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Improving Attractiveness and User-Friendliness of the AICTE Website

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Abstract – All India Council for Technical Education (AICTE) is a legal assortment of the government of India with a legal expert for the arranging and composing improvement of Technical Education all through the nation. AICTE is answerable for legitimate arranging and composing advancement of the specialized instruction and the executive's training framework in India. AICTE is the main association that favors a design school in India. It is an established piece of the Government of India, which has the privilege to calendar, plan, and plan the advancement of training in the specialized field all through the nation. Those schools who run University associated Engineering and Management degree programs settle on utilizing this accessibility of understanding from AICTE. Opening another specialized school is the main position that settles on accessible for use understanding for universities.

Index Terms:- AICTE(All India Council for Technical Education), User experience(UX), User interface(UI), Dark Mode, Technical Education, Schemes, Management.

1. INTRODUCTION

All India Council for Technical Education (AICTE) is a statutory body in india responsible for overseeing the development and management of technical education in the country. It was set up to conduct a survey on the facilities available for technical education and promote development in the country in a coordinated and integrated manner. AICTE website of consists a lot of information on approved institutions, different schemes of the Government, Rules, and Regulations, etc., related to Engineering and Technology, Management, Architecture, and Arts and Crafts. India has over 1000 universities, with a breakup of 154 central universities, 438 state universities, 126 deemed universities, 359 private universities, 7 institutes under the State Legislature Act, and 159 Institutes of National Importance which include IIMs, AIIMs, IITs, IIITs, IISERs, and NITs among others. The other institutions include 52,627 colleges as government degree colleges, private colleges, standalone institutes, and post-graduate research institutions.

2. LITERATURE SURVEY

This section of the paper will represent a literature review of the works that are similar to the presented work. The AICTE website is an important platform for providing information about technical education and institutions in India. Improving the attractiveness and user-friendliness of the AICTE website can help increase engagement and usage of the website.

To gather insight on best practices and recommendations for attractiveness and user-friendliness website design:-

[1] As per Nielsen Norman - Responsive Design: A responsive website design is crucial for improving user-friendliness, as it ensures that the website adapts to different screen sizes and devices.
[2] Content Organization: The website's content should be well-organized and presented in a logical manner to facilitate ease of access and understanding.
[3] Mobile Responsive: The website should be designed to be responsive to different screen sizes and devices, including mobile phones and tablets.
[4] Nielsen, J.(1994). Heuristic evaluation. In Usability Inspection Methods (pp. 25-62). John Wiley & Sons, Inc. This book chapter provides a comprehensive overview of heuristic evaluation as a usability inspection method and explains its benefits for improving the method and improving website and usability.
[5] Mustafa, M. A., & Yusoff, W. F. W. (2015). Evaluating the Usability and User Experience of Organization Websites. Procedia – Social and Behavioral Sciences, 195, 2941-2949.
[6] Sharma, P., & Gupta, A.(2019). User experience design for learning management systems of websites: A Technology Education: Research, 18, 331-356.
[7] Lee, J., & Lee, Y.(2017). The Effect of Website Quality on User Satisfaction and behavior intention in educational websites. Sustainability, 9(6),957.
[8] National Institutional Ranking Framework (NIRF): https://www.nirfindia.org/2021/ranking 2021.html . This website for NIRF that ranks the higher education institutions in India, including engineering colleges and technical education.
[9] As per the Nielsen Norman – User testing: The website should undergo user testing to identify usability issues and gather feedback from users for improvements.
[10] Aicte-India.org-Helping manual for AICTE Website.

3. PROBLEM STATEMENT

Improving the attractiveness and user-friendliness of the AICTE website. The important activity of AICTE with the user-friendly concept is the better user experience, A new version of the AICTE website should be developed as per the latest trends followings:

[1] Latest Graphical User Interface
[2] Dark-Mode Feature
[3] Layout

4. SCOPE

The future of India will be dependent on innovations and work done by the youth. The web applications can be trained to new features for the AICTE website like the latest graphical interface, dark mode, and layout. AICTE covers the program of technical education for training and research in engineering, Technology Architecture, Town Planning, Management, applied arts and Crafts, and hotel management catering technology at a different level, therefore all of these technologies give scope to our newly modified AICTE website.

5. TECHNOLOGY-STACK

This project is developed using both Front-End and Back-End technologies.
Front-End: HTML, CSS, JavaScript, BootStrap
Back-End: Python, Django
IDE: Visual Studio Code editor
Web server: google chrome.

6. IMPLEMENTATION

HTML: Hypertext Markup Language is the standard markup language in this project it is used to create web pages and other information that can be displayed in a web browser. It provides the structure and content of a web page and is used to define the different elements of a page, such as headings, paragraphs images, and links.

CSS: Cascading Style Sheet is a stylesheet language used for describing the look and formatting of a document written in a markup language such as HTML. In this project, CSS is used to style the pages, separating the presentation of a document from its content.

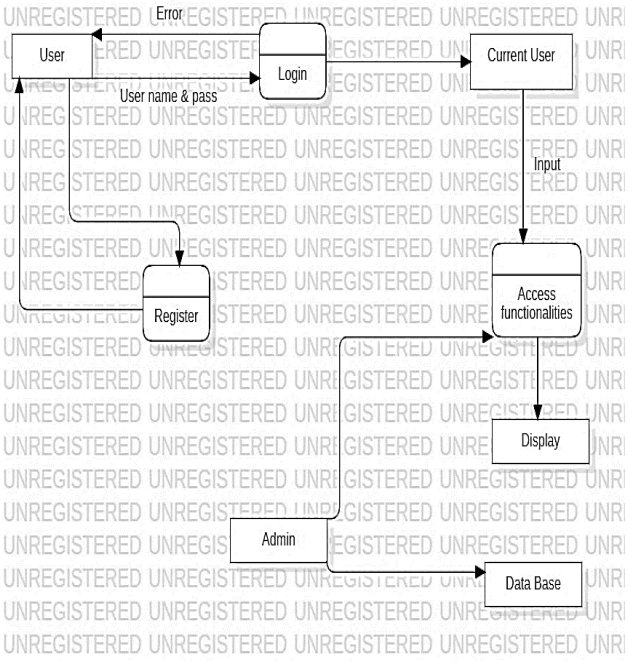
JavaScript: For AICTE Website JavaScript plays an important role. JavaScript is a high-level, dynamically typed, and interpreted programming language and is used for client-side web development. It is used to create interactive and responsive user interfaces and to dynamically update the content and layout of web pages in real-time.

Bootstrap: Bootstrap is a free front-end framework for faster and easier web development. It was developed by Twitter and is now maintained by Twitter and a group of individual developers and corporations. In this project, bootstrap provides a set of CSS and javascript-based design templates for forms, buttons, navigation, and other interface components.

Python: Python is a high-level, Interpreted, and general-purpose programming language along with that python has versatility, readability, and extensive library support. Python offers a range of tools and frameworks to help for getting the job done efficiently and effectively.

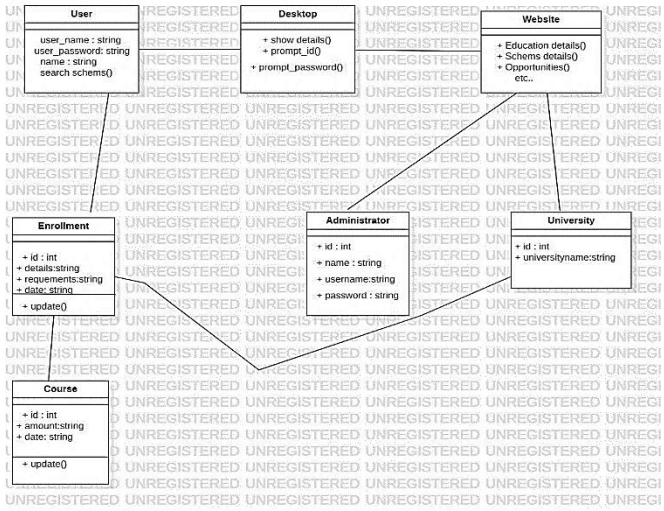
Django: Django is a free and open-source web framework written in Python. It is designed to help developers take applications from concept to completion as quickly as possible. Django follows the model-template-view(MTV) architectural pattern and provides a full-featured framework for building web applications.

Visual-Studio-Code: The code editor IDE that we used to create “Improving Attractiveness and User Friendliness of AICTE Website” is Visual-Studio-Code.
Because it is a lightweight but powerful source code editor which runs on our desktop and is available for Windows, Mac OS, and Linux.



DFD Diagram

In this flow diagram, the following components are shown as if the new user is trying to log in for the first time, then he must register and after registering is successful then he can log in himself and he will be redirected to the AICTE website. If the user is already registered, then he can directly do login and go to the home page. Both newly registered and already registered users must log in with a valid username and password. The current user will be eligible to access functionalities and they are displayed to him. Admin will have to access the database and also, he could have to access functionalities and display them on the website.



Class Diagram

A class diagram shows a set of classes, interfaces, and collaborations, and their relationships. These diagrams are the most common diagram found in modeling object-oriented systems. The class diagram addresses the static design view of our system.

7. RESULT & DISCUSSION

Here are 2 test cases that show features and their working on the Django server.

Test case 1:

Purpose	Start Services
Pre-requisite	The Django server needs to start the state
Test Data	Go to the Panel Page
Steps	Type the following address on the web browser localhost8000 or 127.0.0.1.8000
Expected Result	Process evaluation should start
Actual Result	Pass

Test case 2:

Purpose	Home page with dark mode
Pre-requisite	The Django server needs to start the state
Test Data	Redirect one page to another
Steps	Clicking on the navigation-specific menu. Clicking the light switch button.
Expected Result	Login/New User successfully
Actual Result	Pass

Test case 3:

Purpose	Login/New User
Pre-requisite	The Django server needs to start the state
Test Data	Login/Registration
Steps	Click to login/register. Enter all fields properly
Expected Result	Login/New User successfully
Actual Result	Pass

8. CONCLUSION

Improving the Attractiveness and user-friendliness of the AICTE website is helpful and easy to understand and easy to use for students, staff, and other stakeholders, and because of the change's website looks clean, beautiful, and more user-friendly.

9. FUTURE WORK

Continuously improving the website design and layout to ensure it remains modern and user-friendly. This includes regular updates to the website's visual design, content, and navigation to reflect changing user needs and trends.

10. REFERENCES

[1] aicte-india.org Helping manual for AICTE website.
[2] All India Council for Technical Education, 1987. Government of India. Retrieved 7 March 2019.
[3] A Statutory Body of Government of India,New Delhi,2000
[4] AICTE Handbook 2022: https://www.aicte-india.org/sites/default/files/Handbook_2022%20.pdf This is the official handbook of AICTE that provides comprehensive information on its policies, programs, regulations, and procedures.
[5] AICTE Regulations: https://www.aicte-india.org/bureaus/regulations This is the page on AICTE's website that provides information about the regulations governing technical education in India.
[6] AICTE Journal of Engineering and Technology (AJET): https://www.aicte-india.org/journal This is the official journal of AICTE that publishes research articles, technical notes, and reviews in the field of engineering and technology.
[7] AICTE Online Learning Resources: https://www.aicte-india.org/education/e-learning-resources, This is the page on AICTE's website that provides online learning resources for students and faculty members in technical education.
[8] As per the Nielsen Norman – User testing: The website should undergo user testing to identify usability issues and gather feedback from users for improvement.
[9] Mustafa, M. A., & Yusoff, W. F. W. (2015). Evaluating the Usability and User Experience of Organization Websites. Procedia – Social and Behavioral Sciences, 195,2941-2949.
[10] AICTE contact information:https://www.aicte-india.org/contact-us.