ABSTRACT

Education today is needed to follow the development of information technology, where information technology is an example of the progress of science and technology that is always evolving. In order to fulfill the industry demand in ICT, IT Telkom tried to improve the quality of human resources by developing an elearning system that is used as a media of learning to support the process of training activities. In order to create the effective and flexible training process, IT Telkom develop an e-learning system. The learning process intraining can not be done to the fullest without any teaching materials in the form of the software-based interactive multimedia lessons with the 10 principles of building multimedia learning as instrumental input, multimedia as a best practice for environmental input and using by ADDIE Instructional Design Model method in Java professionalism FRI-IT Telkom.

Therefore, it is neccessary to build learning software for training materials struts 2 framework with Struts 2 Framework as follows: Pendahuluan, Membuat aplikasi sederhana: Annotation dan Hello World, Struts 2 Tags, OGNL Expression Language, Interceptor, DynamicMethod Invocation dan Fungsionalitas DispatchAction, Validation, Domain Object as JavaBeans Propertty dan ModelDriven Action, File Upload, Struts 2 Tiles Integration dan Struts 2 CRUD so that can be measured the success rate of software learning made in terms of quality, the interaction of the program, the presentation of the material and user interaction.

Keyword: E-learning, learning software, interactive multimedia, struts 2 framework, ADDIE Instructional Design Model,instrumental input, environmental input.