

TestForge: MSBTE Exam Scheduling System

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Abstract: *TestForge: A Smarter Way to Manage MSBTE Exam Centers* TestForge is a modern web-based system developed to simplify and improve how MSBTE end-semester exams are conducted at exam centers. Built using Next.js and FastAPI, the platform handles essential tasks such as generating exam timetables, assigning blocks, preparing seating charts, and managing inventory automatically. It also includes digital marksheets for better and faster record-keeping. With features like real-time updates, automated reports, and efficient resource allocation, TestForge helps reduce the workload of exam center staff. This system brings more accuracy, less manual effort, and smoother exam operations. This paper explores how TestForge works and its benefits in streamlining exam center processes.

Keywords: Maharashtra State Board of Technical Education (MSBTE), Examination Management, Block Allocation, Next.js Framework, FastAPI Backend, Automated Report Generation, Seating Chart Design, Inventory Tracking and Management

