

Abstract 76 – Paper ID: 034**NextGen Intern Manager for Effective Talent Development and Skill Tracking**

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Abstract

The NextGen Intern Manager for Effective Talent Development and Skill Tracking is a web-based platform designed to streamline and modernize the management of internship programs in academic and organizational settings. The system addresses key limitations of traditional supervision methods by providing an automated and centralized environment for monitoring attendance, tasks, learning progress, and overall intern performance. It offers dedicated dashboards for interns, mentors, and administrators, enabling seamless interaction and real-time visibility into internship activities. The platform is developed using React.js for the user interface and the Django REST Framework for backend logic, ensuring modularity, scalability, and efficient data handling. Security is reinforced through PBKDF2-SHA256 encryption and role-based access control, guaranteeing restricted and authorized information access. Integrated analytics and visualization modules generate meaningful performance insights, helping mentors evaluate interns objectively and identify skill development trends. The system architecture, deployed on a local server, supports centralized data storage, cost-effectiveness, and reliable backup mechanisms. Developed using Agile methodology, the platform underwent iterative refinement, resulting in improved usability and adaptive feature enhancements. Experimental evaluation demonstrates reduced administrative workload, higher accuracy in attendance and task tracking, and enhanced transparency in performance assessment. Overall, the system contributes to a more accountable, data-driven, and development-oriented internship ecosystem through a secure and user-friendly digital framework.

Keywords: Internship management, skill tracking, performance analytics, Django REST Framework, React.js, role-based access control, PBKDF2-SHA256, Agile methodology, centralized data management, talent development