ABSTRACT

DESIGN AND DEVELOPMENT OF EQUIPMENT & INVENTORY LOAN APPLICATION USING THE AGILE METHOD BASED ON PROGRESSIVE WEB APPS AT TELKOM PURWOKERTO INSTITUTE OF TECHNOLOGY

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Information technology for human life is very influential in all fields, one of which is in the logistics of borrowing equipment and inventory items at the Telkom Purwokerto Institute of Technology (ITTP). Inventory on the ITTP campus plays an important role for students. Because when holding an event, several items of equipment are needed when the event takes place. However, students experience problems in knowing the amount of stock of inventory items in logistics. The development of information technology has a positive impact on students, one of which is making applications for borrowing tools and inventory items based on Progressive Web Apps. In the process of researching this system using agile methods, researchers carry out the necessary planning, design systems, develop systems, test systems, and carry out maintenance. System test results on 14 respondents using blackbox testing with descriptive analysis techniques which produce a percentage value of 98.18% and have a very decent interpretation. The conclusion from this study, the agile method is due to changes in the development process, namely the addition of the WhatsApp number input feature and being able to upload loan letter files for users, as well as the addition of an admin feature to view the data history of each item that has been borrowed by the user. The development of this application can run well so as to produce an application for borrowing tools and inventory items based on Progressive Web Apps by carrying out two iterations on adding an admin feature section and being able to provide information about available asset data for tools and inventory items.

Keywords: Applications, Inventory, Progressive Web Apps, Agile, Blackbox Testing