SYNOPSIS

Title of the Project:

Findify: AI Driven Lost and Found Application

Introduction:

Lost and found management within institutions is often handled manually, leading to inefficiencies, delays, and miscommunication. This project proposes an AI-powered web application that enables users to report and track lost and found items digitally. The system integrates an Angular frontend, a Spring Boot backend, and a Python-based AI module to extract item attributes and suggest intelligent matches. MySQL stores structured data while email notifications ensure users are updated automatically when relevant matches or issues occur.

Problem Statement:

Traditional lost and found systems rely heavily on manual work and do not offer automated matching capabilities. Users and departments face difficulties in managing item records, retrieving matches, and reporting internal issues. There is a lack of centralized, AI-driven, and automated platforms to streamline this process effectively.

Objectives:

• Provide a interface to report lost and found items.

• Use AI/NLP for automatic attribute extraction and similarity matching.

• Implement email notifications for match alerts and departmental issue reporting.

• Maintain secure and structured data management using MySQL.

• Offer an issue-reporting module with automated email escalation.

Proposed System:

Users can submit item details along with descriptions and images. The Python AI module processes the inputs and identifies potential matches based on similarity scores. Spring Boot acts as the central API layer, communicating between Angular, MySQL, and the AI service. An issue-reporting module enables departments to submit concerns that automatically notify support staff via email.

Technology Stack:

Frontend: Angular

Backend: Spring Boot (Java)

Database: MySQL

AI Module: Python (Flask)

Notifications: Email (SMTP)

Expected Outcomes:

• Automated matching of lost and found items using AI.

• Reduced manual effort and increased efficiency.

• Quick communication through email notifications.

• Centralized record management and streamlined departmental issue reporting.

Conclusion:

The AI-Powered Lost and Found Management System provides an intelligent, automated, and efficient solution for tracking and managing lost and found items. With AI-driven matching, email notification workflows, and an intuitive web interface, the system significantly improves accuracy, speed, and user experience.