Project Overview

Title: ThesisTrack: An Algorithm-Driven Platform for Efficient Monitoring of Student Research Progress for CICT  
Prepared by:  
Date:   
Version:  
Reviewed by / Approved by:

Objectives

The purpose of this plan is to guide the development of ThesisTrack: An Algorithm-Driven Platform for Efficient Monitoring of Student Research Progress for CICT. The plan ensures that the system is built systematically using the Software Development Life Cycle (SDLC).

**Goals:**

· Provide a centralized platform for students, advisers, and coordinators.

· Automate checks for thesis completeness, grammar, citations, and formatting using AI (Flan-T5).

· Enable research coordinators to manage adviser sign-ups, approvals, and section assignments.

· Support agile and continuous improvements through Kanban methodology.

**Expected Outcomes:**

· Improved efficiency in thesis monitoring.

· Reduced manual workload for advisers and coordinators.

· Clearer student progress tracking.

· Faster feedback cycles through AI assistance.

Scope

**Inclusions (What’s covered)**

· Student portal for uploading chapters and receiving AI-powered validation/feedback.

· Adviser portal for monitoring assigned student groups, giving feedback, and tracking progress.

· Research coordinator portal for managing advisers and assigning sections.

· AI Integration (FLAN-T5-based) for grammar checking and completeness checking.

· Kanban-based workflow visualization for progress tracking.

**Exclusions (What’s not covered)**

· Integration with external tools (e.g., Google Docs, Turnitin).

· Advanced plagiarism detection (outside the current scope).

**Boundaries/Constraints**

· **Time**: Limited semester-based timeline for development and deployment.

· **Budget**: Restricted to available free/open-source tools and minimal hosting resources.

· **Resources**: Small development team with limited AI training capacity (student researcher only).

· **Technology**: System will use PHP, MySQL, HTML, CSS, JavaScript, and Python (for AI model API).

Stakeholders

**Internal Stakeholders**

· **Project Team (Developers/Researchers)**: Responsible for system design, coding, testing, and documentation.

· **Advisers**: Review student work, give feedback, and monitor progress.

· **Research Coordinators**: Manage adviser accounts and assign sections.

· **Students**: Upload thesis work, receive AI and adviser feedback.

**External Stakeholders**

· **CICT Department**: Oversees implementation of the system.

· **Students:** End-users submitting chapters and monitoring feedback.

**Roles & Responsibilities**

· **Students:** Upload chapters, review AI and adviser feedback, track progress.

· **Advisers:** Validate student outputs, provide feedback, and track assigned groups.

· **Research Coordinators:** Approve adviser sign-ups, assign sections, and oversee system management.

· **Developers (Project Team):** Design, implement, test, and deploy the system.

· **Management (Faculty/Department Heads):** Oversee project compliance with academic requirements.

Requirement & Resources

Strategy

Milestones

Risk Management

Communication Plan

Success Criteria & Metrics

Approval

Prepared by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Reviewed by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Approved by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_