

ABSTRACT

PT. Surya Inti Gas still uses conventional methods in ordering and recording inventory, which causes recording errors, delays and difficulties in monitoring stock in real-time. This research aims to design and build a website-based system using the Extreme Programming (XP) method to increase operational efficiency. The system was developed with Laravel, ReactJS, and SQLite, and tested using Blackbox Testing for functionality and Whitebox Testing for program logic. Development is carried out iteratively by involving users at every stage to ensure the system meets business needs. As a result, this system is expected to minimize errors, speed up the ordering process, increase recording accuracy, and provide real-time data access for users.

Keywords — Web-Based Ordering System, Inventory Management, Extreme Programming, Laravel, ReactJS, SQLite, Software Testing, Operational Efficiency, Blackbox Testing, Whitebox Testing.