

ABSTRACT

LOOOP (Learning Objects in Object Oriented Programming) is an Electronic Learning (E-Learning) system developed in object-oriented programming based on Learning Objects approach for higher education students. It uses an informational type of Learning Objects technology. The motivation of the project is to provide an alternative system for learners in support learning, provides supportiveness for learners in finding and recording information, provides communication tool for learners as well as to give immediate feedback promptly to learners who need information. This system not only provides user with learning contents, but also provided information searching using the Internet via Google.com. A LOOOP complete system is a client-server application that execute on the client computer and retrieved its learning contents from server or from the client computer itself. This system is developed to support learners who would like to study in a new study style that transformed normal study style into digital environment. To develop fully, linear sequential model had been selected as LOOOP project methodology. Visual Basic was the programming languages used in the project implementation. Besides a client server application, ActiveX control and DLL file was also created in this project for reusability and interoperability purposed. In addition, LOOOP language, which was a similar XML standard language, was used for data passing within database and the system. As a conclusion, a depth defined and designed of LOOOP included its input, output, methodology were required at preliminary stage to ensure LOOOP was developed on the correct path.

APPRECIATION

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LIST OF ABBREVIATIONS

ADL	Advanced Distributed Learning initiative
AICC	Aviation Industry Computer-Based Training Committee
API	Application Program Interface
CBT	Computer-Based Training
CD	Compact Disc
COM	Component Object Model
CPU	Central Processing Unit
DFD	Data Flow Diagram
ERD	Entity Relationship Diagram
ERP	Enterprise Resource Planning
GUI	Graphical User Interface
HTML	HyperText Markup Language
ICT	Information and Communication Technology
IMS	Instructional Management System
LMS	Learning Management System
LOOOP	Learning Object In Object-Oriented Programming
MIT	Massachusetts Institute of Technology
RAM	Random Access Memory
SCO	Sharable Content Object
SCORM	Sharable Content Object Reference Model
SDLC	Software Development Life Cycle
SQL	Structured Query Language
UAT	User Acceptance Testing
URL	Uniform Resource Locators
USA	United State Of America
XML	Extensible Markup Language