

udpSkeduler: A web architecture based decision support system for course and classroom scheduling

Miranda, Jaime; Rey, Pablo A; Robles, Jose M.

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Resumen

A key process for post-secondary educational institutions is the definition of course timetables and classroom assignments. Manual scheduling methods require enormous amounts of time and resources to deliver results of questionable quality, and multiple course and classroom conflicts usually occur. This article presents a scheduling system implemented in a Web environment. This system generates optimal schedules via an integer-programming model. Among its functionalities, this system enables direct interaction with instructors in order to gather data on their time availability for teaching courses. The results demonstrate that significant improvements over the typical fully manual process were obtained. (C) 2011 Elsevier B.V. All rights reserved.

Palabras clave

Palabras clave de autor: Education planning; Web-based decision support system; Class scheduling; University timetabling; Operations research; Case study

KeyWords Plus: DSS SUCCESS; UNIVERSITY; IMPLEMENTATION; MODEL