ABSTRACT

The manual inventory management system at SMKN 10 Bandung was deemed

inefficient, prone to recording errors, and difficult to retrieve data. To address these

issues, a web-based inventory information system was developed, focusing on front-

end development using the ReactJS framework and a Single Page Application (SPA)

approach. This system consists of two main subsystems: asset management and

consumables management, and is intended for use by a single admin.

ReactJS was chosen for its ability to build fast, responsive, and modular user

interfaces. The SPA approach allows transitions between pages without a full

reload, thus improving admin experience and efficiency. The development process

was conducted using Agile methods, which allow for continuous iteration and

adjustments based on user needs. Implementation results show that the system

successfully provides essential features such as inventory recording, asset tracking,

and annual report preparation, effectively addressing the limitations of the previous

manual system.

Keywords: ReactJS, Inventory System, SPA, Web Frontend, Agile