Penerapan Arsitektur MVC pada Web Dashboard dan Aplikasi Manajemen Informasi Fakultas Industri Kreatif (MI-FIK) Universitas Telkom

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Abstract

MI-FIK is a software designed to manage information for the academic community of the Faculty of Creative Industries, Telkom University. This software is based on a mobile application that can be used by all students, lecturers, and staff from the Faculty of Creative Industries. To support the management of data contained in the database on the MI-FIK application, a web dashboard-based software has been designed which be managed by the admin. The design of this software is divided into the frontend side and the backend side, to connect the two sides an architecture is needed that can manage and display data. MVC or Model View Controller is a design pattern that functions to connect the software design structure from the backend and frontend. This architecture allows software design to be carried out separately based on logic functions, interaction with the database, and interface display. In addition, Black Box Testing is also needed to ensure that the MVC implementation has been carried out correctly and according to requirements. After all the features for each Functional Requirement have been developed and tested using Black Box Testing, the results obtained from the 50 Functional Requirements and 9 Non-Functional Requirement have been tested. All features meet the needs according to the architectural design that has been created.

Keywords: MVC, Dashboard, Mobile, Black Box Testing, Framework