media have constrained the reach and engagement of these magazines. The emergence of digital platforms and the proliferation of the internet have presented an opportunity to revolutionize the concept of college magazines. An E-Magazine, in this context, aims to capitalize on the benefits of online spaces by creating an inclusive and dynamic platform that transcends geographical constraints.

The project's scope encompasses the entire lifecycle of the E-Magazine platform, from user registration to content creation, publication, engagement, and administration. The primary focus lies on providing a seamless and intuitive user experience, encouraging students to become active contributors and readers of the platform.

1.2 Purpose

The purpose of the E-Magazine project is to create a dynamic and engaging digital platform that serves as an online college magazine, facilitating a space where students can express their ideas, insights, and talents while fostering a sense of community and intellectual exchange. The project aims to achieve the following objectives:

1. **Empower Student Voices:** The primary purpose of the E-Magazine is to empower students by providing them with a platform to voice their thoughts, opinions, and creativity. It serves as a channel for students to showcase their writing skills, share their academic perspectives, and contribute to meaningful discussions.
2. **Facilitate Knowledge Sharing:** The platform intends to facilitate the sharing of knowledge and ideas among students. By allowing students to write and publish blogs on a wide range of topics, the E-Magazine becomes a repository of diverse insights that can enrich the educational experience of both writers and readers.
3. **Encourage Creative Expression:** Creativity is a vital component of the learning process.

The E-Magazine project encourages students to think critically and express themselves creatively, whether through written articles, visual content, or multimedia presentations. This purpose aligns with the broader goal of nurturing well-rounded individuals.

4. **Create a Virtual Community:** The E-Magazine aims to create a sense of belonging and camaraderie among students, transcending physical limitations. By bringing students together on a digital platform, it fosters a virtual community where students can engage, collaborate, and learn from one another.

5. **Promote Critical Thinking:** Writing for the E-Magazine encourages students to think critically about the topics they choose to explore. Analyzing and presenting their ideas in a coherent and persuasive manner sharpens their critical thinking skills and helps them develop a deeper understanding of the subjects they write about.

CHAPTER 2

PROBLEM DEFINITION

2.1 Existing System

The refers to the conventional format of a college E-magazine, which has been a staple of educational institutions for many years. This traditional approach involves producing a printed magazine on a periodic basis, typically once or twice a year, to showcase the achievements, talents, and contributions of students and faculty members.

Furthermore, the absence of engagement features like ”likes” and comments limits user interaction and meaningful discussions around the content. Users are left without a proper way to express their appreciation for a blog or engage in conversations with other readers, hindering the formation of a vibrant and interactive community. This operate on a fixed publication schedule, often aligned with the academic calendar or special events.Content creation, editing, and design processes are planned well in advance to meet publication deadlines.

Students and faculty members are invited to contribute content by submitting their work to the magazine editorial team.The editorial team reviews and selects submissions based on quality, relevance, and appropriateness. Students and faculty members are invited to contribute content by submitting their work to the magazine editorial team.

The editorial team reviews and selects submissions based on quality, relevance, and appropriateness.Once the content is selected, the editorial team collaborates with designers and layout experts to design the magazine’s layout. After printing, physical copies of the magazine are need to distribute on campus, often available in libraries, common areas, and other designated locations

2.2 Limitations

1. **limited User Participation:** The lack of a ”Likes” feature meant that readers couldn't show their appreciation for a particular blog post. This reduced the sense of acknowledgment for authors and their contributions, potentially impacting their motivation to create more content.
2. **ineffective Content Evaluation:** The absence of likes and comments made it challenging to assess the popularity and impact of blog posts. Administrators and authors were unable to gauge which content resonated most with the audience.
3. **Admin Limitations:** Administrators lacked the tools to manage and moderate user-generated content effectively. The absence of user and blog management features meant that inappropriate or irrelevant content could not be swiftly addressed.
4. **No Admin Approval :**In the previous system, user-generated blogs were published directly without any administrative oversight. This approach lacked a mechanism to ensure content quality
5. **Lack of Content Control**: Blogs were posted without any review, leading to a wide range of content quality. Low-quality, irrelevant, or inappropriate content could be published, impacting the overall user experience.

2.3 Problem Statement

In the realm of modern education, the traditional college magazine system faces significant limitations in terms of reach, interactivity, and adaptability. Physical copies of magazines are confined to campus boundaries, leading to restricted readership and delayed dissemination of time-sensitive information. Additionally, the lack of interactive engagement and the inability to incorporate multimedia elements hinder the platform's potential for fostering a vibrant community of knowledge sharing and creative expression.

Furthermore, the resource-intensive nature of print production raises financial concerns, and the environmental impact of paper consumption contradicts sustainability initiatives that many educational institutions strive to uphold. The absence of an efficient mechanism for feedback and interaction restricts the potential for meaningful connections between students and the content they consume.

Therefore, there is a pressing need to bridge the gap between the traditional college magazine system and the evolving digital landscape. The current challenge lies in developing an innova-

tive solution that leverages the power of technology to create an E-Magazine platform, enabling students to transcend physical boundaries, engage interactively with content, and contribute in a multimedia-rich environment. This platform should address issues of accessibility, timely dissemination, interactivity, content variety, and sustainability while embracing the advantages of digital connectivity and communication.

The proposed project aims to design, develop, and implement an E-Magazine platform that overcomes the limitations of the existing system, providing students with a dynamic space for self-expression, knowledge sharing, and community building.

CHAPTER 3

SYSTEM REQUIREMENTS

3.1 Hardware Requirements

The hardware requirements for the E-Magazine project encompass a range of components, from powerful web and database servers to network infrastructure and security measures. These hardware elements collectively contribute to the platform's performance, availability, and reliability, ensuring that users can access, engage with, and contribute to the E-Magazine content seamlessly and securely.

The minimum hardware configuration required for the proper functioning of the system can be outlined below:

1. **CPU**: Intel Core i3 or above
2. **Operation Speed**: 2.0 GHz or above
3. **Ram**: 4GB or above

3.2 Software Requirements

The software requirements for the E-Magazine project encompass a wide range of tools and technologies, spanning from development environments and frameworks to deployment, security, and monitoring solutions. These software elements collaborate to create a robust, secure, and user-friendly E-Magazine platform that meets the project's objectives and delivers an exceptional user experience.

The minimum software configuration required for the proper functioning of the system can be outlined below:

1. **Operating System (OS)**: Windows 8 or above, or the latest version of any Linux distros.
2. **Development Languages**: angular cli ,type script, Html Css
3. **Integrated Development Environment (IDE)**: Visual Studio Code, and Remix IDE (a web-based IDE specifically designed for Solidity development).
4. **Web Browsers**:

(a) **Google Chrome**: The latest version of Google Chrome browser is recommended for optimal compatibility.

(b) **Mozilla Firefox**: The latest version of Mozilla Firefox browser can also be used.

(c) **Apple Safari**: The latest version of Safari browser for macOS users.

5. **Metamask Extension**: Metamask is a popular Ethereum wallet and browser extension that allows users to interact with Ethereum-based applications. It should be installed and configured in the chosen web browser.

3.3 Languages

3.3.1 Angular

Angular is a development platform, built on TypeScript. As a platform, Angular includes:

1.A component-based framework for building scalable web applications

2. A collection of well-integrated libraries that cover a wide variety of features,including routing, forms management, client-server communication, and more.

3. A suite of developer tools to help you develop, build, test, and update your code

3.3.2 HTML and CSS

HTML is a markup language used to define a structure of a web page. CSS is a style sheet language used to style the web pages by using different styling features.

3.3.3 TypeScript

TypeScript is a free and open-source high-level programming language developed by Microsoft that adds static typing with optional type annotations to JavaScript. It is designed for the development of large applications and transpiles to JavaScript.

CHAPTER 4

IMPLEMENTATION

The implementation phase of the E-Magazine project involves utilizing the chosen technologies - HTML, CSS, TypeScript, and the Angular framework - to create a dynamic and interactive online platform for users to create, share, and engage with content. Here's a step-by-step description of how these technologies come together in the implementation process:

4.0.1 Data Management:

1. Utilize TypeScript to define data models, interfaces, and classes that represent different entities such as users, blogs, comments, etc.
2. Implement data fetching and manipulation using Angular's HTTP module to communicate with backend APIs.

4.0.2 User Authentication:

1. Implement user authentication and authorization using Angular's built-in modules or third-party libraries.
2. Provide user registration, login, and logout functionalities.

4.0.3 Content Creation and Submission:

1. Develop forms using Angular's reactive forms approach to enable users to create and submit blogs.
2. Integrate rich text editors for formatting and media embedding.

4.1 Interaction and Engagement:

1. Implement features like like buttons, comments sections, and social media sharing to encourage user engagement.
2. Use TypeScript to handle user interactions and update content dynamically.

4.1.1 API Integration:

1. Communicate with backend APIs using TypeScript and Angular's HTTP module to retrieve and submit data.
2. Ensure that data exchange happens securely over HTTPS.

4.1.2 Deployment:

1. Implement a CI/CD pipeline to automate deployment and testing processes for smoother development cycles.
2. Integrate tools like Google Analytics to track user behavior and engagement on the platform.

4.2 Module Description

1. **Admin Module** In this module the user can register another manager. Here he or she may view all details of the applicant's application. may also review the status of the application. They can also generate reports using the report module. He may have the authority to remove moderators and to add moderators.
2. **Moderators Module(Home Page)** In this module you can view documents that have been sent by registered members. You have all the permissions as Admin.
3. **User Module** Subscribers can submit articles. They can view their profiles and articles list
4. **Security and Certification Module** User information must be validated against the information on the user's table and if it is to be valid, it should be included in the system.

4.3 Architectural Diagrams:

4.3.1 ER-Diagram

4.3.2 Class Diagram

4.3.3 Architecture Diagram

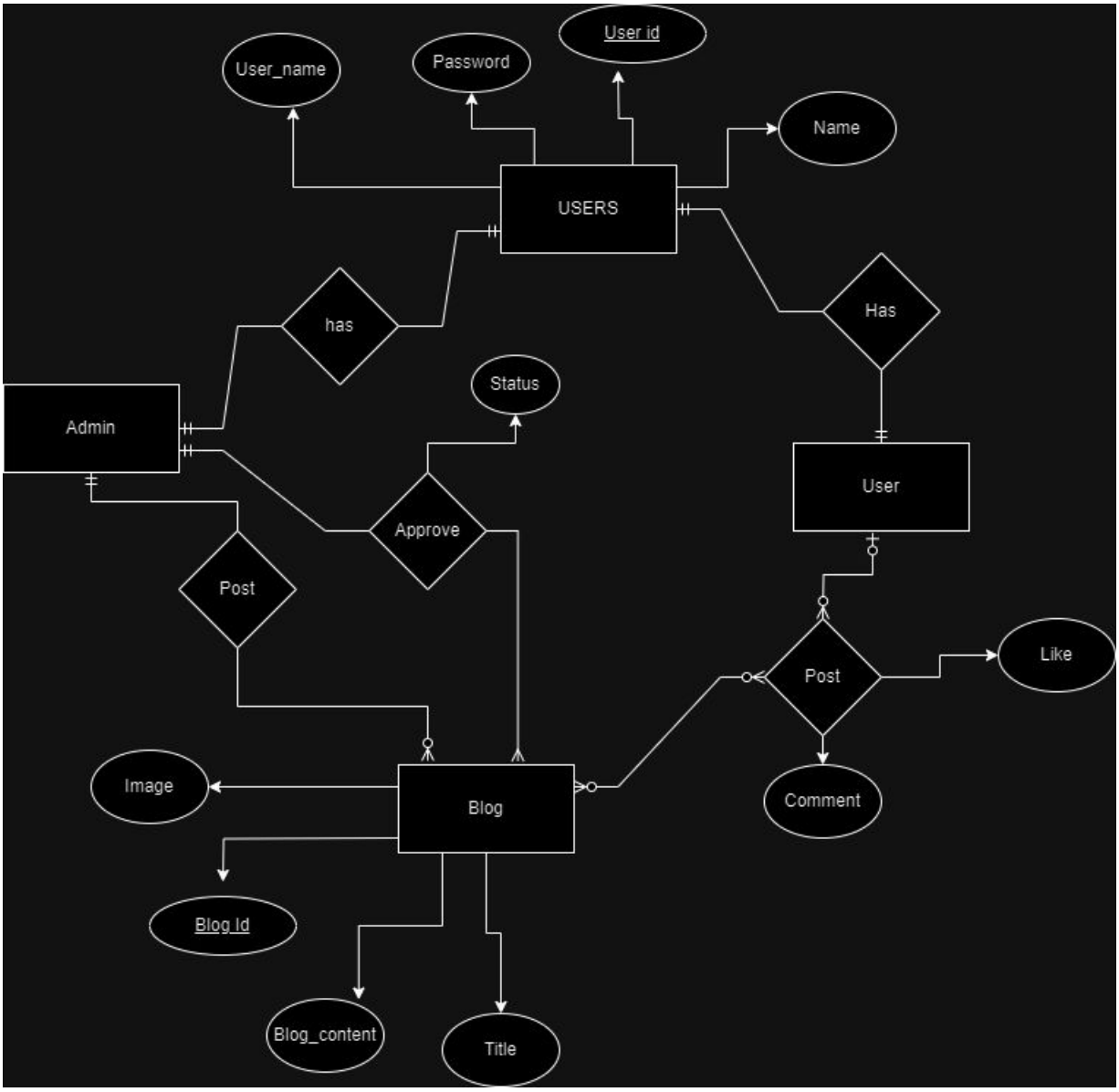


Figure 4.1: ER Diagram

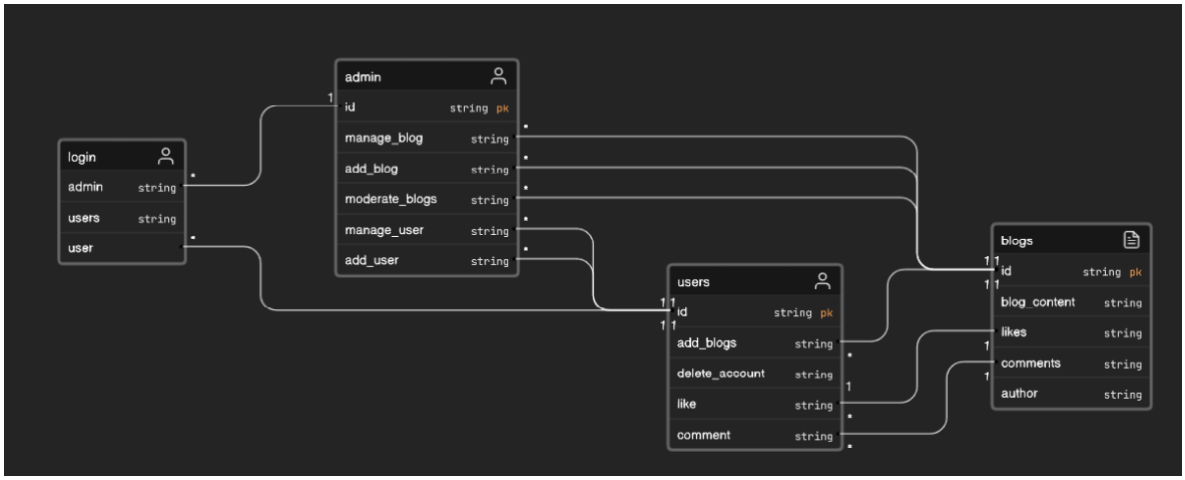


Figure 4.2: Class Diagram

Figure 4.3: Architectural Diagram

CHAPTER 5

PROJECT DESCRIPTION

5.1 Description of Database

The database for the E-Magazine project is a pivotal component that stores, manages, and retrieves various types of data, ensuring the seamless functioning of the platform and supporting user interactions. The design and structure of the database play a crucial role in organizing user information, content, and engagement data.

Support user interactions, content storage, and personalized experiences. Its organization and management contribute to a seamless and secure user experience, fostering a dynamic and engaging online community centered around knowledge sharing and collaboration.

Drawbacks

5.2 Proposed Model

The proposed model for the E-Magazine project envisions a vibrant and interconnected digital space where students can actively contribute, collaborate, and learn in a dynamic environment. By amalgamating user engagement, content diversity, and advanced technological capabilities, the model strives to create an innovative platform that redefines the way educational content is accessed, shared, and experienced in the digital age. Through its user-centric design, security measures, and scalability, the proposed model holds the potential to elevate the educational experience for students and foster a sense of community that transcends physical boundaries.

5.3 Sample Code

```
1   signupForm = new FormGroup({
2      name: new FormControl('', [Validators.
   required, Validators.pattern("^[A-Za-z ]*$"
   )]),
3      username: new FormControl('', [Validators.
   required, Validators.pattern("^[A-Za-z0-9]*$"
   )]),
4      password: new FormControl('', [Validators.
   required]),
5      confirmPassword: new FormControl('', [
   Validators.required]),
6    },{validators:this.passwordMatchValidator
   ()});
7    get signupFormControl() {
8      return this.signupForm.controls;
9    }
10   private passwordMatchValidator():ValidatorFn
   {
11   return (control: AbstractControl):
   ValidationErrors | null=> {
12      const password = control.get('password')?.
   value;
13      const confirmPassword = control.get(
   'confirmPassword')?.value;
14      if (password != confirmPassword) {
15        return {passwordMismatched: true};
16      } else {
17        return null;
18      }
19   }
20 }
21   signUp() {
22      this.serv.getUsers().subscribe((res:User
   [])=>{
23        let allUsers=res
24        let isAlreadyUser =allUsers.findIndex((
   res:User)=>res.username==this.signupForm.value
   .username)
25        if(isAlreadyUser==-1){
26          this.serv.signUpUser(this.signupForm.
   value).subscribe(()=>{
27            alert("success")
```

Figure 5.1: Sign up

```
  toggleSidebar(): void {
    const sidebar = document.querySelector(
'.sidebar');
    if (sidebar) {
      sidebar.classList.toggle(
'sidebar-closed');
    }}
  constructor(private _serv: BlogAppService,
    private _rout: Router,
    private _route: ActivatedRoute,
    private formBuilder: FormBuilder,
    private _http:BlogAppService) {
      this.addBlogForm = this.formBuilder.
group({
        title: ['', Validators.required],
        image: [''],
        content: ['', Validators.required]
      }); }
  AdduserForm = new FormGroup({
    name: new FormControl('', [Validators.
required, Validators.pattern("^[A-Za-z ]*")]),
    username: new FormControl('', [Validators.
required, Validators.pattern("^[A-Za-z0-9]*@"
)]),
    password: new FormControl('', [Validators.
required]),
    confirmPassword: new FormControl('', [
Validators.required]),
  },{validators:this.passwordMatchValidator
()});
  get AdduserFormControl() {
    return this.AdduserForm.controls;}
  private passwordMatchValidator():ValidatorFn
{
  return (control: AbstractControl):
ValidationErrors | null=> {
    const password = control.get('password')?.
value;
    const confirmPassword = control.get(
'confirmPassword')?.value;
    if (password != confirmPassword) {
      return {passwordMismatched: true};
    }
```

Figure 5.3: Admin

```
import { Component, OnInit } from
'@angular/core';
import { BlogAppService } from
'src/app/Services/blog-app.service';
import { CountService } from
'src/app/Services/count.service';
@Component({
  selector: 'app-header',
  templateUrl: './header.component.html',
  styleUrls: ['./header.component.css']
})
export class HeaderComponent implements OnInit
 {
  userlogged: boolean = false
  loggedUserId: string|null=""
  nameOfloggedUser?: string|null
  countOfBlogs?: number
  countOfUsers?: number
  constructor(
    private countServ: CountService,
    private blogServ: BlogAppService) { }
  ngOnInit() {
    this.isLoggedIn()
    this.countServ.countSub$.subscribe(number
=> { this.countOfBlogs = number })
    this.countServ.userCountSub$.subscribe(
number => { this.countOfUsers = number })
  }
  isLoggedIn():void{
    if (localStorage.getItem('userLoggedIn'
)) {
      this.userlogged = true
      this.nameOfloggedUser = localStorage.
getItem("loggedUser")
      this.loggedUserId = localStorage.getItem
("userLoggedIn")
    } }
```

Figure 5.4: Headers

CHAPTER 6

APPLICATION RESULTS

6.0.1 User-Page

Figure 6.1: Admin and User login

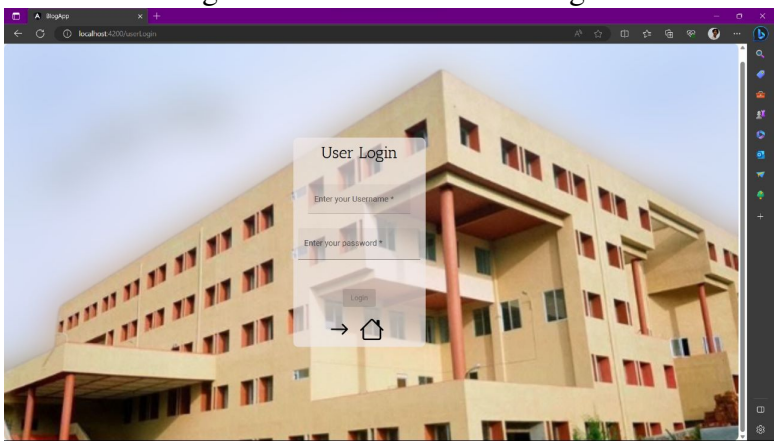
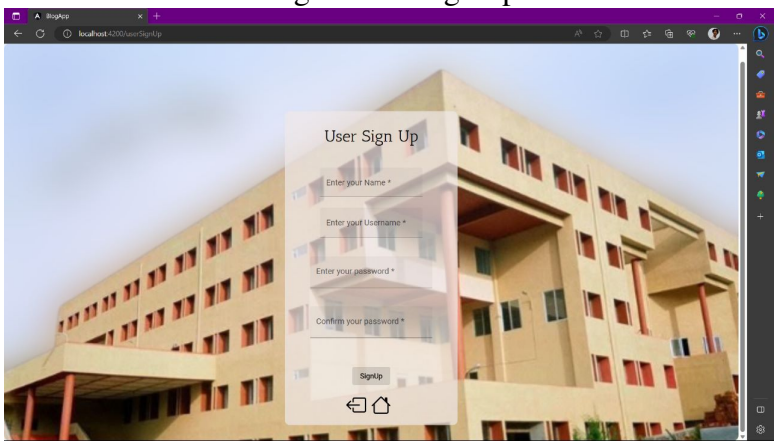


Figure 6.2: Sign-up



6.0.2 Admin-Page

Figure 6.3: Admin manage user

Figure 6.4: Admin can add blogs

Figure 6.5: Add new user

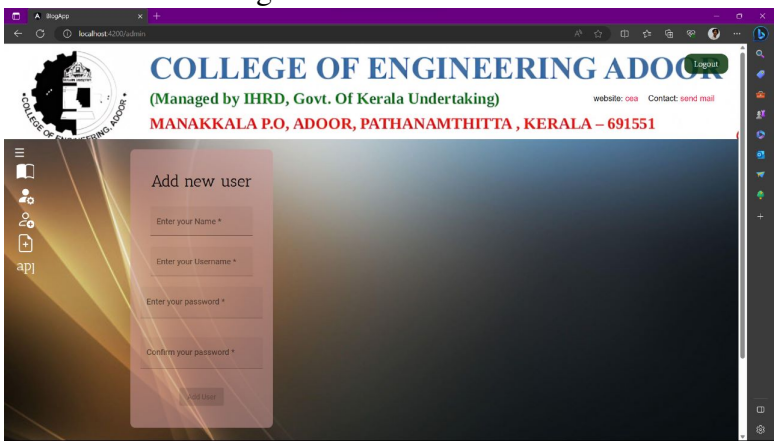


Figure 6.6: Add new blog

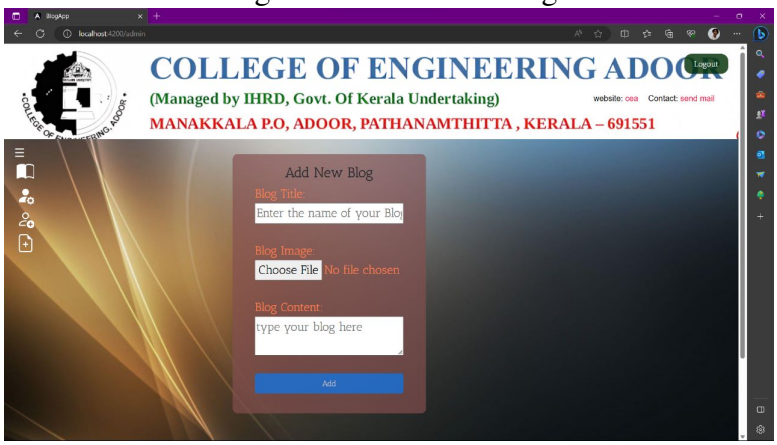


Figure 6.7: Admin-Manage blogs

Figure 6.8: Admin-Manage user

CHAPTER 7

CONCLUSION AND FUTURE SCOPE

7.0.1 Conclusion

In conclusion, the E-Magazine project encapsulates innovation, collaboration, and the ethos of digital transformation within education. By fostering a space for expression, engagement, and enrichment, this platform stands as a testament to the harmonious integration of technology and learning. As it embarks on its journey to impact the academic realm, it underscores the potential of harnessing technology to empower individuals, revolutionize communication, and redefine the boundaries of knowledge dissemination.

This platform, now a tangible reality, marks the beginning of a transformative journey. As it becomes an integral part of the educational ecosystem, its future lies in its continued evolution and enhancement. Regular updates, refined features, and active community engagement will contribute to its growth. Moreover, ongoing collaboration with students, faculty, and administrators will ensure that the platform remains aligned with the ever-changing needs of the educational landscape.

7.0.2 Future-Scope

As the E-Magazine project lays the foundation for a dynamic and interactive platform within the educational landscape, its potential for growth and evolution is vast. The project's success paves the way for several avenues of expansion and enhancement, ensuring its continued relevance and impact.

The future scope of the E-Magazine project is promising and multifaceted, encompassing innovative features, advanced technologies, and an ever-expanding user base. By staying attuned to the evolving needs of students, educators, and the educational landscape itself, the E-Magazine platform has the potential to become an indispensable tool for knowledge sharing, engagement, and collaboration. Through a blend of user-driven enhancements, technological advancements, and ongoing community involvement, the project is poised to shape the future of education by fostering a dynamic and inclusive virtual learning ecosystem.

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