

LABNET

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Abstract: *The LabNet project represents a transformative initiative aimed at modernizing laboratory testing through the strategic integration of cutting-edge technologies. By implementing the innovative Laboratory at Home system, driven by the dynamic MERN stack (MongoDB, Express.js, React, Node.js), this project has successfully streamlined the entire laboratory workflow, resulting in enhanced efficiency, accuracy, and accessibility. The transition from traditional paper-based methods to a digitized platform has significantly reduced turnaround time, leading to timely delivery of critical test results to healthcare providers and patients. The seamless integration of laboratory instruments further amplifies system efficiency, automating data capture and minimizing errors. With a steadfast focus on patient outcomes, the LabNet project facilitates real-time communication among laboratory staff, healthcare providers, and patients, ultimately empowering informed decision-making and contributing to elevated healthcare services. This project embodies a revolutionary shift in laboratory management, embracing the power of digitization and automation to provide precise, timely results, and holds the potential to redefine industry standards while enhancing patient satisfaction.*

Keywords: Laboratory testing process, Health care, Laboratory, Critical test result, Patients

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