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cSPAM – Cloud based Student Project Administration and Management

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***Abstract*— In today's world, time is very crucial and thus valuing time is of utmost importance. Managing projects and submissions of each subject mini project and semester mini project becomes a hectic task for both faculties and students. Efficiency is thus compromised in such situations. The time spent in the whole process of mini project from start to end takes a lot of time if done manually and the monitoring and tracking the progress of all the groups by the faculty is too hectic for the faculties. Project management tool plays a crucial role here, skipping all the wastage of time and hassle of project submissions.**

Our proposed system is a common platform for our institute to manage project submissions and interacting with faculty members and teammates everything online to achieve efficiency.Our proposed system will provide 3 different logins i.e student, faculty and admin.Here students could easily submit their progress of the project and faculties would be able to take to give feedback to the group , keep tracking and monitoring the progress and admin would be authenticating students and faculties and also creating the separate channels for the groups and assign the mentors.

***Index Terms*— projects, project management, mini project, submissions, admin, monitoring**

I. INTRODUCTION

Our proposed system will be a web-based portal for students and faculties where the students would be submitting their progress as well as their project. And the faculty will be monitoring, tracking and managing the progress and attendance records. Our proposed system aims to solve numerous problems faced by students and faculties.

A. Background

The system was developed to facilitate existing traditional manual undergraduate project administering mode, and make all the operations, such as projects submitting by staff, assessing by the assigned assessors and choosing by students, process controlling, and final papers and marks submitting, to be finished on the web with much higher efficiency. Experiments showed that this system is reliable, efficient and convenient.

B. Motivation

The problems faced by the students are the formation of groups, then choosing a topic which is not taken by someone else, not being able to submit their work on a common platform and resubmitting the work due to different reasons.

The main problems faced by the faculties are manage the process of group formation, maintaining the records, tracking and monitoring the different project activities and also the generation of report based on the project activities.

C. Problem Statement

To make a common platform for weekly manage, record, trace and monitor all subject's mini project as well as semester mini projects. Maintaining records and generating weekly reports for every groups. Subject mini project as well as semester mini project i.e 3,4 and 5 sem as well as final year project. To create a web application/interface for managing of projects.Admin would be assigning the groups with faculties and creating the channels for each group. Faculties would be able to assess, communicate and give feedback of the students. Students would be able to upload progress and projects, check feedbacks and see the scheduled meetings and much more.

II. RELATED WORK

An efficient solution based on SaaS (Software as a Service) idea to solve the resource publishing and fetching problem is proposed. This efficiently improves the quality of teaching process. Firstly, a SaaS based business logical architecture is designed to support single-instance and multi-tenant running. In this architecture, we propose CTML (customize template markup language) to realize personalize view and utilize the authentication service to control the access of resources. Secondly, the offline publishing framework is proposed to efficiently improve the resources management. The platform can improve the validity, flexibility and scalability of teaching resources management. In addition, this platform can be easily integrated to traditional education information system according to the unified authentication, and promote the further development of education informatization[1]

The development of and initial experiences with WebUPMS(a web-based undergraduate Project management system), a thesis project management system developed in the Department of Computer Science (DCS) at Xi'an Institute of Post and Telecommunications (XIPT). The system was developed to facilitate existing DCS traditional

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manual undergraduate project administering mode, and make all the operations, such as projects submitting by staff, assessing by the assigned assessors and choosing by students, process controlling, and final papers and marks submitting, to be finished on the web with much higher efficiency. Experiments showed that this system is reliable, efficient and convenient.[2]

III. PROPOSED SYSTEM

Our proposed system is basically a web based application for managing projects and submissions of each subject mini project and semester mini project. A project management tool plays a crucial role here, skipping all the wastage of time and hassle of project submissions. This will help in improving the overall efficiency of the complete project submission and evaluation process.

Our proposed system is a common platform for our institute to manage project submissions and interacting with faculty members and teammates everything online to achieve efficiency.Our proposed system will provide 3 different logins i.e student, faculty and admin.Here students could easily submit their progress of the project and faculties would be able to take to give feedback to the group , keep tracking and monitoring the progress and admin would be authenticating students and faculties and also creating the separate channels for the groups and assign the mentors.

The proposed system will include 5 modules which will be the total backbone of our system these are:

1.Signing in and registering
2.Group formation and Topic selection
3.Guide Allotment and Interaction
4.Submission and tracking
5.Evaluation

Advantages of proposed system

Cost effective
Hassle free
Convenient
Data Integrity and Security
Time management
Flexibility

Disadvantages of proposed system

Application is for Institute people only. (IT department)

IV. ARCHITECTURE AND METHODOLOGY

A. Architecture Design

Figure 1 depicts the main architecture design for the proposed system in this research.

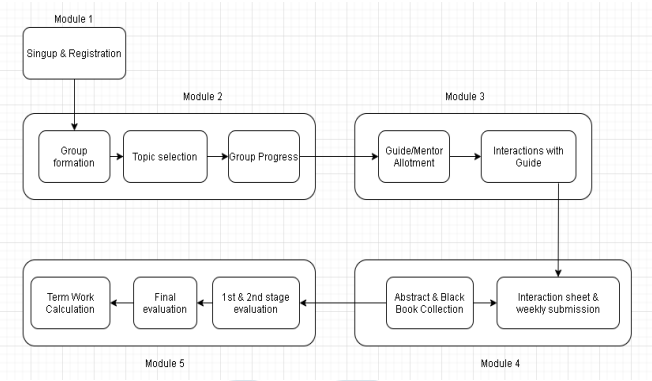

Figure. 1. Architecture Diagram

B. Modules

1. Signing in and registering

Sign-up for student and Faculty:

The students and faculty will sign up by putting basic information like name, email and passwords, then the system will verify the user via email authentication and then will let them into the system.

Registration completion for Students and Faculties:

Once the user has signed-up then he will be forwarded towards the registration page where a brief information would be gathered by the system from the user. A student has to enter his current semester's Name, CGPA and a Domain and a faculty is expected to enter the preferred domain area for guiding the projects and other relevant information.

2. Group formation and Topic selection

Group formation based on CGPA of students:

Groups will be formed using an algorithm which takes inputs of cgpa of all the students of the class and then forming groups of three (with some exceptions of 4) according to the criteria specified by the admin. And then forming the channels of the whole class and the mentor(s). Team leader will also be selected in this but manually.

Topic Selection process:

The team members would be filling a form giving their respective ideas for the project. A separate activity section would be created for the faculty for monitoring the selection process.

3. Guide Allotment and Interaction:

Guide allotment based on field of interest:

Now the guide allotment would be done based on the idea selected and then the domain of the idea and then matching the domain/area of interest of the faculties and assign the mentor to the respective groups. Some faculty would be handling multiple groups.

Task allotment and interaction with guide:

Then the first interaction between the mentor and the group member will take place and then mentor would assign specific tasks and then would assign a deadline and which will be color coded for the submission of the task and the

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students have to submit the tasks on time. The mentor would be evaluating the students weekly and assigning some marks and marking their attendance and then give feedback about the student.

4. Submission and tracking

Weekly submission:

Students would be able to submit their respective progress of tasks assigned to the group on a weekly basis and the faculties in charge would be able see the submitted progress for their respective allotted group.

Collection of abstract:

Students can upload the project abstract for their respective groups which will be stored in the database and can be used by future groups for reference and adding something new to the existing system if they want.

Interaction sheet:

Faculties would be able to fill up the interaction sheet based on the groups performance.

5. Evaluation

1st and 2nd stages evaluation:

The semester first and second stage evaluation will be done and considered for marking by the respective faculty involved.

Final Evaluation:

The final project report and the demonstration will be given by every group and then will be evaluated by the respective faculty appointed.

Term work calculation:

The final term work marks for each group will be put up by the accessor

C. System Requirements

Visual Studio .NET 2005
Python
HTML
MYSQL
Javascript
PHP

V. IMPLEMENTATION

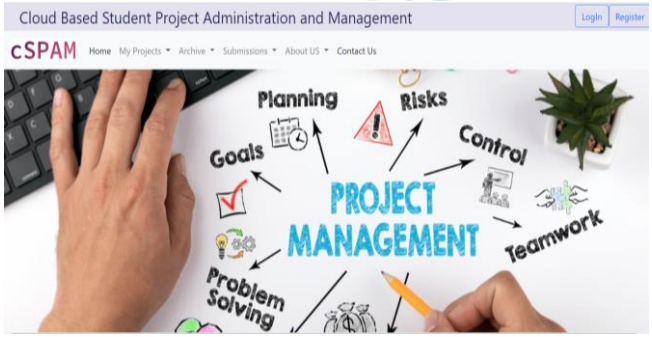

Figure-2 cSpam Web Application(1)

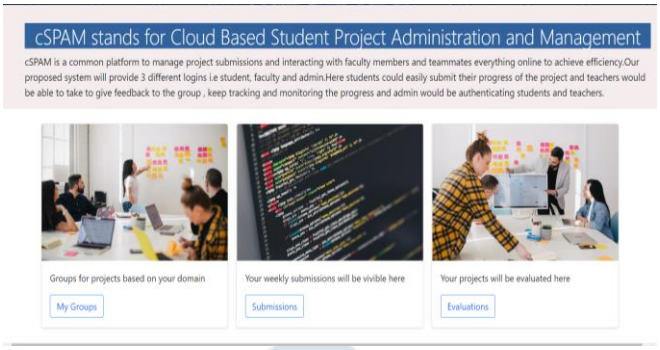

Figure-2 cSpam Web Application(2)

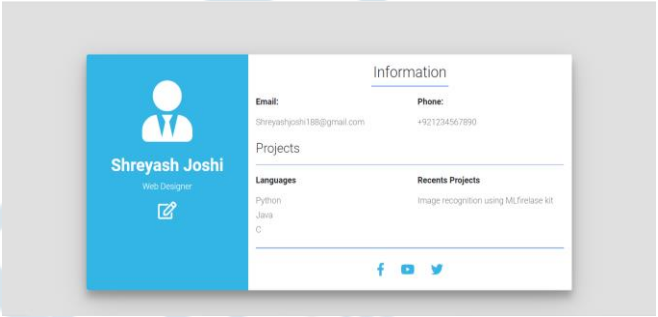

Figure-3 cSpam User Profile Page

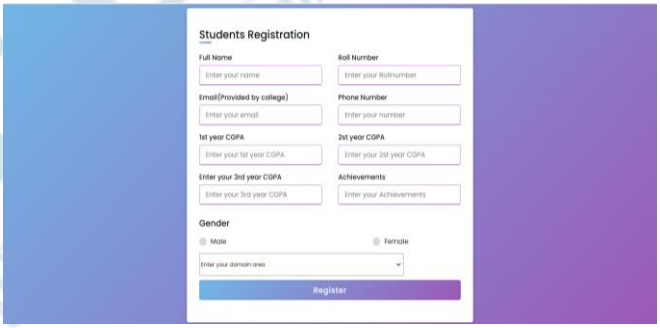

Figure-4 cSpam Student Registration

VI. CONCLUSION

With the development of the education system, a variety of data (e.g. teaching resources data) derives from the informationization process. Therefore, colleges urgently need a unified and organized project management platform to manage and keep records of the projects of the students. So that the need to keep the project as a hard copy is removed here and the whole process of the project from start to end can be monitored and managed easily.

VII. ACKNOWLEDGMENT

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