A Mini Project Report On

PROJECT MANAGEMENT SYSTEM

Submitted to partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY**

in

COMPUTER SCIENCE & ENGINEERING

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2021-2022

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CERTIFICATE

This is to certify that the project report titled "Project Management System" is being submitted by AKSHAT AGRAWAL (18911A0505), BABINOLLA RAMU (18911A0509), DEVARAKONDA PRAHARSHA (18911A0515), SUNKE KISHORE KUMAR (18911A0556). In partial fulfillment for the award of the Degree of Bachelor of Technology in Computer Science & Engineering, is a record of Bonafide work carried out by them under my guidance and supervision. These results embodied in this project report have not been submitted to any other University or Institute for the award of any degree of diploma.

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Hereby declare that the project entitled, "PROJECT MANAGEMENT SYSTEM" submitted

for the degree of Bachelor of Technology in Computer Science and Engineering is original and

has been done by us and this work is not copied and submitted anywhere for the award of any

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ACKNOWLEDGEMENT

We wish to express our sincere gratitude to the project internal guide, Mr. Rajashekar, Assistant Professor, Vidya Jyothi Institute of Technology, Hyderabad for his timely cooperation and valuable suggestions while carrying out this work. It is his kindness that made us learn more from her.

We are grateful to **Dr. B. Vijayakumar**, Professor and HOD, department of CSE, for his help and support during our academic year.

We whole-heartedly convey our gratitude to Principal Dr. A. Padmaja for her constructive encouragement.

We would like to take this opportunity to express our gratitude to our director

Dr. E. Sai Baba Reddy for providing necessary infrastructure to complete this project.

We would thank my parents and all the faculty members who have contributed to our progress through the course to come to this stage.

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ABSTRACT

PROJECT MANAGEMENT SYSTEM

Managing and controlling the student's final year projects is a very tedious job using manual or classical processes. The main goal of this project is to build an integrated framework to handle all project activities. Project management system is a system for the management, tracking and supervision of students' final year projects. It is a web-based platform or framework that is useful to students, project coordinators and project guides.

Project Management System can be used by the college to assign, guide and supervise the student's final year projects. With this application we can digitalize the process of assigning and reviewing student's projects.

Firstly, all students register themselves using the registration form. Then registered students can log in with their username and password to authenticate. When the students log into the system, they can form their own team, upload documents, view their scores, get review schedules, and notifications.

In the same way, Project Coordinator must login through its username and password to get the details of all the students, project guides, teams formed. Once the teams are formed, the project coordinator assigns the project guide to each team and can schedule reviews and send notifications to students and project guides.

The guide can track the assigned students' work and guide them on the successful completion of the project with regular updates. The main purpose of this project is to provide a smart and easy way to group and manage the student's projects.

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INTRODUCTION

The technological development and impact of computers and the internet on our lives has been verified over time affecting various sectors of activity. And almost every task today is being run through computers. Getting information and quickly turning it into a product that consumers want is the essential key to staying in business and all of this is done nowadays using computers and applications or information systems. And the education system is undeniably the backbone of the society, it focuses at preparing the young talents for the future. However, currently the process of student's project management at the Vidya Jyothi Institute of Technology is performed manually. With extensive human intervention, many students skip details on some relevant news and updates about their projects for their final year. Students are therefore unable to track their project activities. It's easy to obtain all the information and updates of the project from guides and coordinators for the students. Managing tasks manually for the final year is a very stressful task. But anyone with a simple web platform can do project-related work which is the main objective of the project management system (PMS). It offers a clear web portal to students, project coordinator and project guide for the management and monitoring of project activities.

All device modules have a specific user identity and password. The module can then log into the website using its id and password to become more authenticated. PMS enables the students to register themselves using registration form. Then registered students can log in with their username and password to authenticate. When the students log into the system, they can form their own team, upload documents, view their scores, get review schedules, and notifications. In the same way, Project Coordinator must login through its username and password to get the details of all the students, project guides, teams formed. Once the teams are formed, the project coordinator assigns the project guide to each team and can schedule reviews and send notifications to students and project guides. The guide can track the assigned students' work and guide them on the successful completion of the project with regular updates. The main purpose of this project is to provide a smart and easy way to group and manage the student's projects.

What is management of the project? Project management consists of planning, timing,

management of resources, review of requirements, design and testing in order to meet project objectives and targets. It is impossible to complete tasks in time without project management. Project management is therefore necessary to remove certain obstacles in the implementation of projects and achieve clear objectives. Generally, the project & title will be chosen by the students and forwarded to the project coordinator, as the project title, in a document called the project abstract along with a bird's-eye view of the project. The project coordinator accepts the project and enables the student to continue and begin working on the project. In the middle of the design of the project, the project coordinator also asks the student to submit the sample code of some module. In the end, the student is required to prepare documents such as SRS Documentation (includes Introduction, Modules, User Roles, SDLC Methodology etc.), PowerPoint presentation of the Project Demo Flow and also takes the Source Code, along with all the content. The project coordinator will examine all these documents and complete the project analysis and record the marks for the team.

LITERATURE SURVEY

According to Freund et al. (2017), nowadays people interact directly with technology in fields such as education, government, finance, retail, entertainment, health care, science, travel, publishing, and manufacturing. And they also state that educators and teaching institutions use technology to assist with education. Most equip labs and classrooms with laptops or desktops. Some even provide computers or mobile devices to students. Many require students to have a mobile computer or mobile device to access the school's network or Internet wirelessly, or to access digital-only content provided by a textbook publisher.

Many educators may use a Course Management System (CMS), sometimes called a Learning Management System (LMS), which is a software that contains tools for class preparation, distribution, and management. For example, through the course management system, students access course materials, grades, assessments, and a variety of collaboration tools. Many schools offer distance learning classes, where the delivery of education occurs at one place while the learning occurs at other locations. Distance learning courses provide time, distance, and place advantages for students who live far from a campus or work full time.

A rather tiring job is a conventional way of organizing and tracking student projects using the manual process. The project's motto is to develop an integrated framework for the management and control of all project activities. This is a web-based framework that supports students, project coordinators, and project guides. System allows admin to introduce to the system students and faculties. The registered students can log in with their username and password to authenticate. When the students log into the system, they can form their own team, upload documents, view their scores, get review schedules, and notifications. In the same way, Project Coordinator must login through its username and password to get the details of all the students, project guides, teams formed. Once the teams are formed, the project coordinator assigns the project guide to each team and can schedule reviews and send notifications to students and project guides. The guide can track the assigned students' work and guide them on the successful completion of the project with regular updates. The key positions in the system are project coordinator who can track the progress of all the projects.

FEASIBILITY STUDY

In order to evaluate if the project can be done in the given time frame, we are using the TEL-evaluation methods, where we cover the feasibility of the project from a technological, economical and legal perspective. Those perspectives would help us have a broad vision on the requirements and implications related to the project. We also discuss in this section the methodology used in conducting the project.

3.1 Economical Feasibility

This project will be based on Free and Open-Source Technologies and Libraries that are readily available to developers and scientists, free of cost. This means that we don't have to worry about costs related to licensing or reusing source code and that the only costs related to the project are related to the time and the effort spent in development of the project.

3.2 Technological Feasibility

This project would be developed using technologies and libraries pertinent to data management and web technologies.

3.2.1 Web Technologies

In Web Technologies, there are several technologies that are used to implement Web Based Applications. This is mainly due to the active scientific and data-analysis communities that develop applications to help them with their research. We do think that we are going to evaluate different server and client server languages (e.g. Ajax, HTML, CSS, JavaScript) during the implementation phase and rather mix and match different technologies to use their strong points.

SYSTEM REQUIREMENTS SPECIFICATIONS

4.1 EXISTING SYSTEM

Existing system of system of project management is manual. Project coordinator or guide gives tasks for students manually. Students complete the work which is given by coordinator or guide and submits manually. In this system all work is done manually so it can take more time to complete project related work. Project coordinator or guide requires remembering when a student completed the work so it is difficult for Project coordinator or guide which student completed the task and when. The existing system does not help users to get the right information at the right time and users cannot manage project development easily to achieve the main goal.

4.1.1 Limitation of Existing System

- It is time consuming.
- All the work is done manually.
- Right information is not retrieved at right time.
- Incompatibility and inaccuracy in data maintenance.
- Modifying team members/project guide is a broad process which can lead to confusion and mistakes.
- Any updates to the data by team members, the Project coordinator or guide cannot be seen immediately by the rest of the team members.

4.2 PROPOSED SYSTEM

We have successfully proposed the "Project Management System" to overcome the drawbacks of the existing system for replacing the manual work of the for managing, controlling, monitoring the final year projects. This application is flexible and can easily be accessed by the Project Coordinator, Students and project guide. Project management system is a system for managing, controlling, monitoring the final year projects of students.

It contains 3 major modules:

1. Students

All students register themselves using the registration form. Then registered students can log in with their username and password to authenticate. When the students log into the system, they can form their own team, upload documents, view their scores, get review schedules, and notifications.

2. Project guide

The guide can track the assigned students' work and guide them on the successful completion of the project with regular updates. The main purpose of this project is to provide a smart and easy way to group and manage the student's projects.

3. Project coordinator

Project Coordinator must login through its username and password to get the details of all the students, project guides, teams formed. Once the teams are formed, the project coordinator assigns the project guide to each team and can schedule reviews and send notifications to students and project guides.

4.2.1 Advantages of Proposed System

- To automate the traditional process of the manual work involved in the project management.
- The average time spent in contrast with the current system would be lower.
- The details will be reliable and data replication will not occur.
- To provide a well-organized platform to maintain all the history about the project tasks.

SYSTEM REQUIREMENTS

5.1 SOFTWARE REQUIREMENTS

• Operating System : Windows 7 and above (with any web browser)

• Front end : HTML, CSS, Bootstrap-4, JavaScript

• Back end : PHP, MYSQL

• Server : Apache Web Server

5.2 HARDWARE REQUIREMENTS

• RAM : 4GB and Higher

• Processor : Intel i3 or above

• Hard Disk : 2GB or above

5.3 REQUIREMENTS DEFINITION

After the severe continuous analysis of the problems that arose in the existing system, we are now familiar with the requirements that are required by the current system. The requirements that the system needs are categorized into the functional and non-functional requirements. These requirements are listed below:

5.3.1 FUNCTIONAL REQUIREMENTS

Functional requirements define which functions or features that are to be incorporated in any system to fulfill the business requirements and to be acknowledged by the clients. On the premise, the functional requirements specify the relationship between the inputs and outputs. All the operations to be performed on the input data to obtain output are to be specified. This includes specifying the validity checks on the input and

output data, parameters affected by the operations and the other operations, which must be used to transform the inputs into outputs. Functional requirements specify the behavior of the system for valid input and outputs.

Various modules and functionalities of project management system are:

1. Login

- The main index of the application is login page where we need to provide credentials such as ID, Password and type of login (Coordinator/ Guide / Student).
- Once inputs are authenticated, the user will be redirected to the dashboard page from where the header menu options will be available to navigate to the required page.

2. Project Coordinator Login

- Project Coordinator login is handled by a single person who is the toplevel management of all logins.
- Various functionalities for Project coordinator are:
 - View Profile
 - View students
 - Add/update/delete project guide
 - View formed team details
 - Assign project guide to teams
 - Assign marks to students
 - View project details
 - o Schedule reviews & send notifications

3. Student Login

- Various functionalities for Project coordinator are:
 - Register
 - Form team
 - Upload document
 - Upload abstract
 - View document

- View abstract
- View marks
- o Receive notification

4. Guide Login

- Various functionalities for Project coordinator are:
 - View assigned team details
 - View assigned teams review marks
 - View assigned team project details

5.3.2 NON-FUNCTIONAL REQUIREMENTS

Non-Functional Requirements are the constraints or the requirements imposed on the system. They specify the quality attribute of the software. Non-Functional Requirements deal with issues like scalability, maintainability, performance, portability, security, reliability, and many more. Non-Functional Requirements address vital issues of quality for software systems.

- **Security:** Secure connection should be established for transmission of any data. The system's back-end servers shall only be accessible to authenticated management.
- **Performance:** Any page that the user tries to access should load in less than 2 seconds.
- **Maintainability:** In case of a failure, a re-initialization of the system will be done. Also, the software design is being done with modularity in mind so that maintainability can be done efficiently.
- **Usability:** Users can easily navigate its interface and can easily determine what a feature is and what it can do. Non-technical background of a user should not be an obstacle to understand and use the system.
- Availability: The system should be available at all the times, meaning the user can access it using a web browser, only restricted by the down time of the server on which system runs.
- **Browser Compatible:** The application should be accessible through all latest web browsers such as Google Chrome and Internet Explorer.

SYSTEM DESIGN

6.1 Software Development Life Cycle (SDLC)

The software development life cycle (SDLC) is a process by which software is developed and deployed. It's a process that encompasses every phase of software creation, from conception to maintenance after the software is released.

6.1.1 Iterative Model

In the Iterative model, the iterative process starts with a simple implementation of a small set of the software requirements and iteratively enhances the evolving versions until the complete system is implemented and ready to be deployed.

An iterative life cycle model does not attempt to start with a full specification of requirements. Instead, development begins by specifying and implementing just part of the software, which is then reviewed to identify further requirements. This process is then repeated, producing a new version of the software at the end of each iteration of the model.

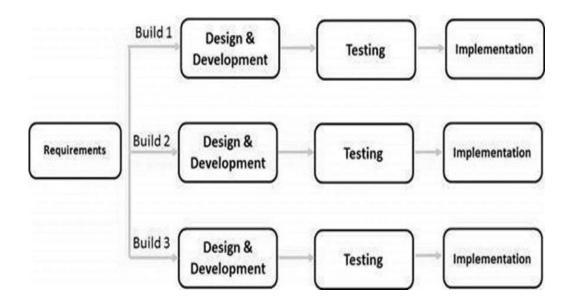


Fig 6.1 Iterative Model

6.2 UML Diagrams

UML diagram is designed to let developers and customers view a software system from a different perspective and in varying degrees of abstraction. UML diagrams commonly created in visual modeling tools include. In its simplest form, a use case can be described as a specific way of using the system from a User's (actor's) perspective. A more detailed description might characterize a use case as:

- A pattern of behavior the system exhibits
- A sequence of related transactions performed by an actor and the system
- Delivering something of value to the actor

Use cases provide a means to:

- Capture system requirements
- Communicate with the end users and domain experts
- Test the system

Use cases are best discovered by examining the actors and defining what the actor will be able to do with the system. Since all the needs of a system typically cannot be covered in one use case, it is usual to have a collection of use cases. Together this use case collection specifies all the ways of using the system.

A UML system is represented using five different models that describe the system from distinctly different perspective. Each model is defined by a set of diagrams, which is as follows.

User Model

- This model represents the system from the user's perspective.
- The analysis representation describes a usage scenario from the end-user's perspective.

Structural Model

- In this model the data and functionality are arrived from inside the system.
- This model models the static structures.

Behavioral Model

It represents the dynamic of behavioral as parts of the system, depicting the interactions
of collection between various structural elements described in the user model and
structural model.

Implementation Model

• In this the structural and behavioral as parts of the system are represented as they are to be built.

Environmental Model

• In this the structural and behavioral aspect of the environment in which the system is to be implemented are represented.

UML is specifically constructed through two different domains they are:

- UML Analysis modeling, this focuses on the user model and structural model of the system.
- UML design modeling, which focuses on the behavioral model.

6.2.1 USE CASE DIAGRAM

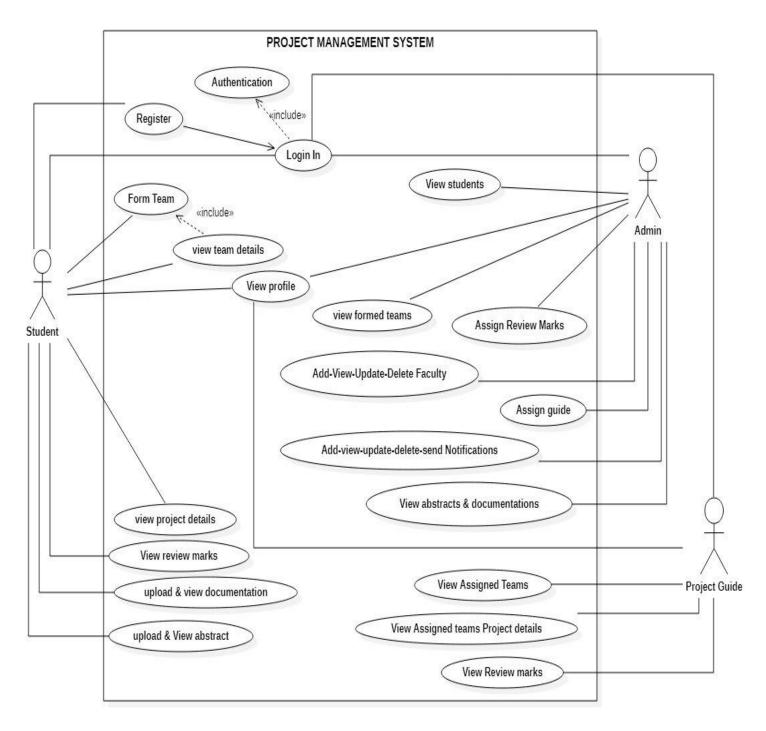


Fig 6.2 Use case diagram

6.2.2 CLASS DIAGRAM

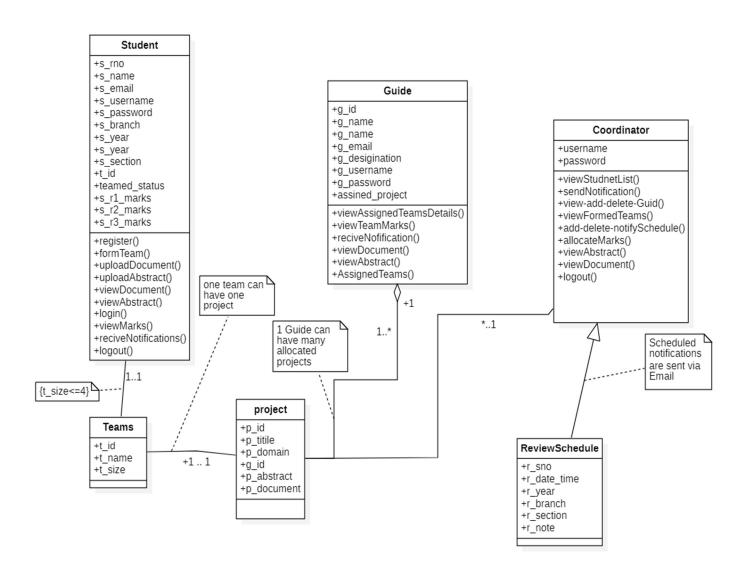


Fig 6.3 Class diagram

6.2.3 SEQUENCE DIAGRAM

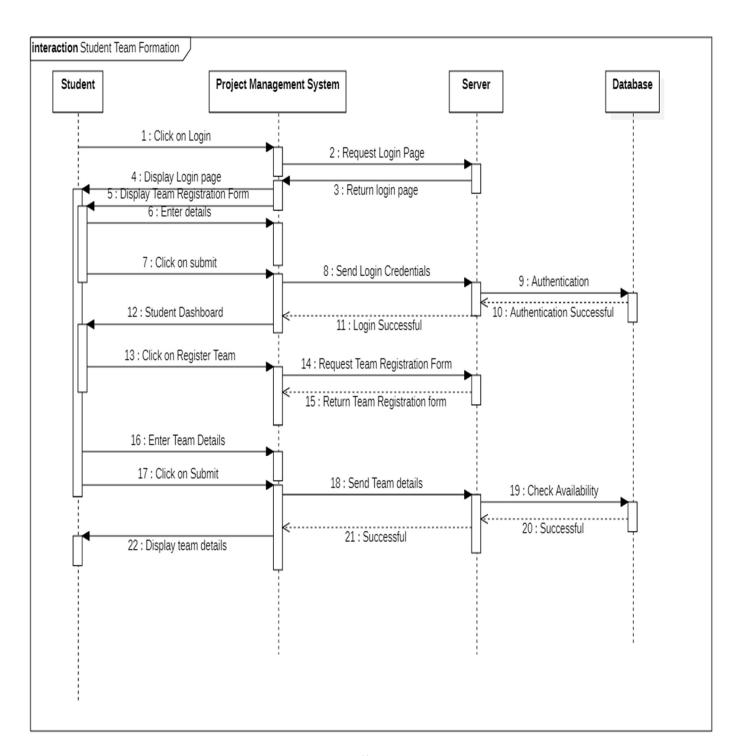


Fig 6.4 Sequence diagram

6.2.4 COLLABORATION DIAGRAM

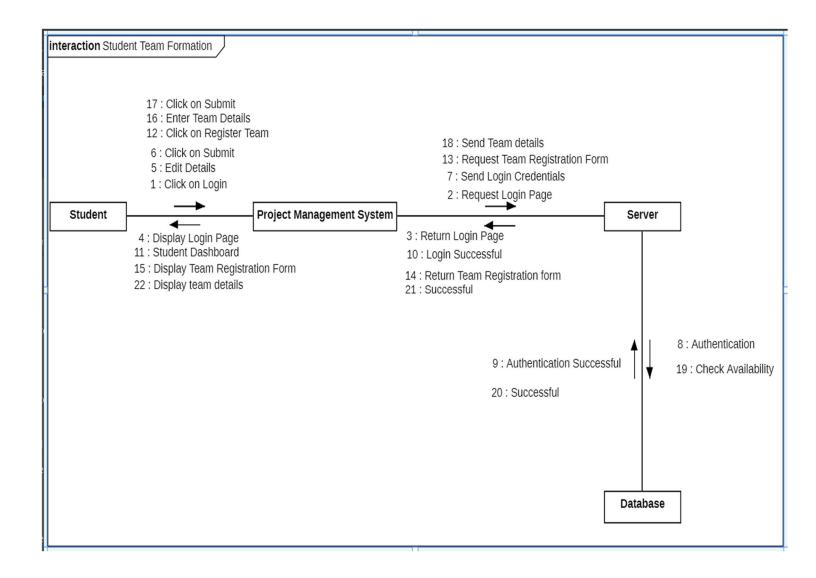


Fig 6.5 Collaboration diagram

6.2.5 ACTIVITY DIAGRAM

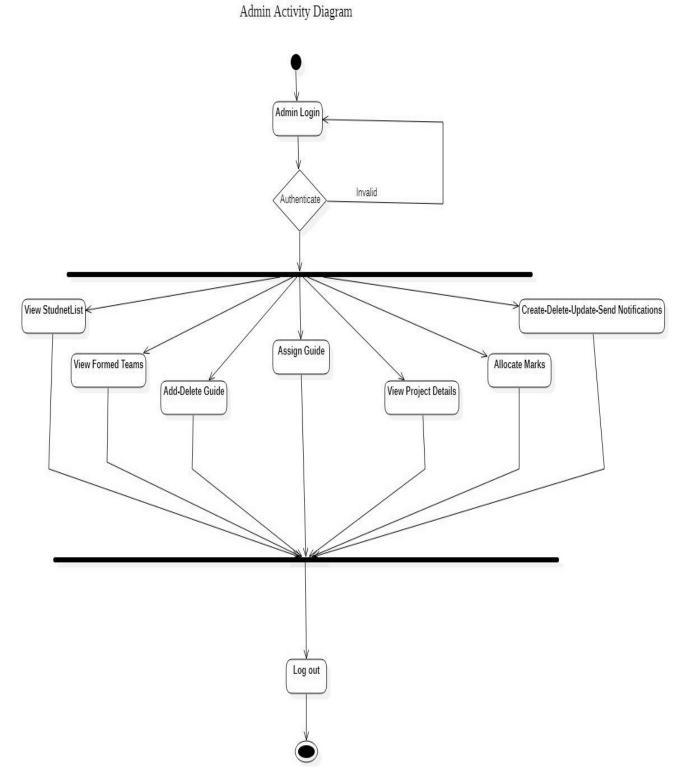


Fig 6.6 Activity diagram

6.2.6 STATE DIAGRAM

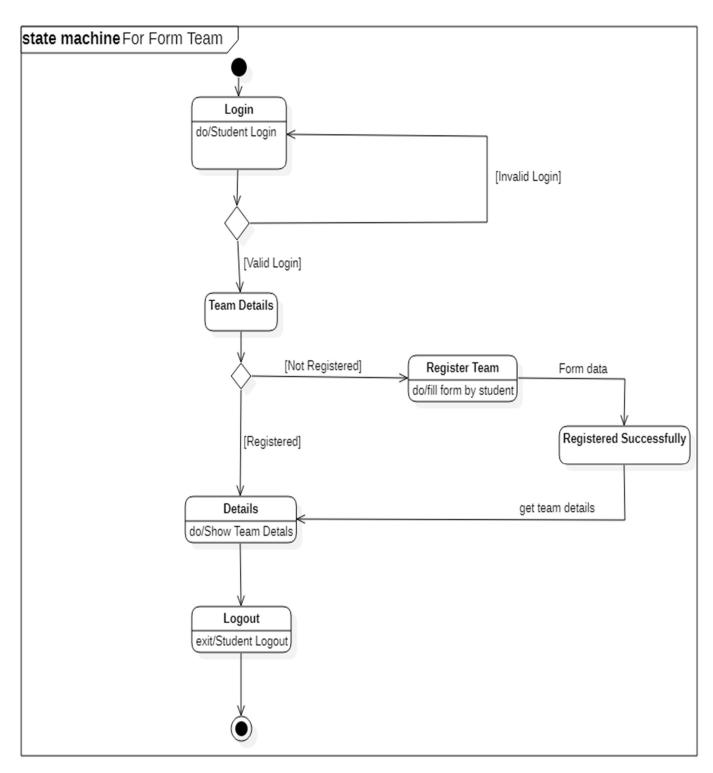


Fig 6.7 State diagram

6.2.7 COMPONENT DIAGRAM

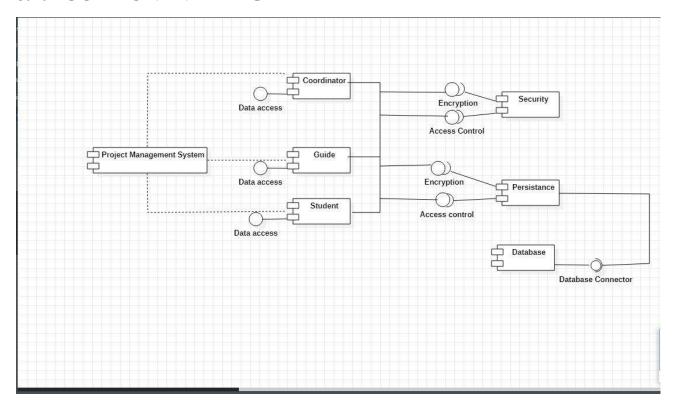


Fig 6.8 Component diagram

6.2.8 OBJECT DIAGRAM

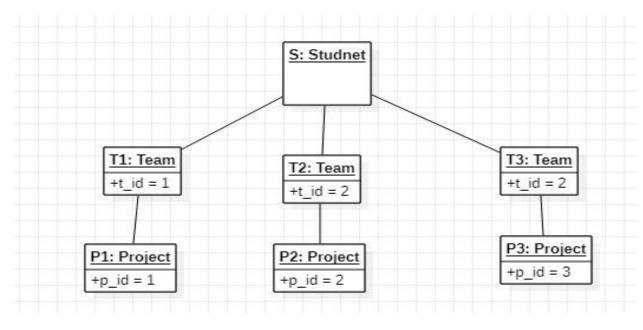


Fig 6.9 Object diagram

6.2.9 DEPLOYMENT DIAGRAM

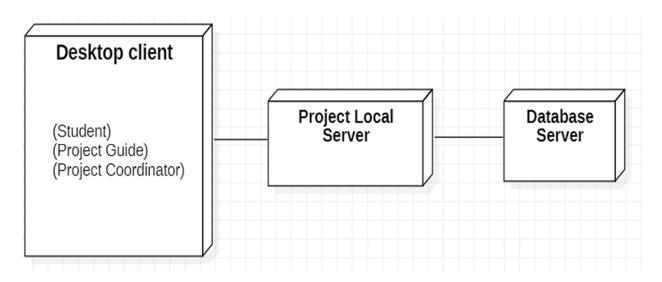


Fig 6.10 Deployment diagram

SOFTWARE ENVIRONMENT

7.1 WEB TECHNOLOGIES

We probably know that computers don't communicate with each other the way that people do. Instead, computers require codes, or directions. These binary codes and commands allow computers to process needed information. Every second, billions upon billions of ones and zeros are processed in order to provide you with the information you need.

The methods by which computers communicate with each other through the use of markup languages and multimedia packages is known as web technology. In the past few decades, web technology has undergone a dramatic transition, from a few marked up web pages to the ability to do very specific work on a network without interruption. Let's look at some examples of web technology.

7.2 TECHNOLOGIES USED IN THE APPLICATION

7.2.1 HTML

HTML or Hyper Text Mark-up Language is the standard mark-up language used to create web pages.HTML was created in 1991 by Tim Berners-Lee at CERN in Switzerland. It was designed to allow scientists to display and share their research.

HTML is written in the form of HTML elements consisting of tags enclosed in angle brackets (like <html>). HTML tags most commonly come in pairs like <h1> and </h1>, although some tags represent empty elements and so are unpaired, for example <imp>. The first tag in a pair is the start tag, and the second tag is the end tag (they are also called opening tags and closing tags).

The purpose of a web browser is to read HTML documents and compose them into visible or audible web pages. The browser does not display the HTML tags, but uses the tags to interpret the content of the page. HTML describes the structure of a website semantically along with cues for presentation, making it a mark-up language rather than a

programming language.

HTML elements form the building blocks of all websites. HTML allows images and objects to be embedded and can be used to create interactive forms. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. It can embed scripts written in languages such as Java Script which affect the behavior of HTML web pages.

HTML is a descriptive mark-up language. Library of various mark-up languages is defined in various browsers.

7.2.2 CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the look and formatting of a document written in a mark-up language. While most often used to style web pages and user interfaces written in HTML and XHTML, the language can be applied to any kind of XML document, including plain XML, SVG and XUL. CSS is a cornerstone specification of the web and almost all web pages use CSS style sheets to describe their presentation.

CSS can also allow the same mark-up page to be presented in different styles for different rendering methods, such as on-screen, in print, by voice (when read out by a speech-based browser or screen reader) and on Braille-based, tactile devices. It can also be used to allow the web page to display differently depending on the screen size or device on which it is being viewed. While the author of a document typically links that document to a CSS file, readers can use a different style sheet, perhaps one on their own computer, to override the one the author has specified.

With plain HTML you define the colors and sizes of text and tables throughout your pages. If you want to change a certain element you will therefore have to work your way through the document and change it. With CSS you define the colors and sizes in "styles". Then as you write your documents you refer to the styles. Therefore: if you change a certain style, it will change the look of your entire site. Another big advantage is that CSS offers much more detailed attributes than plain HTML for defining the look and feel of your site.

7.2.3 JAVA SCRIPT

Being a scripting language, JavaScript cannot run on its own. In fact, the browser is responsible for running JavaScript code. When a user requests an HTML page with JavaScript in it, the script is sent to the browser and it is up to the browser to execute it. The main advantage of JavaScript is that all modern web browsers support JavaScript. So, you do not have to worry about whether your site visitor uses Internet Explorer, Google Chrome, Firefox or any other browser. JavaScript will be supported. Also, JavaScript runs on any operating system including Windows or Mac. Thus, JavaScript overcomes the main disadvantages of JavaScript (Now deprecated) which is limited to just IE and Windows.

7.2.4 PHP

PHP is one of the most widely used server-side scripting languages for web development. Popular websites like Face book, Yahoo, Wikipedia and so on, and our very own Studytonight, are developed using PHP.

PHP is so popular because it's very simple to learn, code and deploy on a server, hence it has been the first choice for beginners for decades.

In this tutorial series we will be covering all the important concepts of PHP language from basics to advance and will also share some ready-to-use, useful code snippets for beginners to kick start their web development project.

7.2.5 MYSQL

A database is a separate application that stores a collection of data. Each database has one or more distinct APIs for creating, accessing, managing, searching and replicating the data it holds.

Other kinds of data stores can also be used, such as files on the file system or large hash tables in memory but data fetching and writing would not be so fast and easy with those types of systems.

Nowadays, we use relational database management systems (RDBMS) to store

and manage huge volumes of data. This is called relational database because all the data is stored into different tables and relations are established using primary keys or other keys known as Foreign Keys.

7.2.6 Bootstrap-5

Bootstrap-5 is a powerful and popular mobile first front-end framework for building responsive mobile first sites on the web. It is a latest version of Bootstrap, which uses HTML, CSS and JavaScript. It contains mobile first styles throughout the entire library, instead of using them in the separate files.

With just the knowledge of HTML and CSS anyone can get started with Bootstrap. Also, the Bootstrap official site has good documentation. It is supported by all popular browsers and its responsive CSS adjusts to Desktops, Tablets and Mobiles.

- Provides a clean and uniform solution for building an interface for developers.
- It contains beautiful and functional built-in components which are easy to customize.
- It is an open source and provides web-based customization.
- Build fast, responsive sites with Bootstrap.

Quickly design and customize responsive mobile-first sites with Bootstrap, the world's most popular front-end open-source toolkit, featuring Sass variables and mixins, responsive grid system, extensive pre-built components, and powerful JavaScript plug-in.

Install Bootstrap's source Sass and JavaScript files via npm, Composer, or Meteor. Package managed installs don't include documentation or our full build scripts. You can also use our npm template repo to quickly generate a Bootstrap project via npm. Components and options for laying out your Bootstrap project, including wrapping containers, a powerful grid system, a flexible media object, and responsive utility classes.

IMPLEMENTATION

8.1 Index.php

```
<!doctype html>
<html lang="en">
<head>
  link href="//maxcdn.bootstrapcdn.com/bootstrap/4.1.1/css/bootstrap.min.css"
rel="stylesheet" id="bootstrap-css">
  <script src="//maxcdn.bootstrapcdn.com/bootstrap/4.1.1/js/bootstrap.min.js"></script>
  <script src="//cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
  <!-- Required meta tags -->
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
  <!-- Fonts -->
  <link rel="dns-prefetch" href="https://fonts.gstatic.com">
  link href="https://fonts.googleapis.com/css?family=Raleway:300,400,600" rel="stylesheet"
type="text/css">
  <link rel="icon" href="Favicon.png">
 <!-- Bootstrap CSS -->
  link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">
<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js"></script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.3/umd/popper.min.js"></script>
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/js/bootstrap.min.js"></script>
<style >
  @import url(https://fonts.googleapis.com/css?family=Raleway:300,400,600);
body{
```

```
margin: 0;
  font-size: .9rem;
  font-weight: 400;
  line-height: 1.6;
  color: #212529;
  text-align: left;
  background-color: #f5f8fa;
}
.navbar-laravel
{
  box-shadow: 0 2px 4px rgba(0,0,0,.04);
.navbar-brand, .nav-link, .my-form, .login-form
{
  font-family: Raleway, sans-serif;
}
.my-form
  padding-top: 1.5rem;
  padding-bottom: 1.5rem;
.my-form .row
  margin-left: 0;
  margin-right: 0;
}
.login-form
```

```
padding-top: 1.5rem;
  padding-bottom: 1.5rem;
.login-form .row
{
  margin-left: 0;
  margin-right: 0;
}
body
background-image: url("./Images/bg.png");
background-repeat: no-repeat;
background-size: cover;
}
nav\{
  /*background-color: rgba(55,55,83,255);*/
  background-color: #fff;
}
.navbar-light .navbar-nav .nav-link {
  color: rgb(0\ 0\ 0);
}
</style>
  <title>PMS</title>
</head>
<body>
<nav class="navbar navbar-expand-lg navbar-light navbar-laravel">
  <div class="container">
  <a class="navbar-brand" href="#">Project Management System</a>
  <button class="navbar-toggler" type="button" data-toggle="collapse" data-</pre>
```

```
target="#navbarSupportedContent" aria-controls="navbarSupportedContent" aria-
expanded="false" aria-label="Toggle navigation">
    <span class="navbar-toggler-icon"></span>
  </button>
  <div class="collapse navbar-collapse" id="navbarSupportedContent">
    ul class="navbar-nav ml-auto">
      class="nav-item">
        <a class="nav-link" href="login.php" id="login">Login</a>
      class="nav-item">
        <a class="nav-link" href="register.php">Register</a>
      </div>
  </div>
</nav>
</body>
</html>
```

8.2 Session.php

```
<?php
session_start();
$user = $_POST['id'];
$pass = $_POST['pass'];
$role = $_POST['role'];
include 'connection.php';
if($role == "Admin")
{</pre>
```

```
if(!empty($user) && !empty($pass))
             $sql = "SELECT * FROM coordinator WHERE c_username='$user' AND
c_password='$pass'";
             $res = mysqli query($conn,$sql);
             $count = mysqli num rows($res);
             if($count != 0)
                    $ SESSION['Email'] = $user;
                    $ SESSION['Role'] = $role;
                    header("location:./admin/Admin.php");
              }
              else
                    $message = "Invalid Username or Password!";
                    header("Location:login.php?message1=$message");
              }
  }
}
else if($role == "Faculty")
{
  if(!empty($user) && !empty($pass))
  {
             $sql = "SELECT * FROM guide WHERE g username='$user' AND
g password='$pass'";
             $res = mysqli query($conn,$sql);
             $count = mysqli num rows($res);
             if(scount!=0)
                    $ SESSION['Email'] = $user;
                    $ SESSION['Role'] = $role;
                    header("location:./guide/guide.php");
```

```
}
              else
                     $message = "Invalid Username or Password!";
                     header("Location:login.php?message1=$message");
              }
  }
}
else if($role == "Student")
{
  if(!empty($user) && !empty($pass))
  {
              $sql = "SELECT * FROM student WHERE s_username='$user' AND
s password='$pass'";
              $res = mysqli_query($conn,$sql);
              $count = mysqli_num_rows($res);
              if($count != 0)
                     $ SESSION['Email'] = $user;
                     $_SESSION['Role'] = $role;
                     header("location:student/student index.php");
              }
              else
                     $message = "Invalid Username or Password!";
                     header("Location:login.php?message1=$message");
              }
  }
?>
```

SYSTEM TESTING

Error finding is the main use of testing. Testing is the way toward attempting to find each possible flaw or shortcoming in a work item. It gives a way to deal with check the helpfulness of parts, sub-assemblies, and social occasions just as a finished thing it is the path toward working on programming with the point of ensuring that the Software system satisfies its necessities and customer wants and does not bomb in an unacceptable manner.

Testing permits to expel the mistakes and improve the framework execution. There are numerous kinds of tests which enables us to improve our venture execution and to make it mistake free. What's more we likewise have tests which encourage us to check singular modules autonomously and furthermore to check complete framework together according to our convenience.

9.1 TYPES OF TESTS

9.1.1 UNIT TESTING

Unit testing incorporates the arrangement of analyses that favor that within program basis is working properly, and that program information sources produce significant yields. It checks whether little segments are working appropriately or not. Every single decision branch and inside code stream should be endorsed. It is the attempting of individual programming units of the application .it is done after the completion of an individual unit before fuse. This is an auxiliary attempting, that relies upon learning of its improvement and is prominent. Unit tests perform fundamental tests at section level and test a specific business system, application, or possibly structure plan. Unit tests ensure that all of a thoughtful method for a business technique performs unequivocally to the recorded points of interest and contains obviously portrayed data sources and foreseen results. A unit test encourages you to discover which part is broken in your application and fixes it quicker.

Test Case Scenarios for Login or Sign-up

- Case 1: Random selection of links outside of Login page and Signup page (Pre-login / Pre-signup)
 - User Management Frontend
 - Action Redirect to login page
 - Possible additional action Message "Please login if returning user / Sign up if new user"
- Case 2: Click Login button without filling all the details (username + password)
 - User Management Frontend
 - Action Reload login page with message "Required details not entered. Please fill necessary login information"
- Case 3: Login details filled → Login button clicked
 - Check with Database (User Management Backend)
 - User Management Frontend
 - If invalid combination of email-password Redirect to Login + Message
 "Invalid combination. Please enter correct username password"
 - If valid combination (student) Redirect to Student Dashboard page if Student login.
 - If valid combination (guide) Redirect to Guide Dashboard page if Guide login.
 - If valid combination (admin) Redirect to Admin Dashboard page if Admin login
- Case 4: Sign-up button selected without all required fields filled
 - User Management Frontend
 - Redirect to Sign-up page
 - Display message "Please enter all required fields"
- Case 5: Signup button selected after all fields entered
 - User Management Backend

- Identify if records already exist in Database (Identify primary key, but also consider email id during check)
- Only add records to table if new records
- User Management Frontend
- If records exist Message "You are already a registered user. Please continue via login"
- If a new user To be determined whether the user is returned back to the login page, or sent to the Dashboard page.

9.1.2 INTEGRATION TESTING

Integration tests are expected to test joined programming modules to choose whether they everything considered continue running as one program. Testing is an event driven and is dynamically stressed over the crucial after effect of screens or fields. Combination tests show that in spite of the way that the sections were autonomously satisfied, as showed up by successfully unit testing, the gathering of portions are correct and unsurprising. Combination testing is expressly away for revealing the issues that rise up out of the gathering of these portions.

Integration testing permits to discover blunders because of unexpected communication between the framework and the sub-framework segments. We test the product in order to test and to identify all the potential mistakes in our undertaking once we complete the source code and before conveying it to the clients.

These techniques provide guidance for testing:

- To test the internal logic of the software components.
- To test the input and output domains of a programs and to uncover the errors in program function, behavior and performance.

We can test the software by using two methods:

- White Box testing: In this the internal logic program is being checked by using different test case design techniques.
- Black Box testing: In this the software requirements are tested by using different test case design techniques.

9.1.3 PERFORMANCE TESTING

This test is done to find the run-time performance of the software with the context of the integrated system. These tests can be carried out throughout the testing process. For example, the performance of individual module is accessed during white box testing under unit testing.

9.1.4 VERIFICATION ANDVALIDATION

Testing procedure is a piece of subject alluding to checking and approval of our task. We have to find the framework determinations and we should attempt to meet the details of the client and to fulfill the client, for this reason, we need to check and approve the item and we have to ensure that everything is working appropriately. Check and approval are the two unique things. One is performed to guarantee that the product is working accurately and to implement a particular usefulness and the other is done to guarantee if the client prerequisites are appropriately met or not by the finished result.

RESULT AND OUTPUT SCREENS

10.1 Home page

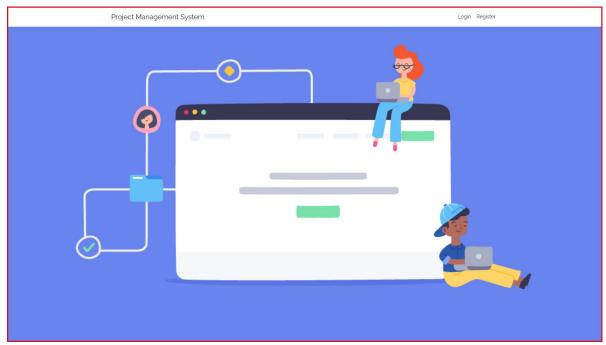


Fig 10.1 Home page

10.2 Login Page

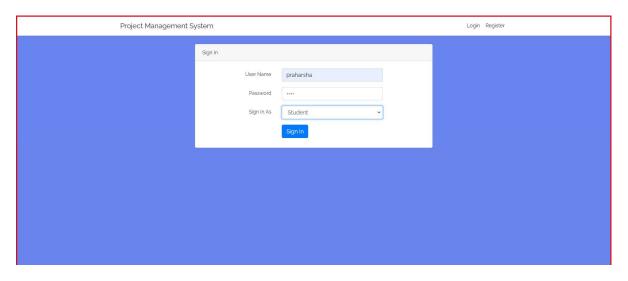


Fig 10.2 Login page

10.3 Registration Page for Student

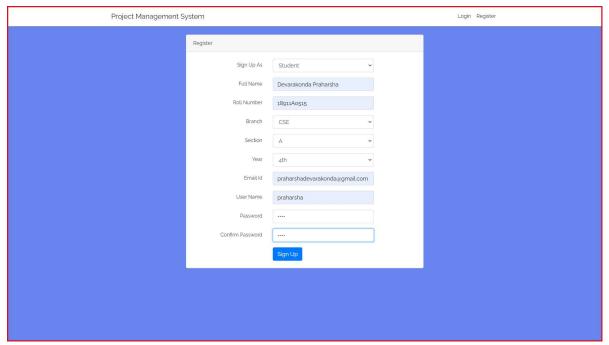


Fig 10.3 Registration page

10.4 Project Coordinator

10.4.1 Home Page

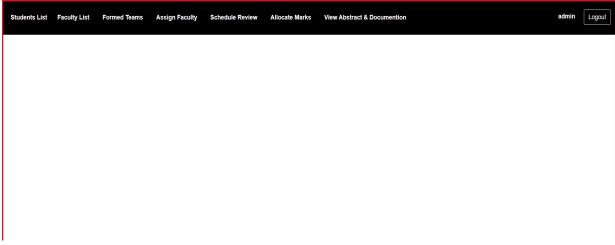


Fig 10.4 Home page

10.4.2 Student List

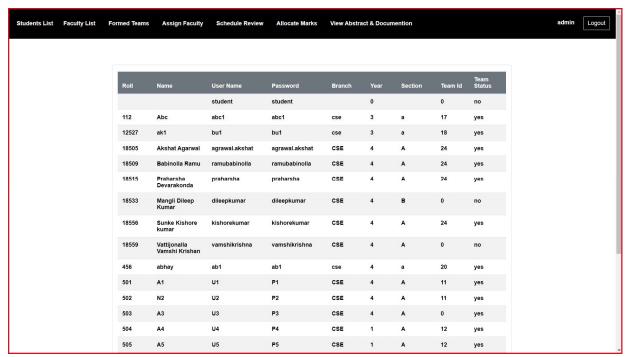


Fig 10.5 Student list

10.4.3 Faculty List

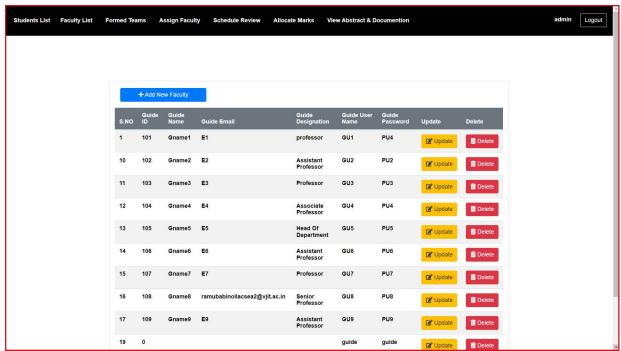


Fig 10.6 Faculty list

10.4.4 Formed Teams

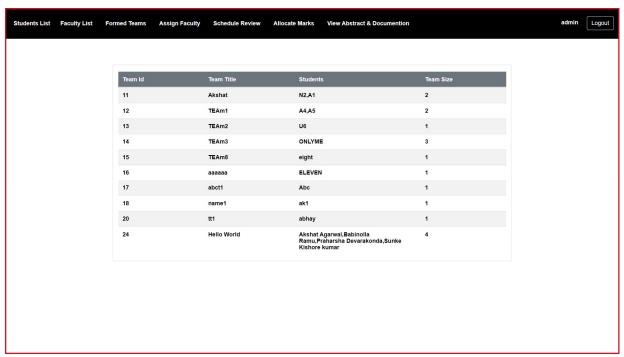


Fig 10.7 Formed Teams

10.4.5 Assign Project Guide

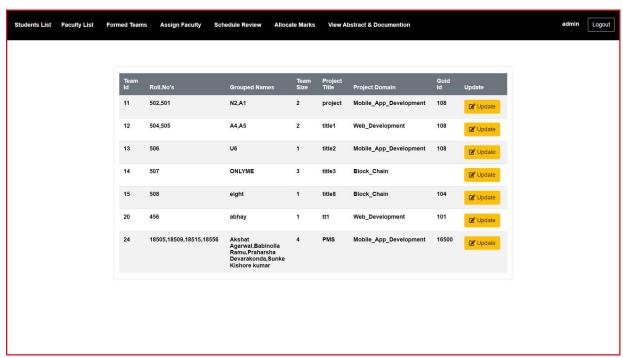


Fig 10.8 Assign Project Guide

10.4.6 Schedule Review

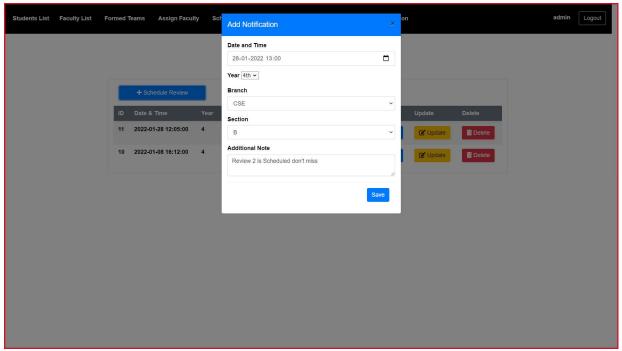


Fig 10.9 Schedule Review

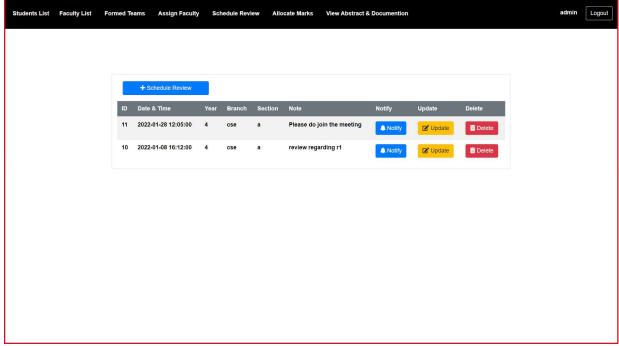


Fig 10.10 Scheduled reviews

10.4.7 Allocate Marks

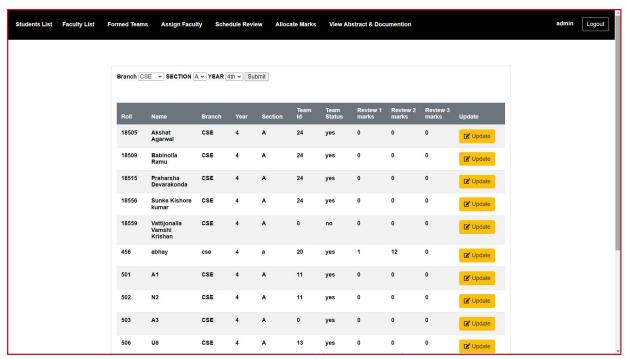


Fig 10.11 Allocate marks

10.4.8 View Abstract & Documentation

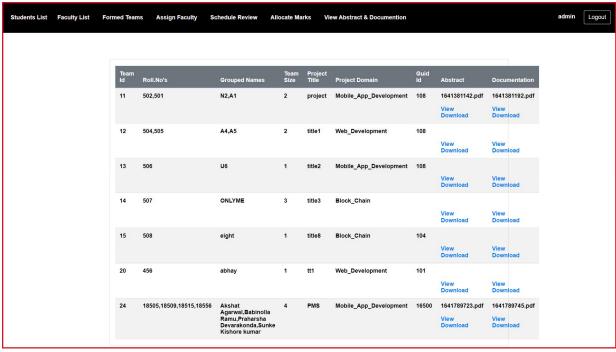


Fig 10.12 View abstract and documentation

10.5 Project Guide

10.5.1 Profile

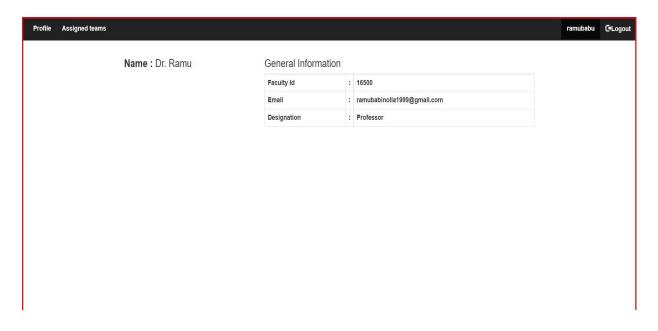


Fig 10.13 Profile

10.5.2 Assigned Teams

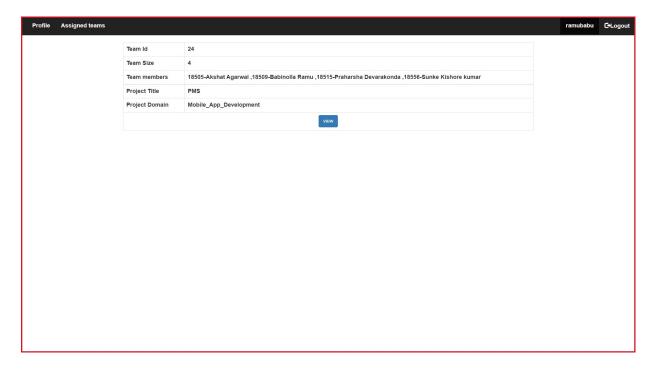


Fig 10.14 Assigned teams

10.5.3 Project Details

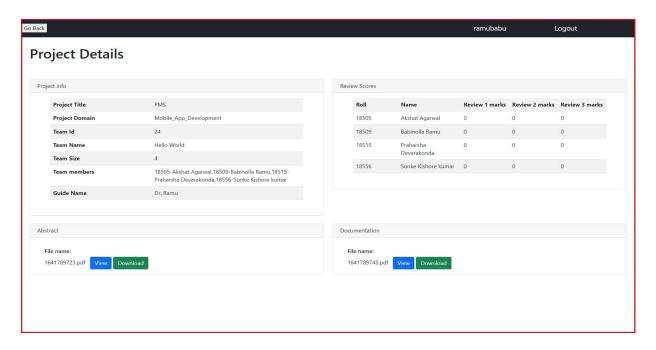


Fig 10.15 Project details

10.6 Student

10.6.1 Profile

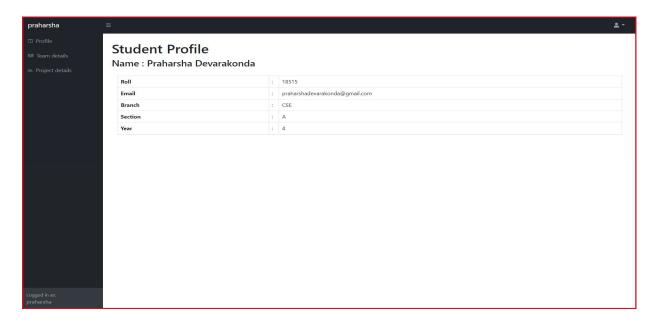


Fig 10.16 Profile

10.6.2 Team Formation & Details

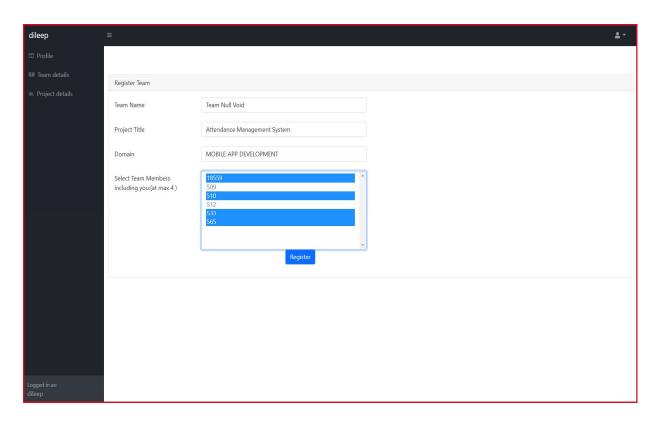


Fig 10.17 Team formation form

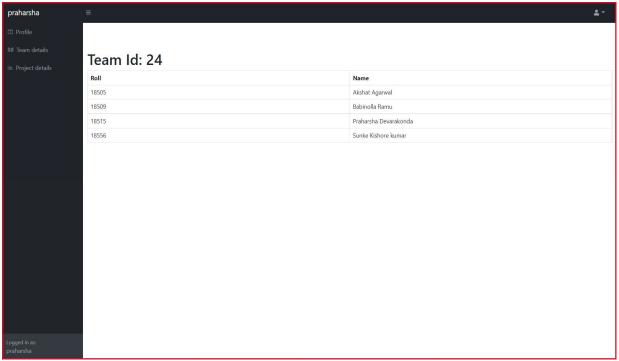


Fig 10.18 Formed team details

10.6.3 Project Dashboard

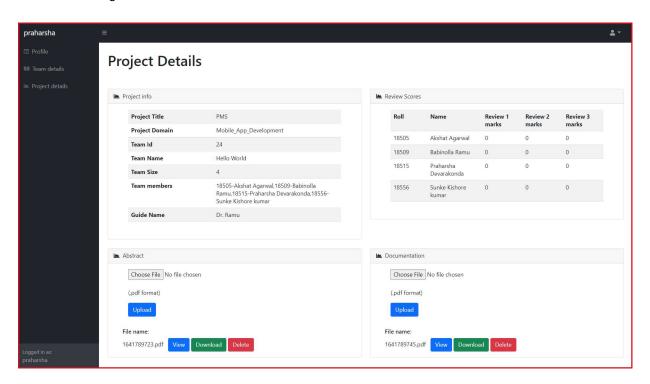


Fig 10.19 Project dashboard

CONCLUSION AND FUTURE ENHANCEMENT

Project Management System (PMS) is a very effective application which can be used to a great extent. PMS have many advantages over the traditional system. Some of these advantages are centralized data, up-to-date status reporting, Email notification, ease of use, backups etc. The use of this application reduces the extra time and efforts required to manage and monitor the final year projects in colleges. It also provides a good interface which is easy to understand by the users and helps in adapting to the use of this web application.

The Project Management System will help project coordinators and guides to manage the records and status of each project they handle respectively. This project organizes the project records with each part of the development category, such as the abstract, documentation etc. This feature is dynamic to this system, which means that the project coordinator can manage the category or division list. The project management system also controls the teams for each project. The system also alerts a simple reminder/notification for each individual of team members and their guide.

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