ABSTRACT

Information Technology and Telecommunications to the Internet becomes the main priority in the development of world progress. These developments provide new breakthrough in mobile learning using mobile IT devices or so-called mobile learning (m-learning). M-Learning has some excess capacity for learning that can be accessed anytime, anywhere, by anyone. But on the other side, learning in m-learning devices have limited resources and the diversity of platforms so that the necessary design that ensure compatibility and interoperability. Despite the lack of which is owned by m-learning did not stop the research to make m-learning is something that is worth more for implementation of e-university.

In general, this research aims to examine the development steps of a m-learning applications based on Java Mobile Edition with Apache WebService (JSON) and applying the multi-tier architecture using iterative and incremental methods. Applications built to run on any platform supporting Java cell phones that at least MIDP 2.0, CLDC 1.1 and JSON web service. Beside that, the interface of application will be showed as more attractive and consistent in any type of mobile phone so this applications using LWUIT.

Finally, from all of that things this application is expected to be an application that supports the e-university in learning activities that integrated with E-Learning System (Application Elisse). Mobile learning will be consistent with a system called Moli.

Keyword: m-learning, multimedia, mobile web service, dan Java Mobile Edition.