# BANNARI AMMAN INSTITUTE OF TECHNOLOGY

**An Autonomous Institution Affiliated to Anna University - Chennai, Accredited by NAAC with A+ Grade**

**Sathyamangalam - 638401 Erode District, Tamil Nadu, India**

**Student Name:** PRETHIVE C S

**Seat No:** 355

# Project ID: 29

**Project title:** Corse File Automation

## Technical Components

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| --- | --- |
| **Component** | **Tech Stack** |
| Backend | Java with Spring Boot |
| Frontend | React |
| Database | MySQL |
| API | Open API |

**Implementation Timeline**

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| --- | --- | --- | --- |
| **Phase** | **Deadline** | **Status** | **Notes** |
| Stage 1 | /04/2024 | Under review | Planning and Requirement gathering |
| Stage 2 |  | In process | Design and Prototyping |
| Stage 3 |  | In process | DB Designing |
| Stage 4 |  | In process | Backend Implementation |
| Stage 5 |  | Not started | Testing & Implementation |

**PROBLEM STATEMENT:**

* The Course File Automation System is designed to streamline academic and administrative tasks in educational institutions.
* Faculty members will securely log in to enter and update their department's vision, mission, course outcomes, and program outcomes.
* The system will efficiently gather student assessment data, including PT1, PT2, and end-semester marks, alongside students' names and roll numbers. This data will be compiled into a comprehensive PDF report.
* The report will feature the department's vision and mission, course outcomes, program outcomes, and detailed student assessment data.
* Additionally, it will include digital signatures from both the respective faculty member and the Head of Department (HOD). This automation aims to enhance accountability, improve resource management, and provide valuable data for informed decision-making, while also supporting overall student engagement and success.

**PROJECT-FLOW:**

## Purpose: To develop a course file automation system that allows faculty to log in, enter department vision, mission, course outcomes, and program outcomes, and manage student marks for PT1, PT2, and end-of-semester evaluations. The system will also generate PDFs with faculty and HOD signatures, thereby streamlining the course documentation process and reducing manual administrative efforts.

## Scope: This system includes user authentication, secure management of course documentation, and automated generation of PDFs for departmental records. It aims to improve accuracy and efficiency in handling course-related documentation and student performance data.

## Business Context: The centralized course file automation system is designed to enhance efficiency and accuracy across the institution by automating documentation and record-keeping processes. Key stakeholders include faculty members, department heads, administrative staff, and the IT department.

## Considerations:

## All users possess active institutional accounts for authentication.

## Users have regular access to internet-enabled devices.

## Integration with existing institutional authentication systems may be necessary.

## Dependencies:

## Integration with institutional user authentication systems.

## Reliable performance and availability of the system to handle document generation and data management.

## User Personas:

## Faculty Member: Needs to enter and manage course-related information, including department vision, mission, and student marks. Requires the ability to generate and review PDFs with signatures.

## Department Head (HOD): Needs to review and sign course-related documents, ensuring accuracy and compliance.

## Administrative Staff: Manages system operations, verifies document accuracy, and ensures timely processing of requests.

## User Stories:

## As a faculty member, I want to efficiently enter course-related information and manage student marks so that I can ensure accurate and up-to-date course documentation.

## As a department head, I need to review and sign course documents to validate and approve course content and student evaluations.

## As administrative staff, I need to manage the automation system to ensure smooth operation and address any issues promptly.

## Functional Requirements:

## User Authentication: Secure login using institutional authentication systems.

## Data Entry Forms: Interfaces for entering department vision, mission, course outcomes, program outcomes, and student marks.

## PDF Generation: Automated generation of PDFs for course documentation with faculty and HOD signatures.

## Dynamic Dashboard: Real-time viewing and management of course-related data and documents.

## Approval Workflow: Automated workflow for document review and approval, including faculty and HOD signatures.

## FLOW CHART:

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