

Automatic Course File Generator

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V. DESIGN

Abstract—One of the primal tasks to handle a course is to plan the course and organize the documents related to the course. A proper plan is the first step to the successful education of the student and eliminate any ambiguities that generally follows. This Project deals with creation of a Course File that maintains the Course Plan and details for a Course for a particular semester. This Projects also reports overall Students Performance using appropriate analytics. It gives a broader idea for a Faculty in-charge to check previous years performance of Students and make necessary course plan changes. All the functionalities will be facilitated by notifying concerned Faculty to make necessary updates to the Course File regularly.

Keywords—*faculty, course file generator, course, semester*

I. INTRODUCTION

Automatic Course File Generator is a web-based application being developed to serve the faculty to organize their course for a semester. This application aims at digitalizing the tasks which involves organizing/modifying/retrieving reports of the work done/to be done which will enable a faster and a more accurate access to information. This report gives an insight into our application like the motivation, design of application, and various features offered by the application to the faculty.

II. MOTIVATION

The main purpose of technology is to make the lives of people easier. The main motivation behind the development of this application is to help in making the file organization easier by digitalizing their day-to-day tasks which are of utmost importance and value.

III. PROBLEM STATEMENT

To implement a fully functional Course file Generator which helps faculty to analyze the schedules, question papers-key and Performances of the previous semesters course. It will eventually turn into a one-stop solution for faculty-in-charge to plan for a particular course.

IV. RELATED WORKS

The methodology for maintaining the files and generating the report was suggested by Geanne Ross L. Franco [1]. There are many apps for organizing different documents uploaded but our application not only enables document organization but also creates prescribed template format which appends all the important files uploaded in the application

We intend to make the course file to be generated based on a user-friendly interface on a few simple clicks.

The project requires faculty and student details taking up a course.

Once a faculty is registered and has logged onto the application, he will be able to view the past course plans of the different faculty who have handled the particular course and the respective student performances. This will give a better insight for the current faculty to plan the course for the current semester.

The course instructor can divide the work into following scenarios.

A.Pre-Course Plan

B.Peri-Course Plan

C.Post-Course Plan

A.Pre-Course Plan:

The faculty can upload a tentative course session plan and can recheck with it when the course gets started.

The faculty can upload the reference materials and related IEEE research papers.

The faculty can decide the evaluation policy of the course before the commencement of the course.

The faculty can list the different projects which he plans to assign to the students availing the course.

B.Peri-Course Plan:

The faculty can upload the students registered for the course in the current semester.

The faculty can update his plan for the whole semester in the work plan provided on the application. The faculty will be repeatedly notified through his mail about the upcoming events.

The faculty for the course can upload the examination/test papers along with their keys and also refer to the past papers and keys.

After each examination/test is completed and evaluated, the faculty can upload the students marks and compare it with the performance of the past students.

The faculty can collect feedback of the course by generating a link by a single click where an e-mail goes to all students registered to the course and students have to authenticate link with one-time password sent to their links and can submit their feedback regarding the course.

The faculty can also view the result statistics after the end semester examination in which a normal distribution is generated based on mean and variance of the total marks obtained by the students

The faculty can generate the course file with a single click

which will include all the tasks that the faculty had done during the semester while undertaking the course in a standard format.

The mentors of the particular faculty can also view the course and give suggestions to the faculty instructing the course.

C.Post-Course Plan:

Summary of the course will be provided by a single click and result statistics also will be shown to the respective faculty of the course.

The faculty also analyze the weak performance of particular students and can suggest respective action for improvement of the same course in future offerings of the course i.e for the new batch students availing the course.

By a single-click the faculty can also view the Course Objective attainments in a respective department and can see the statistics how many students have achieved the each CO-attainment and compare with the previous CO- attainments achieved by the students of the course.

The Entity Relationship (ER) diagram is shown in Figure 1

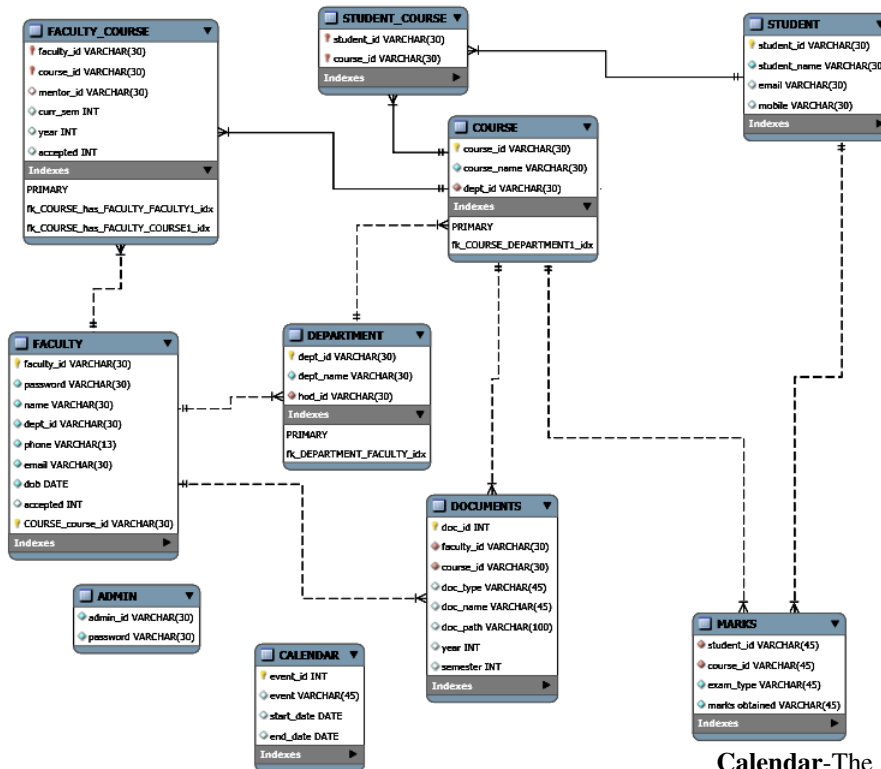


Fig. 1. Entity Relationship (ER) Diagram

VI. PROOF OF CONCEPT

The web application is implemented using various web technologies

Technologies used in implementation of the design is

HTML,CSS,JavaScript,PHP,BootStrap,jQuery,MySQL

There will be 2 types of users:

A.Admin

B.Faculty

The Home page of the application have 2 types of functionalities

A.Login

B.Register

When a new faculty registers, his credentials will be sent to Admin and admin has to approve for the further access of the application.

Admin Login:

After successful login of admin he can perform actions given below

Teachers Registrations-The registration requests from the new faculty will be displayed and admin approves the faculty request for creating their own accounts.

Course Registrations-When a faculty use the application and registers for a particular course then the course registrations requests will be displayed and admin approves the request.

Time Table-The admin uploads time table of that particular semester here.

Calendar-The admin updates the calendar of the semester and add each and every event like examinations,assignments,class committee meeting based on the start date and end date and the events updated will be displayed in faculty's calendar.

Faculty Login:

After successful login of faculty he can perform actions given below

Courses Currently Handled-The application displays the courses which are currently handled by the faculty and on

clicking get this course button the application extends to the course file page.

Register For New Course-When a faculty is assigned with a course and the course is not yet registered in the application then he can click on register for new course and all the courses offered in the department will be shown and he can make a request to admin for approving the course registration to the particular faculty.

Calendar- The events updated by admin is displayed in the calendar. Notifications are sent to the faculty's registered email address saying that you have to update a particular event and reminders will be given. Notifications are implemented by setting up a cron job which will be run everyday and faculty will be intimated with a reminder via their respective emails.

Course File Generator:

When faculty click on the button 'get this course', the faculty will be extended to use the application.

This phase contains different functionalities such as:

- A.Course File
- B.Students List
- C.References
- D.Exams/Assignments
- E.Attendance
- F.Generate Course File

A.Course File:

The application provides here to upload the tentative course plan and evaluation plan(pdf format) for the course.

B.Students List:

The application provides here to upload the students list (csv format) who registered in the course.

C.References:

The application provides here to upload the references and research papers and previously uploaded reference papers will be also displayed.

D.Exams/Assignments:

The functionality will be a drop down menu as

- (i)Test 1
- (ii)Test 2
- (iii)End Semester Examination
- (iv)Assignments/Projects

Each option will be provided to upload Question Paper,Key Sheet And Marks Sheet of respective examination and can also view the previous semesters question papers and key sheets.

E.Attendance:

The application provides here to upload attendance register of students as pdf file.

F.Generate Course File:

On clicking this button, a pdf file will be generated which

contains all the information regarding the tasks mentioned above such as Course File, exams/assignments and attendance record on a prescribed template format.

Figure 2 shows the block diagram(flow) of the application.

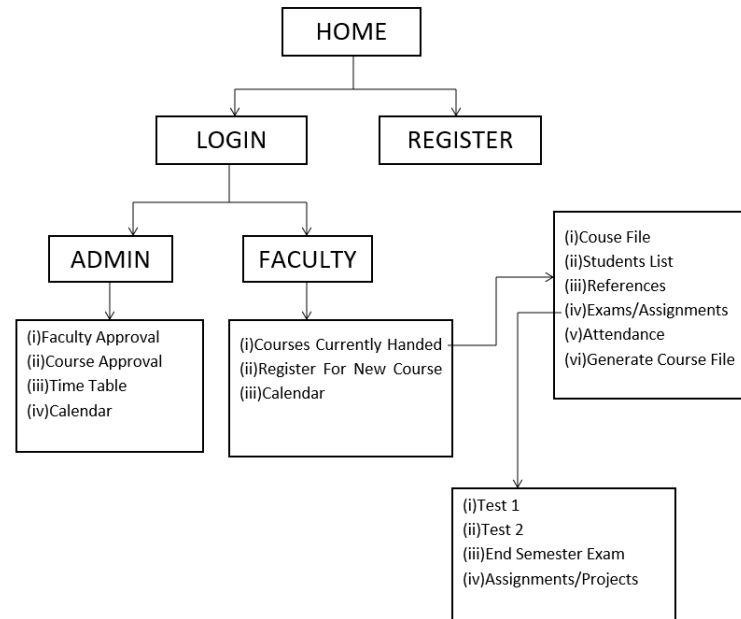


Fig. 2. Block Diagram

VII. WORK PLAN FOR NEXT SEMESTER

1. Feedback of students will be included based on email authentication in the application.
- 2.Graphical Representation Of Result will be displayed in application.
- 3.Course Objective Attainments will also be implemented.
- 4.Based on the faculty responses, we will make appropriate enhancements to the current work.

VIII. CONCLUSION

From this project we understand the advantages of using The Automatic Course File Generator. This not only helps task of digitalizing of documents but also helps analyse the performance of students. A faculty handling a particular course in a University can generate a Course File and compare Course Files of previous years.

REFERENCES

- [1] Geanne Ross L. Franco., Design and Implementation of a Web-Based Faculty Information System 2015.
- [2] PHP Mailer for enabling email. url:<https://github.com/PHPMailer/PHPMailer>
- [3] FPDF Package for template generation. url:<http://www.fpdf.org/en/download.php>