ABSTRACT

This project presents a comprehensive web-based platform designed to conduct coding contests and streamline candidate evaluations, primarily aimed at assisting companies in identifying and recruiting skilled individuals. Developed using Django, ExpressJS, ReactJS, and MySQL, the system enables company officials to create and manage contests featuring various types of questions, including multiple-choice, descriptive, and coding challenges.

For coding-based assessments, the platform supports backend execution of user-submitted code, allowing for automated evaluation against predefined test cases. This ensures fair, consistent, and efficient scoring without manual intervention. The modular architecture allows for flexible contest configuration, user registration, result analysis, and administrative control.

Additionally, the platform provides a dashboard to review individual and overall candidate performance, offering insights to support data-driven hiring decisions. This solution not only reduces the manual effort involved in organizing and grading assessments but also enhances the reliability and scalability of the technical evaluation process for recruitment and academic testing scenarios.

The platform also incorporates secure authentication and authorization mechanisms to ensure that only verified users can access specific functionalities, such as contest creation or participation. Its intuitive user interface, built with ReactJS, ensures a seamless experience for both administrators and candidates across devices. With its scalable backend architecture and structured data handling using MySQL, the platform is well-equipped to handle a large number of concurrent users and contest submissions. Designed with adaptability in mind, the system can be extended for use in academic institutions, online hackathons, and corporate assessments, making it a versatile tool for modern technical evaluations.

KEYWORDS

Automated Code Evaluation, Online Coding Platform, Technical Skill Assessment, Full-Stack Web Application, Django Backend Development, ReactJS Frontend, Contest Management System, MySQL Database Integration