## **ABSTRACT**

The increase in the number of new Telkom University students in 2022 has resulted in some students not getting boarding facilities and having difficulty finding a place to live around Telkom University. Based on the results of the customer profile, several problems were found, such as unable to check room availability, search features that were not in accordance with user wishes, slow information loading speed, and incomplete information presented. Therefore, we need an application that can handle these problems. In its development, the Scrum method is used which is based on the principles of transparency, inspection and adaptation to organize work in a timely and efficient manner. The API implementation uses restify as the node.js middleware which is specially made for Restful API and mongodb with its performance and flexibility. Based on the results, it can be concluded that the API can manage user data, boarding data, rental data, and seller data around Telkom university, can run 24/7 and has encryption and decryption as a mechanism to keep user data confidential. On the other hand, all APIs have been tested through unit testing and integration testing, and have achieved an adequate level of code coverage by industry standards with an average value of 91.41% which ensures their quality.

**Keywords**: API, boarding house, rent, residence, students.