

EASYSCANNER - APPLICATION FOR EXAM CORRECTION

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In today's rapidly evolving educational landscape, where technology's pervasive influence continues to transform once arduous manual processes into streamlined, automated workflows, the development of EasyScanner stands as an innovative solution poised to revolutionize the practice of exam grading. With a clear commitment to enhancing the educator's experience, this cutting-edge application introduces a user-centric approach to academic assessment, addressing the perennial challenge of precise exam corrections. EasyScanner represents an answer to the needs of educators who, despite existing tools for exam grading, recognize an untapped potential for a higher quality solution in this domain. The project's management adheres to the agile Scrum framework, complemented by the sophisticated PERT estimation technique, ensuring both efficiency and adaptability throughout the development journey. This pioneering software project is structured into two key modules: frontend and backend, each meticulously designed to fulfill its role effectively. The frontend leverages React Native, a versatile JavaScript framework with React at its core, facilitating cross-platform mobile development. In contrast, the backend harnesses the power of Express, a minimalist framework tailored for API development. Architecturally, the project adopts the REST (Representational State Transfer) model, complemented by the MVC (Model View Controller) design pattern for effective project organization. A fundamental component of the project's infrastructure is the MongoDB database, chosen for its flexibility as a non-relational database system. MongoDB Atlas, a cloud-based variant, is selected for its seamless integration and scalability. Recognizing that a significant portion of development time can be consumed by database interactions, the project wisely incorporates the Object Relational Mapper (ORM) mongoose, simplifying data access with its high-level, object-oriented interface, and pre-built methods for common operations, such as `findById()`, `findByIdAndUpdate()`, and `findByIdAndDelete()`. As of now, the project is in its initial development phase, with outcomes and insights to be shared in subsequent stages, as the project matures into advanced development phases. Amidst the evolving landscape of education and technology, one core lesson emerges: effective communication is paramount to guide the team through challenges and propel the project toward satisfying both end-users and the development team. As development progresses, we anticipate delivering impactful results that will benefit both users and project contributors.

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