

ABSTRACT

Conceptual database design is one from several steps to make a good database design. Entity-Relationship data model is widely use to develop an initial database. It provides useful concepts that allow designer to move from informal description of what user want from their database to a more detailed, and precise, description that can be implemented in a DBMS. Most DBMS are relational DBMSs. Therefore, designer next task is to convert an ER schema into a relational schema.

This final project had implements web based computer aided design tool for data modelling. This tool help designer to make an ER diagram and automate the process of converting an ER schema into a relational schema. This tool take user's input of Entities, Attributes and Relationship using Graphical User Interface and displays the map the ER Diagram to a relational schema. The entire tool is implemented in Java as an Applet and Swing component used for the implementation of the Graphical User Interface.

Applet has limited access to resource, its not allowed to write files in client disk. Therefore, this final project also implements a web server to keep user files. This web server provides 4 MB space for every registered user. Registered user can create, delete, modify, or publish their project files. Guest can only see an ER diagram published by registered user. Project files that already published can't be modified by guest or the publisher.

Keyword : conceptual design, entity relationship, relational schema, convert, Java Applet, Swing