## DESIGNING AND DEVELOPING A WEB-BASED BOARDING HOUSE SEARCH APPLICATION

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## **ABSTRACT**

The search for boarding houses on Bengkalis Island is still carried out using simple methods, such as physically visiting locations to inspect available boarding options. This method complicates the process for seekers who wish to compare rental prices and required amenities. The challenges faced in finding suitable boarding houses have prompted the researcher to design and develop a Web-based Boarding House Search Application as a solution. In response to these challenges, the researcher has devised a system that aids students in finding suitable boarding accommodations and assists boarding house owners in updating rental prices and room details. The technology employed to build this application involves the programming language JavaScript, React JS for the frontend, Express JS for the backend, a MySQL database, and design based on the Unified Modeling Language (UML). Data collection techniques employed in this study consist of interviews, observations, literature review, and documentation. The application was tested using Black Box testing, involving assessments on the admin, boarding house owner, and seeker sides. This was accomplished by thoroughly testing all the available features within the application to ensure its successful functionality and alignment with expectations. This application offers ease in obtaining information about room amenities, appropriate pricing, and boarding house locations for students, while also enhancing promotional opportunities for boarding house owners.

**Keywords**: Website, Aplication, Boarding Houses Search, React JS, Express JS, JavaScript.