

Shakira - A Project Management System for College

Introduction

SHAKIRA was built with the intention of seamlessly being able to integrate the final year project allotment system in my undergraduate institution (VESIT). The project was successfully built by me and 3 other students and deployed on the college server. It has helped digitize this year's project allotment system and overcome considerable overhead involved otherwise.

The need for such an integrated system arose from the fact that till last year, the procedure for allotting projects to various student groups by the professors was cumbersome since a number of projects had to be first selected by various student groups, then the preferences of the students had to be manually submitted from which the professors decided whether the particular project should be allotted or not. This involved paper based evaluation of students' academic record, their motivation for pursuing the project etc. Finally once it was decided that the project should be assigned then the student groups had to be summoned to make a final decision and once this was done, no changes could be made. Considering such manual paper based approach, the need to provide an 'integrated allotment system' was greatly felt.

Our student group was assigned with the responsibility for developing such a system. To start with we had to do a lot of field work such as evaluating the precise needs of the students and professors, their expectations about how the system should exactly behave, how the communication could be enhanced etc. Having got this raw data we proceeded to building the actual system by following the Management of Information Systems steps in a sequential manner. We first laid out the plans and objectives as a whole and then for each of the subsystems. This was followed by drawing the conceptual system design. Finally the detailed system design, coding and documentation completed the building steps. Once completed, the system was enhanced with a Management Reporting System (MRS) to be used by the faculty and immediately deployed on the college servers. We used PHP as frontend and MySQL as the backend mechanism since we already had prior experience with the two and it was easily supported by our Linux based server system. The power of the system really was admired by all the professors and students since real-time synchronized project allotment was truly made possible and this year's project assignment was greatly simplified.

http://www.stople.com/prof_login.php - Microsoft Internet Explorer

http://www.stople.com/prof_login.php

File Edit View Favorites Tools Help

Welcome **karan kamdar**.
You are successfully logged in to the system
[\[logout\]](#)

This link [project](#) allows you to add project. You can added all the projects that are available for this present year.

This link [Request](#) allows you to view all the request made by different groups for your project list. You can choose anyone of them and allote a project to them

List of Projects this semester

Project Name	Description	Assigned
Software Agents	COBMAF - A new CORBA based multi-agent framework	<input checked="" type="checkbox"/>
JADE	A complete software agent development platform	<input type="checkbox"/>
Mobile Guide	A Mobile Assistant Software for mobile devices	<input type="checkbox"/>

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Working

SHAKIRA's login page is displayed initially where there are separate login mechanisms for faculty and student groups. Once registered and logged in, the faculty is given various options such as adding a project to the system or seeing the number of requests received from the student groups. The list of projects added by the professor is given in the form of a table with the option of assigning that project to a particular student group. As and when the requests from different student groups are received, the group name along with their complete request consisting of project, priority and motivation is displayed to the professor. The professor then has to simply compare these requests and decide who should be assigned that project. Once the decision is made, the faculty clicks on the assign button sending a notification to the student group to whom the project has been assigned.

At the student end, once they login to the system for the first time, they have to enter details of their student group such as names, aggregate GPA, roll nos. etc. Once this information is obtained the student group is given the options of choosing any (one or more) of the projects according to their priority from the project list. Once they assign a priority and send a request to the various professors with their motivation, the student request is completed and the professor now has to select the best student group.

I along with my team of programmers are working towards smoother integration of the system and increasing its performance at peak hours. We would also be enhancing the graphical user interface and the MRS system so that it can support report generation in variety of formats such as word, powerpoint, pdf, direct2mobile etc. The traditional method of report generation can now be eliminated. We are also taking the idea further to encompass not only the project allotment system but also the library and office services in the college with the idea of creating one unified platform for the college where information can be entered and extracted throughout the campus as and when required.