

ABSTRACT

In the transportation sector, maintenance is a routine activity carried out to ensure vehicles are in optimal condition. This maintenance process produces many used spare parts that are no longer used. However, used spare parts are often not managed optimally, resulting in wasted resources. In fact, used spare parts can be reused through repair or sales processes that can provide added value to the company. This final project aims to design and develop a used spare parts management feature in the Inventory Management Module of PT Indo Trans Teknologi's Vehicle Maintenance System (VMS) application. The developed features include the process of returning, receiving, inspecting, and classifying actions for used spare parts based on the inspection results, such as repairing, selling, or disposing of them. Development was carried out iteratively using an Agile approach with a Scrum framework. To support structured project management, Notion was used as a tool for managing backlogs, monitoring progress, and as a communication medium during development. The final result of this final project is a validated system design and successfully implemented functionality. This system is expected to improve accountability, efficiency, and the economic value of used spare parts utilization.

Keywords: Inventory Management, Spare parts, Vehicle Maintenance System, Agile, Scrum, Project Management.