

ABSTRACT

Feelsbox is a digital startup that focuses on mental health with the initiative to develop a feature "FeelsQuest" as an effort to educate the public, especially teenagers in preventing and dealing with mental health problems. However, in its development, an architecture is needed that applies the principle of separation of concerns between client and server so that the API implementation and testing process can be more focused and the resulting API can be used across platforms. This research applies the REST architecture using the PHP programming language and the Laravel framework. Development is carried out by applying the MVC (Model-View-Controller) concept as a separation of responsibilities between data (model), view (view), and data processing bridge (controller). In addition, API testing is carried out using API testing methods using Postman to test API functionality through functional testing, and API performance through load testing. The application of the REST API architecture to the FeelsQuest feature successfully separates server-side and client-side development. This separation allows independent development on the backend and frontend sides. The resulting API can be used across platforms through the interoperability support of the REST architecture by using links or API endpoints for the data exchange process. Testing shows that each API endpoint functions in accordance with predetermined functional requirements and the API is able to handle the access load according to the needs of the FeelsQuest feature. The application of the REST API architecture to the FeelsQuest feature with PHP and Laravel has succeeded in creating a system that applies the principle of separation of concern between client and server. In addition, tests conducted on APIs that have been made show that each API has met the needs of the FeelsQuest feature, both functionally and non-functionally.

Keywords: *backend, functional testing method, Laravel, load testing method, online course, REST*