

ABSTRACT

The increasing use of the internet has created significant opportunities for businesses, including Pusat Oleh-oleh Sawangan No.1 Purwokerto, to expand their market through digital platforms. However, the store has not yet implemented an online sales system, making it difficult for out-of-town customers to view and purchase products. This study aims to design and develop a REST API backend system using the Scrum method to support the store's e-commerce website. The REST API was built with Express.js and PostgreSQL, and tested using whitebox testing with the Jest framework. The resulting backend system effectively manages product data, transactions, and payment integration. Unit testing was conducted on 189 test scenarios using Jest, all of which passed successfully within 25.827 seconds. This indicates that the system's logic including authentication, product data processing, and transactions works as intended and meets the specified requirements. With this system, customers can shop more easily, while the store improves its digital service and competitiveness.

Keywords: *REST API, Scrum, E-commerce, Backend Development, Express.js, Whitebox Testing, Unit Test, Sawangan Purwokerto.*