

CHAPTER I: INTRODUCTION

1.1 Introduction

Gyanshristi is a robust and innovative Content Management System (CMS) designed to simplify content creation, management, and delivery while fostering collaboration among users. This system plays a crucial role in enabling organizations, institutions, and individuals to efficiently manage digital information without requiring advanced technical skills.

This project aims to provide content to every user whoever is involved to get knowledge by using technology. It is devoted to providing the content creation and content delivery features in a more managed and entertaining way. This platform is tailored to provide an engaging and inclusive experience for diverse users by integrating advanced features such as voice recognition and text-to-speech, making content creation and interaction seamless and accessible. The voice recognition feature allows users to interact with the system through voice commands, while the text-to-speech functionality provides an auditory way to consume content, making the system inclusive for users with different preferences and needs. Now, the school and any other institutions can use AI-based CMS with minimal cost. This project is focused on enhancing the user experience by streamlining the process of content management. By incorporating AI technologies, it is easy to simplify interactions and ensure that content is easily accessible to all users.

Our system has four types of accessing modes each with specific roles and permissions to ensure an organized and efficient content management process. They are: -

- Admin
- Author
- Editor
- Viewer

1.2 Background of the study

A Content Management System is a digital platform designed to empower users to create, manage, and share content seamlessly in a collaborative digital environment. As digital technologies continue to transform how information is shared and consumed, Content Management Systems (CMS) have become essential tools for efficiently organizing, managing, and delivering content. Traditionally, content creation and management required extensive manual effort, technical expertise, and significant resources for structuring and

maintaining information. However, the emergence of CMS platforms has revolutionized these processes by providing flexible, user-friendly, and scalable solutions for individuals and organizations alike. Content Management Systems (CMS) have revolutionized the way digital content is created, managed, and delivered. From the early days of static platforms like Jekyll to the modern, dynamic systems such as WordPress, CMS technology has evolved to offer responsive designs, multilingual support, and enhanced interactivity. However, existing systems often fail to address critical user needs, such as accessibility for visually impaired users, seamless voice-based interactions, and offline content access.

1.3 Problem Statement and Motivation

In this time, students are often bored to read from the same textbooks and it is very difficult to find the right content from the Google like search engine. Finding the appropriate and right content according to their syllabus is a huge task. Similarly, teachers are not able to provide note to every student and writing on the board could be really painful. While students cannot just sit and read the notes given by the teachers. The collaboration and interaction about the educators and learners are a huge problem during content creation and content delivery. Other external persons are not able to provide some help to the students by providing note to each and every student.

1.4 Objectives

1.4.1 Primary Objectives

- To provide content in a managed way to different entities according to user roles.
- To create content through voice recognition and read content through text-to-speech technology.

1.4.2 Secondary Objectives

- To manage users with different accountable features.
- To provide feedback or clear doubts to the contents through comments.
- To design a responsive and intuitive user interface that works well on various devices.
- To implement search functionalities.
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1.5 Project Scope and Direction

The main intention of this project is to solve the issues encountered during the traditional content authoring and delivery system where it was completely based on the paper works. Some institutions are using the web applications for this but there occurs issue of ease in content creation and content delivery. In this project, a web application can be used to create and provide contents using voice recognition for content creation and text-to-speech for content delivery. Not only that, students can also ask their doubts through the comments.

1.6 Limitations

- The targeted groups for GyanShristi mainly includes colleges, schools and similar educational institutions.
- It cannot provide accurate voice recognition at the beginning.
- The admin, editor, and author side web pages are not responsive. So, they need desktop or laptop for a better experience.
- Teachers must have good English-speaking skills.

1.7 Report Organization

Chapter I: This chapter explains the overview, introduction, problem statement, objectives, scope and limitation of the system.

Chapter II: This chapter covers all the history, methods, requirement specification and feasibility analysis and structured system requirements.

Chapter III: Design of Content Management System project is explained in detail with all the necessary diagrams and brief functionality.

Chapter IV: Process of implementation and testing is described along with all the tools used for development.

Chapter V: Conclusion and future scope of the application are explained.