SOFTWARE REQUIREMENT SPECIFICATION

NAME	MERUNYA SRI R
ROLL NUMBER	7376221CS220
SEAT NUMBER	62
PROJECT ID	22
PROJECT TITLE	WIKI PAGE GENERATION

TECHNICAL COMPONENTS

FRONTEND	REACT JS
BACKEND	NODE JS,EXPRESS
DATABASE	MONGODB
API	OPEN API

PROBLEM STATEMENT

The content management process on the wiki page has several difficulties which includes:

- Faculty members manually copy and paste code templates for each unit when uploading content to the wiki page.Each unit requires a code template containing links to lecture videos, materials, and discourse.
- The manual duplication and modification of code templates **increase the risk of errors** and inconsistencies in the uploaded content.The manual and error-prone process of uploading content hinders the efficiency of content management on the wiki page.

- Difficulty for administrators and faculty members in **replacing content links** (e.g., lecture videos, material PDFs, discourse links) within the same code, often resulting in frustration and unexpected errors.

PROJECT FLOW

Purpose

The purpose of this project is to develop a portal to enhance the efficiency of the content management process for both administrators and faculty members.

Objectives

Creating a streamlined process without the need for manual copying and pasting of code templates often.

To automate the code generation of wiki page based on input provided by the faculty members.

Making the content upload process easier and to increase efficiency.

Scope

This system includes user authentication,faculty mapping system,vetting process updates, Dynamic content uploading template,code generation for wiki page recreation.

Features

Facilitating better collaboration and communication between administrators and faculty members through features such as assignment mapping, status tracking, and notifications.

Functional requirements

User Authentication:

- Users should be able to authenticate as either faculty or administrator via a login page.
- Authentication should be secure and protect user credentials.

Admin Page:

- Admins should have full access to map faculty members with the number of units they are responsible for.

- Admins should be able to view and sort the status of faculty based on content submission and approval.

Faculty Page:

- Faculty members should be able to upload content for their allotted units.
- Uploaded content should undergo review by the admin for correctness.
- Faculty should be notified of the status of their content submissions.

Review Process:

- Admins should be able to review uploaded content and either approve or reject it.
- If rejected, faculty should be required to reupload corrected content.

Code Generation:

- Upon admin approval, code for the wiki page should be automatically generated based on the uploaded content.
- The generated code should accurately represent the uploaded content and be suitable for pasting into the official wiki page.

Database Management:

- Creation of "Staff" and "Subject" tables with appropriate attributes and relationships.
- Data in the database should be secure, consistent, and easily retrievable.

Non-Functional Requirements

Usability:The user interface should be intuitive and easy to navigate for both administrators and faculty members.

Reliability: The system should be reliable and available for use at all times, with minimal downtime for maintenance or updates.

Performance: The system should respond quickly to user actions, with minimal latency.

Code generation should be efficient, even with large amounts of content.

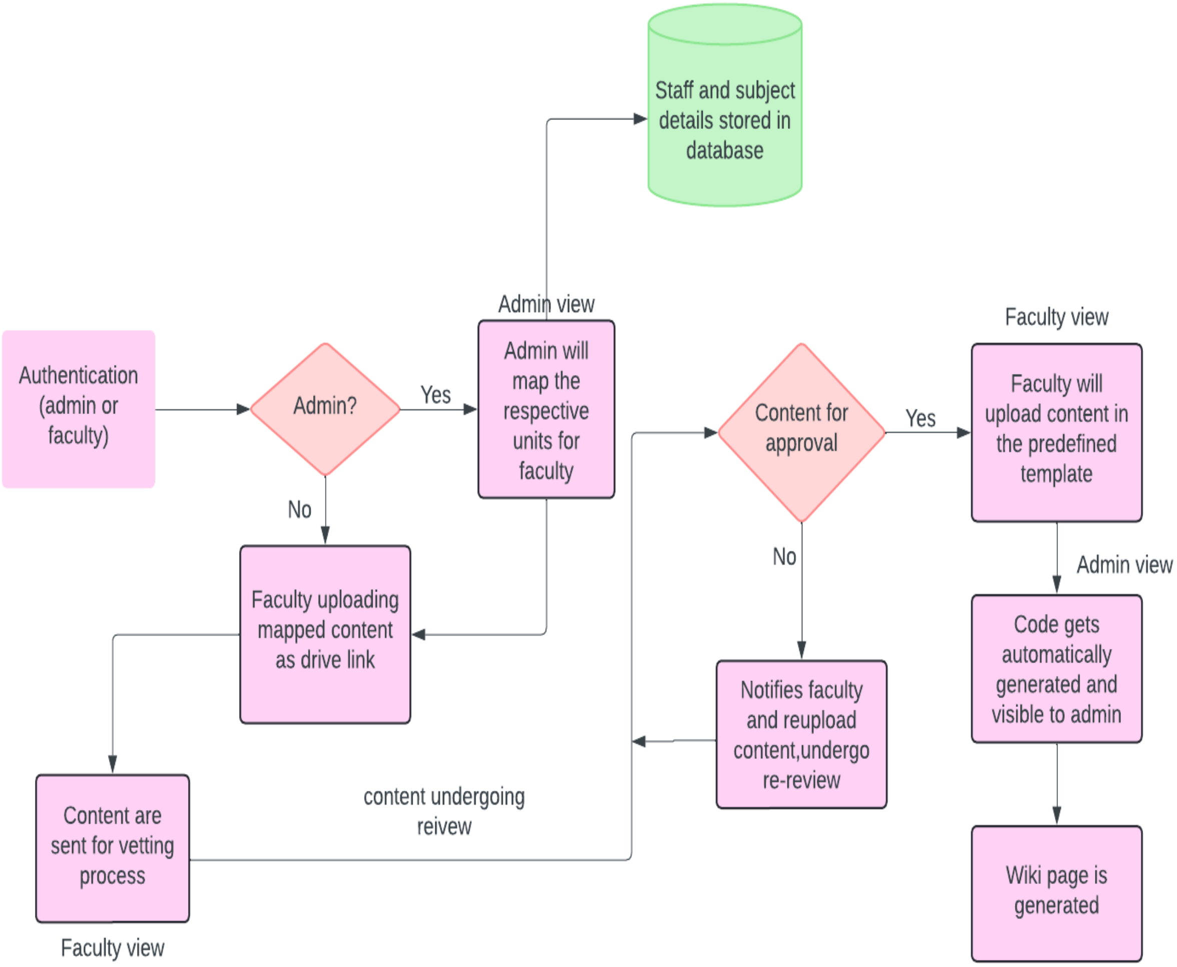
Scalability: The system should be scalable to accommodate a growing number of users and increasing amounts of content.

Maintainability: The codebase should be well-structured and documented to facilitate future updates and maintenance tasks.

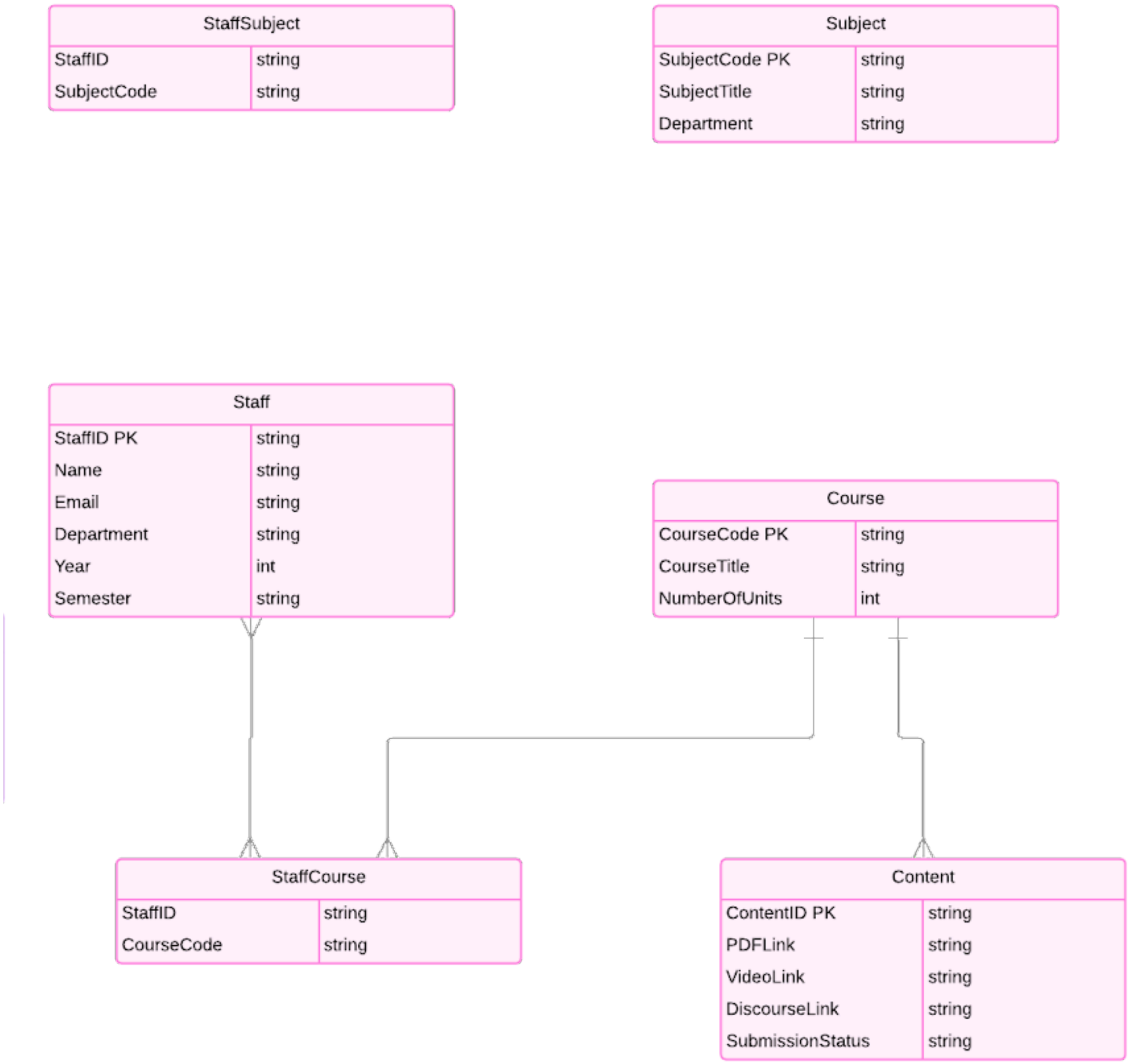
Primary stakeholders

The primary stakeholders include Administrators and Faculty members.

FLOW CHART


Staff and subject details stored in database
Admin view
Faculty view
Authentication (admin or faculty)
Admin?
Yes
Admin will map the respective units for faculty
Content for approval
Yes
Faculty will upload content in the predefined template
No
No
Admin view
Faculty uploading mapped content as drive link
Code gets automatically generated and visible to admin
Notifies faculty and reupload content,undergo re-review
content undergoing reivew
Content are sent for vetting process
Wiki page is generated
Faculty view

ER DIAGRAM:



StaffSubject	
StaffID	string
SubjectCode	string

Subject	
SubjectCode PK	string
SubjectTitle	string
Department	string

Staff	
StaffID PK	string
Name	string
Email	string
Department	string
Year	int
Semester	string

Course	
CourseCode PK	string
CourseTitle	string
NumberOfUnits	int

StaffCourse	
StaffID	string
CourseCode	string

Content	
ContentID PK	string
PDFLink	string
VideoLink	string
DiscourseLink	string
SubmissionStatus	string