# *ABSTRACT*

*BINA ESSA Institute is a non-formal education institution engaged in fashion and garment design, offering training programs under the supervision of the Ministry of Manpower (Kemnaker). To improve the efficiency of the manual registration process, this study developed a web-based application system called EduSkill. This system aims to facilitate the registration process for new students at the BINA ESSA Course and Training Institute (LKP) and Job Training Institute (LPK) with a focus on implementing a user-friendly user interface (UI) using the React.js framework and the Atomic Design approach. The Atomic Design approach that breaks down UI elements into atoms, molecules, organisms, templates and pages helps create a modular, organized and consistent system. The implemented design was tested using the validity and maintainability test method against the existing react source code using sonarqube. This testing was carried out to minimize unnecessary deficiencies in the source code of the react frontend implementation that was built. The data flow between the frontend and backend is designed in such a way that the data validation process on the frontend, data processing on the backend (using the Laravel framework), and presentation of registration status information on the frontend can run efficiently and in an integrated manner.*

**Keywords**: *Frontend*, *Atomic Design*, *Application*, React, Laravel, SonarQube