

## **Abstract**

E-Learning is virtual learning on internet that student mustn't come to classroom, so there is no human tutor or teacher for train the students, e-learning just placing lecture notes on the web does not train. That system is example of collective tutoring, where a tutor give a same material for all student without consider students ability and current knowledge. As a result, a student which not yet mastery a material perforced to follow next material. The solution is individualistic tutoring, that is executing and managing tutorial according to a scenario tailored to the characteristic of students.

On this final project, will be developed a Intelligent Tutoring System (ITS) on e-Learning for adopt the role of individualistic tutoring (one-to-one teaching) under a Bayesian Network approach supported. ITSs are Intelligent software programs that give support to the learning activity, incorporate built-in expert systems in order to monitor the performance of a learner and to personalize instruction on the basis of adaptation to learners' such as learning style, current knowledge level, appropriate teaching strategies of knowledge, and decides on the next instructional event to maximize the student's learning. Bayesian Networks are used to assess user's state of knowledge or learning style and preferences, in order to suggest pedagogical options and recommend future steps in the tutor.

Application's development use object oriented analysis and design with Rational Unified Process metode, implementation's tools are MySQL for database, PHP and Javascript for being accessible through an Internet browser, and Rational Rose 2000.

**Keywords :** E-Learning, Intelligent Tutoring System (ITS), Bayesian Network