ABSTRACT

In the textile industry, significant production increases due to high demand and foreign capital investment present new challenges in ensuring the quality of the fabric produced. This research aims to develop a frontend interface for the textile production defect detection system at PT. Gracia Mega Karya using the User-Centered Design (UCD) method to present defect detection results visually and interactively. The system, named "Defector," provides visual information related to defect detection in textile production. The development process began with data collection and user needs analysis, which were applied in the prototype design. The prototype was then tested through usability testing to ensure that the interface meets user needs and is easy to use. The research results show that the "Defector" system is effective in improving the efficiency and quality of textile production. The developed interface is intuitive and responsive, enabling quicker and more accurate decision-making regarding process improvement and development.

*Keywords -**frontend, defect, textile, User Centered Design (UCD), laravel***