

# Evaluation

### 7.1 Introduction

The previous chapter provided a vivid description on the system implementation. It described the system components separately and then provided a detailed description of the implementation of the curriculum design system. This chapter will provide a description of how we evaluate the autonomous solution for curriculum design to see whether the objectives have been achieved at the end of the project.

### 7.2 Evaluation of Autonomous solution for Curriculum Design

Evaluation is a very important process which is done by the people who implemented the system to see whether their objectives have been achieved by the implemented system or not. By the evaluation we can measure the functionalities of the implemented system and by those measures it can get an idea about an achievement of the project objectives.

The aim of this project was to handle the issue in designing curriculum among the negotiation within different parties with use of Multi-Agent technology. The objectives of the implemented final part was to Design and develop the Multi Agent System for curriculum design.

To testing environment has been setup in two ways. One is for the testing conversation between agents and other bugs in the software and other one is testing the prototype developed in this project. To test the conversation between agents it has been used the sniffer Agent available in JADE tool kit. The sniffer agent subscribes to a platform AMS (Agent Management System) to be notified of all platform events and of all message exchanges between a set of specified agents. Using some test cases it has been tested the functionalities of the system. Using this approach it has been tested the frontend functionalities as well as the backend functionalities.

For testing the prototype developed in this project, testing environment has been setup with the participant of senior lectures, probationary lectures, instructors in the faculty of Information Technology. Most of them have been involved for the curriculum design process in the faculty and those who were not involved are tackled by the questioner. First it has been taken current curriculum available in the faculty and entered into the system. Then it has been entered the syllabus related to each module in the curriculum. Then prepare a questionnaire to evaluate the proposed system. The questionnaire will be available in the Appendix C. For each participant it has been given the questionnaire and asks them to study about the system by allowing them to do the changes for the modules in existing curriculum and add new modules to the same curriculum and then ask to fill the questionnaire. Finally get their comments about the proposed solution to check whether the proposed multi agent system have been achieved expected target.

Result obtain from the participant has been finalized and it is shown in Table 7.1.

Satisfactory of credit balancing	>90%
Satisfactory of Pre-requisites checking and equivalent modules checking	>75%
Satisfactory of content editing	>50%
satisfactory of final design	>70%
satisfactory of use of multi agent technology	>70%

Table7.1: Result obtain from the questionnaire

### **7.3 Summary**

This chapter described the evaluation process of the autonomous solution for curriculum design with the use of participant, set up testing environment, and the result obtain from the questionnaire. Next chapter describe the conclusion and further works of this project.



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