

Diploma Cracker: All in One Learning Platform for Diploma Engineering Students

Omkar Garje¹, Rohit Nalavade², Sanskar Thorat³, Pournima Kamble⁴

Students, Department of Computer Technology^{1,2,3}

Lecturer, Department of Computer Technology⁴

Bharati Vidyapeeth Institute of Technology, Navi Mumbai, Maharashtra, India

Abstract: Education is evolving with the integration of technology, making learning more accessible and efficient. Diploma Cracker is a web-based platform designed to assist diploma engineering students and teachers by providing a centralized repository of study materials, AI-driven doubt resolution, and productivity-enhancing tools. The platform offers a structured learning experience through syllabus-specific PowerPoint presentations (PPTs), a 25-minute Pomodoro study timer, and an AI chatbot for real-time doubt resolution. The website is built using HTML, CSS, JavaScript, and Bootstrap for the frontend, while Django (Python) and SQLite manage the backend and database functionalities. Teachers have admin access to update syllabus content, ensuring that study materials remain accurate and relevant. The project aims to simplify the academic journey by providing interactive, distraction-free learning resources.

Keywords: Diploma Cracker, AI Chatbot, Web-Based Learning, Django, SQLite, Study Timer, Study Materials, Diploma Engineering, Pomodoro Technique, Chatbase Integration