

## **ABSTRACT**

*SMK Negeri 10 Bandung faces challenges in managing its inventory, where the inventory process is still carried out using Excel and manual recording. This causes several problems in inventory management, such as data inaccuracy, difficulty tracking asset location, and errors in presenting inventory reports. This research aims to develop a web-based inventory system backend using the Laravel framework. The development method used includes requirements analysis, system design, implementation, and testing. The developed backend consists of a series of RESTful APIs used to communicate with the frontend and database. This research successfully developed a backend system capable of handling inventory data management efficiently. All developed API endpoints successfully passed functional testing using Postman and were able to respond to client requests according to system specifications. The system also successfully passed simple CSRF and SQL Injection security tests.*

**Keywords:** *inventory system, laravel, RESTful API, backend development*