Abstract

Each User interface design needs to be tested, one of which is by using heuristic evaluation. Heuristic evaluation is used to test ten usability aspects of the application and a severity rating to determine the magnitude of the user interface problems of the application. There are problems with usability in the TA mobile application. It was starting from the current user interface display, which is unresponsive (88%). Furthermore, some icons do not match the icon name and information (83%). There is an accumulation of information on one page, especially on the home page, where users need excessive scrolling (72%). So it is necessary to redesign the user interface design in order to meet user needs. This study aims to determine the suitability of the TA trial mobile application with user requirements through requirements elicitation (observation and questionnaires) and testing with heuristic evaluation & severity rating to measure the usability of the TA mobile application. This research has produced seven Functional Requirements, four Non-Functional Requirements, and Use Case diagrams involving three actors and eleven Use Cases. In addition, for the MVVM implementation, we have implemented interface design, for example, applied to the LoginAction class to avoid using ENUM. The implementation of View on 'SignInButton,' 'usernameView,' and 'passwordView' to create actions and states, and implementation of RxViewModel as the basis of all ViewMode. In the final stage of this research, usability and severity measurements have been successfully carried out, which are included in the category with a rating = 1 (cosmetic problem).

Keywords: Usability, Requirement Elicitation, User Interface Design, MVVM