

On-line Project Allocation System

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Abstract

This project involves the development of a supervisor allocation system for use in academic institutions. It is based on an existing program which was recently developed at the University of Manchester for 3rd year project allocation at the department of Computer Science. This existing system takes ranked student project choices as input and allocates projects and supervisors to students in such a way as to give students the highest ranked projects possible, subject to various constraints on staff duties. The new system uses the same optimization procedures in a more general setting, allowing academic administrators to manage supervisor allocation. Thus, the focus of this project is not on the optimization of algorithms, but rather on generalizing, re-designing and re-engineering the existing system which will result in a flexible and easily re-configurable system for use in a variety of university settings.

The Project Allocation System is a web application that allows the allocation to take place securely over the Internet, independent of the location and the equipment of the user. The application is secured so only the people responsible are allowed to perform the allocation and to view the sensitive data. The front-end enables the administrators to configure the system in response to changing project regulations and assignment desiderata. The system can also be used as a report tool regarding project and allocation details. Apart from the administrators, secretarial staff can also use the System. Different privileges are given to them. As part of the solution, a secondary System was produced. It pursues the same objective but it is created in a more flexible and general concept.

After its completion, the System was tested using data that simulate actual real-time use. Several scenarios were run in order to test all the possible circumstances and cases. Several evaluation criteria were used in order to assess various aspects of the application. The conclusions were drawn according to the results derived from this process.