



**BANNARI AMMAN**  
**INSTITUTE OF TECHNOLOGY**  
An Autonomous Institution, Affiliated to Anna University,  
Approved by AICTE, Accredited by NAAC with 'A+' Grade

## Software Requirement Specification for Wiki Page Generation

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<b>Project ID</b>	22
<b>Problem Statement</b>	Wiki Page Generation

## Technical Components

<b>Front End</b>	React
<b>Back End</b>	Node.js with Express.js
<b>Database</b>	MongoDB
<b>API</b>	OPen API

# **1. Introduction**

## **1.1. Purpose:**

The purpose of this document is to present a detailed description of the Wiki page generation. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli.

## **1.2 Scope of Project :**

**Course Management :** The project focuses on managing course content, including lecture videos and materials, for faculty within the designated platform.

**User Roles and Permissions :** It includes defining and implementing user roles (Admin, Faculty) with specific permissions change to their responsibilities within the system.

**Content Verification and Approval :** The system facilitates the verification and approval process of uploaded materials and videos by Admin, ensuring quality and accuracy before making them accessible to students.

**Integration with External Platforms :** Integration with external platforms such as PeerTube for video hosting and embedding PDFs directly into the wiki page for material access is within the project's scope, enhancing user experience and accessibility.

# **2. System Overview**

## **2.1 Users :**

### **Faculty :**

Faculty members play a vital role in the educational process by diligently uploading lecture materials and videos, thereby ensuring that course content is delivered to students in a timely manner. They actively engage with administrative feedback, making any necessary corrections, and meet submission deadlines punctually. This active involvement of faculty enhances the quality of educational resources, thereby enriching the learning experience for students. Additionally, faculty members receive reminders regarding upcoming submission due dates and have access to reports detailing the points they have earned for their submissions, facilitating transparency and accountability in the academic process.

**Admin :**

Admins oversee the entire process, mapping faculty to courses and specifying upload requirements. They verify submissions, provide feedback to faculty, and manage the final approval process. Admins ensure compliance with standards, maintain database integrity, and update wiki pages with generated code, facilitating seamless access to educational materials for students.

**2.2. Features:****Login and Registration:**

- Faculties can log in using their existing BITSathy account credentials.
- New faculties can register for an account, providing necessary information such as name, email, department, etc.

**Subjects Assigned:**

- Faculties can view the subjects assigned to them along with due dates for final submission.
- They can submit lecture videos and materials for approval.
- Upon submission, the uploaded materials are sent to the admin interface for review and further processing.

**Submission Status:**

- Faculties can check the status of their submissions, whether they are pending, approved, or rejected.
- They can also view the submission history to track their past submissions.

**Report of Submissions:**

- Faculties can access a report of their submissions, including details like submission date, status, and any points allocated for timely submissions.
- This report helps faculties keep track of their performance and adherence to deadlines.

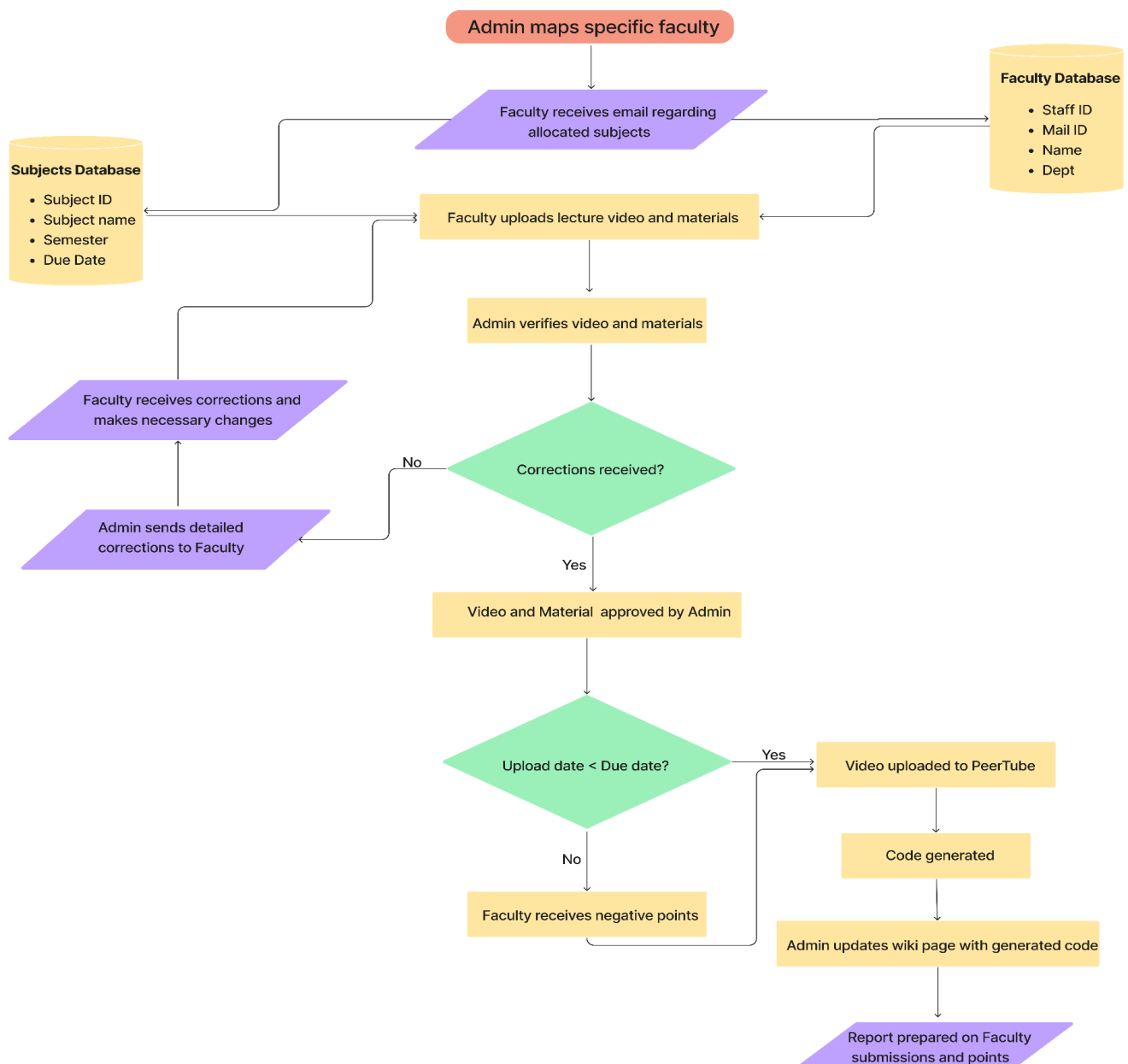
**Admin Access:**

- Admins have access to all submitted materials.
- They can view the details of each submission, including uploaded videos and materials.
- Admins can approve or reject submissions with suitable remarks.
- They can also award points for timely and quality submissions.

### Admin's Analytical Dashboard:

- Admins have access to an analytical dashboard where they can view various metrics related to submissions.
- This dashboard provides insights such as the number of submissions by category (e.g., subject, department), pending approvals, and overall submission trends.
- Admins can also view reports of individual faculties to assess their performance and identify areas for improvement.

### Flow Chart :



### **3. System Requirements Specification:**

#### **3.1 Functional Requirements:**

##### **User Management:**

- Faculties can log in and submit materials assigned to them.
- Admins have access control with an analytical dashboard and dedicated features.

##### **Submission of Materials:**

- Faculties can see their submissions along with details.
- Submission includes lecture videos and lecture materials.

##### **Submission Status:**

- Faculties can view the current status of their submission.
- If submission is rejected, the remarks are shown.
- Faculties can also see the points awarded to them.

##### **Admin Dashboard:**

- Admins can view a list of all submitted materials.
- Materials can be filtered by category (year, subject, semester).
- Admins can view details of each submission.
- Admins can approve or reject submissions with suitable remarks.
- Admins can schedule meetings for accepted submissions.

##### **Analytics Dashboard:**

- Admins can view the number of submissions by category.
- Number of submissions are requested based on the category.

##### **Additional Specifications:**

- Faculty gets mail regarding the required materials and subjects allocated.
- Faculty upload lecture videos and materials.
- Admin verifies the video and sends corrections.
- After corrections, the video gets approved by Admin.
- Video gets uploaded to PeerTube and material gets uploaded to the wiki page.
- After the materials and videos get approved and uploaded, HTML markup code is generated for the wiki page.
- Admin updates the generated code (HTML markup code) in the wiki page.

### Faculty Requirements:

- Faculty gets an email regarding the required materials.
- Faculty uploads the materials.
- Faculty receives corrections from the Admin.
- Faculty also gets a due date for the approval.
- Faculty get negative points for late submissions.
- Reports are prepared on Faculty submissions and points.

### Admin Requirements:

- Maps faculty. Lists specifications of the material and video to be uploaded.
- Checks whether the requirements are satisfied or not.
- If satisfied, approve; else, rejects along with remarks.
- Final code generated (HTML markup code) is given to the admin.
- Reports are provided.

### Uploading Details:

- Videos are uploaded to PeerTube.
- Materials are uploaded as PDFs directly in the wiki page.

### ER Diagram :

