

## ABSTRACT

*Most students felt that learning in the classroom is not enough to understand the programming. They need to learn to be independent to gain mastery of logic programming languages and applications specific software. This last project tries to do the development and implementation of e-learning in Advanced Programming courses, Information Systems Studies Program, Faculty of Industrial Engineering IT Telkom.*

*This e-learning development using Quality Function Deployment (QFD), which involves customer (student and lecturer). This method can provide detailed knowledge in the design of an e-learning. With simple random sampling techniques and sample size using the formula solving sample with 5% error, it will get the voice of the customer e-learning Advanced Programming as follows: interface structure, types of files used familiar software, downloadable materials, materials used forms presentation that is easily understood, for example the case in applications in C/C++ displays the stages in the making step, examples of cases in the applications in C/C++ displays the source code, easy to interact directly with faculty, ease to learn together (collaboration) with other students, the quiz / exercise, the dictionary terms in C/C++ in Indonesian language, the language selection, the transparency values in Advance Programming, the presentation of material in the form of a varied (slides, pictures, videos, etc.), loading speed, upload speed, and speed download.*

*To meet the voice of the customer determined the following technical characteristics: type of e-learning software, the kind of script programming language, the look / theme, type of software for content, ease of downloading the materials, forms / lectures methods, shape the content, quality content, type of feature live meetings, the frequency of faculty conduct live meetings, chat availability, availability of features forums, quiz form, quality, quiz, quiz feedback forms, quizzes feedback quality, the availability of the task of collecting features, types of database servers, availability glossary, glossary of quality content, the type of language options content capacity, users upload capacity, size hosting, application availability enhancements.*

*In practice, not all the technical characteristics of the target can be met by Learning Management System that is used (Moodle). Target maximum capacity is 64 Mb content, Moodle only provides facilities to upload material / content up to 8 Mb. Therefore the solution implemented is uploaded files on the server first, then e-learning to take the links from that server.*

*Finally, e-learning can meet all the technical characteristics of the target and other elements required, such as hardware and software on the server. With the implementation directly, it is known that the e-learning has been made in accordance with customer needs.*

*Keywords: e-learning, lectures, web, Learning Management System, Quality Function Deployment*