# *ABSTRACT*

*The rapid urbanization in major cities like Jakarta has led to an increasing demand for vertical housing such as apartments. However, Muhammad Fazlur Rachman, an apartment property agent operating in South Jakarta, faces difficulties in marketing and renting out his new apartment units because they do not appear in search results on major platforms like Traveloka due to the absence of ratings. He also mentioned that prospective tenants often struggle to find units that match their preferences in terms of location, size, or accessibility, even though those listings are part of his portfolio.*

*In addition, the processes of recording rental data, listing status, and handling complaints are still managed manually using scattered Spreadsheets across multiple files, making monitoring inefficient. This study aims to design and develop RuangHuni, a web-based information system application that supports apartment property agents in marketing and rental processes through a preference-based recommendation system, as well as apartment management through an integrated digital platform.*

*The methodology used is Waterfall, starting from requirement analysis, design, implementation, to testing. The system is modeled using Unified Modeling Language (UML), implemented with the Laravel framework and MySQL database. Evaluation was conducted through Black Box Testing, in which all test cases passed successfully, demonstrating functional readiness. Usability Testing using the System Usability Scale (SUS) resulted in an average score of 78.7, while User Acceptance Testing (UAT) showed a satisfaction level of 94.4%. The recommendation system was also validated by the appearance of 13 unrated new apartment units within the top 10 pages of recommendation results.*



***Keywords*—apartment, information system, property agent, web application, recommendation system**