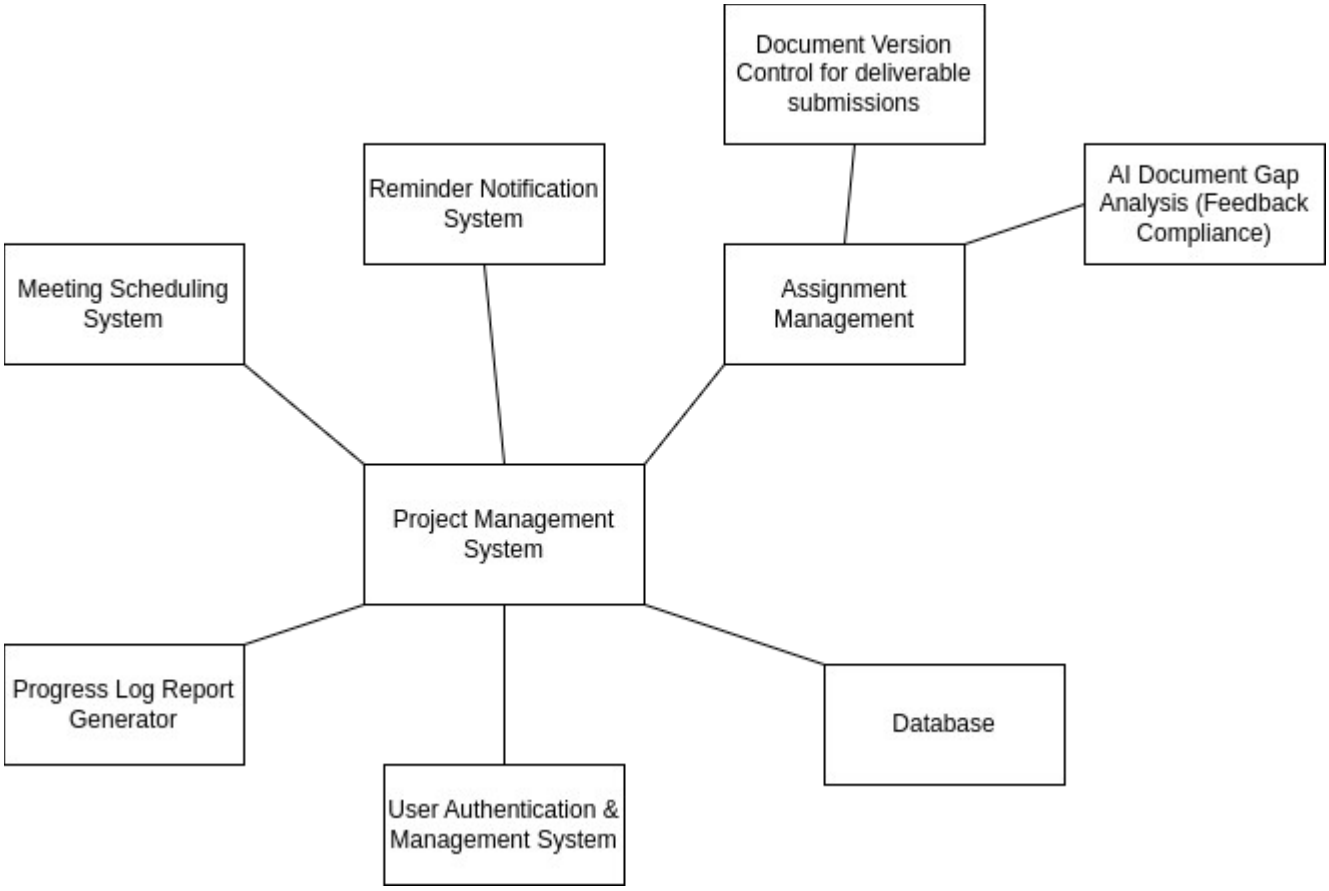
Project Management System: Background Study

Existing Solutions	Features	Limitations
A Web Based Final Year Project Supervision System (Beekhy, 2013)	- Appointment scheduling system which uses the supervisor's calendar as a basis for scheduling meetings. - Document management system where supervisors can set tasks for deliverable submissions/re-submissions and track document changes. - Progress tracker with Gantt chart visualization to provide a complete picture of project's progress.	- Lack of AI-powered feedback compliance checking - Inability to send notifications to external services such as email or push notifications for important reminders
Creatrix Campus *(Creatrix Campus, 2025:-b, Creatrix Campus, 2025:-c)*	- Centralized document repository for change tracking and version control. - Customizable review and approval workflows to streamline dissertation management (Low-code configurations). - Reporting analytics for evaluating dissertation and thesis milestones for both students and supervisors. - Meeting management software includes meeting scheduling with conflict avoidance and attendance tracking.	- No out-of-the-box solution for automated feedback checking; training is required for developers to implement and maintain custom review and approval workflows. - Enterprise-level pricing may present a significant financial barrier.
Moodle as a Final Year Project Management System *(Khamaruddin et al., 2018)*	- The system re-purposes Moodle's forum activity module to provide reminders with email notifications for important tasks and deadlines. - Assignment activity module in Moodle allows supervisors to set assignments where students can submit drafts and final documents. - Progress updates are tracked via the system's course administration module.	- Assignment activity module does not provide change tracking between submissions. - The system lacks a meeting planning and automatic feedback checking system.

Final Year Project Management System for Information Technology Programmes *(Leung et al., 2018)*	- The system has a File Sharing and Repository module to centralize document and code submissions. - Project Management module provides students with a shared workspace and a scheduler for them to create tasks and set deadlines. - Basic progress tracking feature for each student.	- The system lacks a meeting scheduling and automatic feedback checking system. - Lack of a sophisticated version control system for managing documents and code. - Group-based submission may obscure work accountability for individual students.
Google Workspace for Education *(Google, 2025)*	- Google Classroom acts as the core of the system where supervisors can make classes for project students and create assignments with deadlines. - Google Classroom integrates seamlessly with Google Calendar, which can be used as a basis for meeting scheduling. - Google Docs allows keeping track of different document versions for version control and overall change tracking using “Suggest” mode. - Google Docs integrate with Google Assignment for feedback submission.	- Lack of customization flexibility to incorporate an AI solution for feedback compliance checking. - Inadequate progress tracking capabilities to provide an overview of project’s progress.
Web-Based Final Year Project Supervision Management System (FYPSMS) (Adeniyi et al., 2024)	- Student home page for uploading project work documents and viewing progress. - Supervisor dashboard to view progress for multiple students and project inspection page for viewing, downloading documents & providing feedback.	- The system lacks a dedicated meeting scheduling system and automatic feedback checking. - There is no feature to track changes between document submissions.

Solutions	**Meeting Scheduling & Reminder Notification System**	**Deliverable Submission/Re-Submission with Change Tracking**	**Automatic Feedback Compliance Checking**	**Progress Tracking (progress log or visual)**	**Specific Features**
A Web Based FYP Supervision System	✓	✓	✗	✓	- Meeting scheduling on the basis of supervisor calendar. - Gantt Chart visualization for progress tracking
Creatrix Campus	✓	✓	?	✓	- Low code platform to create review and approval workflows for deliverables. - Meeting Attendance tracking
Moodle as a FYP Management System	✓	✗	✗	✓	- Re-purposing existing open-source Moodle modules to provide specific features
FYP Management System for IT Programmes	✗	✗	✗	✗	- Architecture for streamlining group-based project supervision
Google Workspace for Education	✓	✓	✗	✗	- Document versioning for visible change tracking - Prevent document editing/re-submission during feedback
Web-Based FYPSMS	✗	✗	✗	✓	- Dedicated dashboards for system administrators and external examiners

Core Features of Project Management System



Role-Base Access Control

- **Role Assignment** – Users can be assigned roles of supervisor or student by an administrator or inferred from external authentication providers.
- **Authentication & Authorization –** Users need to provide their credentials in order to access different subsets of the system features based on their roles.

Project Management

- **Projects –** Supervisors can create, read, update and delete/archive (CRUD) projects and assign or remove students from them.
- **Assignments –** Supervisors can CRUD assignments with deadlines for students to submit/re-submit their work.

Reminder Notification & Meeting Scheduling

- **Calendar Sharing –** Supervisors and students can share their calendars to schedule meetings intelligently and improve attendance rates.
- **Email Reminders –** Meeting and assignment notification reminders are automatically sent via email. Supervisors can create manual reminders as well.

Assignment

- **Submission-Feedback Loop (SFL) –** Assignments alternate between a submission mode where students submit their deliverables and a feedback mode for review of the deliverable submissions.
- **Deliverable Version Tracking with Centralized Store –** Assignment deliverable submissions are versioned and stored in a central repository and can then be viewed and downloaded by students and supervisors.
- **Assignment Feedback –** Supervisors can provide feedback to assignment deliverables in the form of concise points.
- **AI Document Comparison –** Prior to deliverable re-submission, the document is compared with previous submission and feedback using artificial intelligence and feedback compliance is measured (gap analysis)
- **Feedback Compliance Review –** Students can review AI feedback compliance and can select unresolved feedback for manual review before confirming re-submission.

Progress Tracking

- **Progress Logs –** Progress log reports based on various metrics such as meeting attendance, assignment completion or feedback compliance rates can be generated and downloaded.