

A Web Deployed Multi-Agent Based Approach for Student-Lecturer Appointment Scheduling in Institutions of Higher Learning

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Abstract:

Institutions of higher learning such as universities have been positively influenced by the internet which has facilitated learning and teaching. Likewise, this same internet can also support student lecturer appointments, but currently students and lecturers are faced with issues such as finding free time-slot, difficulty of students to meet supervisor and issues related to managing appointment operations. Therefore, this paper develops a multi-agent architecture and a web based agent appointment scheduling system to support students and lectures in managing appointment scheduling in universities. The agent based appointment scheduling system was implemented as a web system integrated by multi-agents to facilitate students in finding free time-slot, resolving difficulty of students to meet supervisor and also addressing difficult of managing scheduled appointment records by lecturers. The applicability of the agent based appointment scheduling system was evaluated by collecting data using questionnaire from randomly selected 102 students and lectures in Malaysia universities. Furthermore, Statistical Package for the Social Science (SPSS) was employed to analyze the questionnaire data using descriptive and exploratory factor analysis. Findings from this study reveal that the developed agent based appointment scheduling system is applicable in supporting student lecturer appointment scheduling in universities.

Keywords: Multi-agent; Appointment; Scheduling; Students-Supervisor; Institutions of higher learning; Applicability