

A

Major Project

On

FACULTY REPORT GENERATION SYSTEM

(Submitted in partial fulfillment of the requirements for the award of Degree)

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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Kandlakoya (V), Medchal Road, Hyderabad-501401.

2018-22

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



CERTIFICATE

This is to certify that the project entitled “**FACULTY REPORT GENERATION SYSTEM**” being submitted by **GUNTUKU VIJAY (187R1A0523), RAMINENI MANOJ BARGAV RAM (187R1A0534) & VANGARI SRILEKHA (187R1A0557)** in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science and Engineering to the Jawaharlal Nehru Technological University Hyderabad, is a record of bonafide work carried out by them under our guidance and supervision during the year 2021-22.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

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ABSTRACT

Currently in Educational Organization every achievement and document management happens manually. Such examples of activities that happen manually are documents being stored in the hard disks registers and files, all the achievements are maintained in files, hard disk or paper documents, and there are no proper report generation techniques for achievements and works. Manual processes take a lot of time to implement, data loss may happen and can cause delay to the actual work. With the fast growing network, this process needs to be automated to provide ease to manual work. This can greatly increase the economic growth of college management and manage all events of the faculty very smoothly with all information directed to one single portal. Due to manual management of faculty records management faces a lot of challenges where they lose a lot of time to gather all the data together. So in order to overcome these sorts of issues, our portal contains different modules like faculty information, documents, achievements and report generation. All the data about the faculty is maintained in this portal, one can see all their achievements and generate or print their reports. So every document is maintained in the database and there is no loss of data and accessing of the documents is very fast.

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1. INTRODUCTION

1. INTRODUCTION

1.1 PROJECT SCOPE

People say document management is hectic, but we understand the organization's pressure and efforts in their maintenance. So we tried developing a one-stop solution titled "Faculty Report Generation System". Where faculty can manage their documents and achievements in the portal. The goal of our system is to develop a cost-effective and sustainable system. It is most suited to the user's analysis and is the heart of the process. Where faculty can manage their documents and achievements in the portal. The goal of any system development is to develop and implement the system cost effectively. It is most suited to the user's analysis and is the heart of the process. Analysis is the study of the various operations performed by the system such as (add, update, delete, read, search details) and maintain relationships within the system. During analysis, data collected on the files, decision points and transactions handled by the present system. The Faculty Management System can be accessed using a username and password. It is accessible by an administrator and even by the faculty. The data can be retrieved easily with a single click. The data is well protected for personal use and makes the data processing very fast. This system has objectives of easily & maintainable information. If any faculty lost their data can retrieve them from the database^[3]. Here the data will be stored into the database so that the data will be stored for long period of time. It can be accessed by any person who has the permission to do so.

1.2 PROJECT PURPOSE

The Faculty Report Generation System project presents a digital portal^[1] which stores the data of the employees of an organization where all the services are single click away^[2]. All the achievements of the faculty can be seen in a single place. So if any one wants to retrieve the data it is so easy to retrieve data. All the information about the faculty achievements can be seen in one place. If management^[4] wants any faculty data they can get it in a single click.

The analysis is the study of the various operations performed by the system such as (adding, updating, deleting, reading, searching details) and maintaining relationships within the system. During analysis, data was collected on the files, decision points, and transactions handled by the present system. The System can be accessed using a username and password. It is accessible by an administrator and even by the faculty. The data can be retrieved easily with a single click. The data is organized in a well systematic fashion. If any of the faculty lose their data, it can be easily retrieved from the database. Here the data will be stored in the database so that the data will be stored for a long period of time. It can be accessed by any person who has permission to do so.

1.2 PROJECT FEATURES

The main features of this project are that all the data about the faculty is maintained in this portal, one can see all their achievements and generate or print their reports. So every document is maintained in the database^[3] and there is no loss of data and accessing of the documents is very fast. This project makes the job very easy in access their documents, management can also generate the report of faculty in a single click. It reduces the data loss, accessing speed is high and every data is maintained. Fake data can be easily identified. So no cheating or fake documents not possible.

2. SYSTEM ANALYSIS

2. SYSTEM ANALYSIS

2.1 INTRODUCTION

System Analysis is the important phase in the system development process. The System is studied to the minute details and analyzed. The system analyst plays an important role of an interrogator and dwells deep into the working of the present system. In analysis, a detailed study of these operations performed by the system and their relationships within and outside the system is done. A key question considered here is, “what must be done to solve the problem?” The system is viewed as a whole and the inputs to the system are identified. Once analysis is completed the analyst has a firm understanding of what is to be done.

2.2 PROBLEM DEFINITION

An organization's employees' records^[2] do not have proper destination to get stored, when in need their retrieval is very difficult with the available conventional procedures. As mentioned in “Web Based Student Information Management System In Universities” by Symon C. Lubanga at (Standing Conference of Eastern, Central and Southern Africa Library and Information Associations (SCESCAL))^[1] a dedicated web based application to store and review data of students of his university is developed, where they managed to onboard each and every minor asset of college digitally and used a single login for the whole system which is a great disadvantage to overcome that we have two separate logins for both the management and faculty (users).

2.3 EXSISTING SYSTEM

Presently most of the organizations use Hard disks, File Systems, Paper Books to store data of achievements, awards, recognitions, and all the above listed methods are traditional and cannot be used for large scale of data where it does not have proper report generation techniques for the above works. There is possible of the loss of data, sometimes the data provided by the faculty maybe incorrect or fake. So the storing of the data for many years is not possible and faculty can't access their documents whenever they want.

2.2.1 LIMITATIONS OF EXISTING SYSTEM

2.2.1.1 Paper Work is more

2.2.1.2 Time Consuming Proces

2.2.1.3 Fake documents or information is possible.

2.2.1.4 May cause loss of data

2.3 PROPOSED SYSTEM

In the proposed system, in order to solve all the drawbacks and issues with the current system we implemented a digital portal which stores the data of the employees of an organization where all the services are single click away. Proposed system includes admin and faculty modules, where faculty can upload all their data and awaits for admin approval; finally college management^[4] can generate monthly, quarterly and overall reports. Our literature survey reviewed that most of the digital platforms for maintaining records used Content Delivery Network's^[2] to develop their portals which is actually the best idea to host sites which have high usage among people, but we found using them locally on the server will result in less loading speed and faster content delivery compared to Content Delivery Networks. Tarun K. Sen (Professor Emeritus, Pamplin College of Business, Virginia Tech Director, Entigence Corporation) mentioned about implementational challenges in his article (Enterprise Systems for Faculty Information In Universities)^[3] like using a centralized database which inspired us to follow the same model in developing our application.

2.4.1 ADVANTAGES OF THE PROPOSED SYSTEM

- Consumes less time.
- Long Lasting Data .
- All services are single click away
- Fake data can be identified easily.
- Misuse of the documents not possible.

2.4 FEASIBILITY STUDY

The feasibility of the project is analyzed in this phase and a business proposal is put forth with a very general plan for the project and some cost estimates. During system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the company. Three key considerations involved in the feasibility^[1] analysis are. Feasibility study is carried out based on many purposes to analyze whether a software product will be right in terms of development, implantation, contribution of project to the organization etc.

- Economic Feasibility
- Technical Feasibility
- Social Feasibility

2.5.1 ECONOMIC FEASIBILITY

In Economic Feasibility study cost and benefit of the project is analyzed. Means under this feasibility study a detail analysis is carried out what will be cost of the project for development which includes all required cost for final development like hardware and software resource required, design and development cost and operational cost and so on. After that it is analyzed whether project will be beneficial in terms of finance for organization or not. The developing system must be justified by cost and benefit. Criteria to ensure that effort is concentrated on a project, which will give best, return at the earliest. One of the factors, which affect the development of a new system, is the cost it would require.

The following are some of the important financial questions asked during preliminary investigation:

- The costs conduct a full system investigation.
- The cost of the hardware and software.
- The benefits in the form of reduced costs or fewer costly errors.

Since the system is developed as part of project work, there is no manual cost to spend for the proposed system. Also all the resources are already available, it gives an indication that the system is economically possible for development.

2.5.2 TECHNICAL FEASIBILITY

In Technical Feasibility current resources both hardware software along with required technology are analyzed/assessed to develop project. This technical feasibility study gives report whether there exists correct required resources and technologies which will be used for project development. Along with this, feasibility study also analyzes technical skills and capabilities of technical team, existing technology can be used or not, maintenance and up-gradation is easy or not for chosen technology etc. This study is carried out to check the technical feasibility, that is, the technical requirements of the system. Any system developed must not have a high demand on the available technical resources. The developed system must have a modest requirement, as only minimal or null changes are required for implementing this system.

2.5.3 BEHAVIORAL FEASIBILITY

This includes the following questions:

- Is there sufficient support for the users?
- Will the proposed system cause harm?

The project would be beneficial because it satisfies the objectives when developed and installed. All behavioral aspects are considered carefully and conclude that the project is behaviorally feasible. This includes analyzing barriers of legal implementation of project, data protection acts or social media laws, project certificate, license, copyright etc. Overall it can be said that Legal Feasibility Study is study to know if proposed project conform legal and ethical requirements.

2.5 HARDWARE & SOFTWARE REQUIREMENTS

2.6.1 HARDWARE REQRIMENTS

For developing the application, the following are the Hardware Requirments:

- System : Intel(R)Core(TM)i7/i5
- Hard Disk : 50GB
- Input Devices : Keyboard, Mouse
- Ram : 4GB

2.6.2 SOFTWARE REQRIMENTS:

- Operating system : Window 10/11
- Editor : Vs Core (or) Notepad++
- Languages : HTML,CSS,SQL,PHP,jQuery(AJAX),JS
- Tool : XAMPPM, GIT
- Database : MYSQL

3. ARCHITECTURE

3. ARCHITECTURE

3.1 PROJECT ARCHITECTURE

This project architecture shows the procedure followed for ERP for educational institutions, starting from login, entering username followed by verification of details and then navigation to dashboard then perform all the crud activities finally followed by logout.

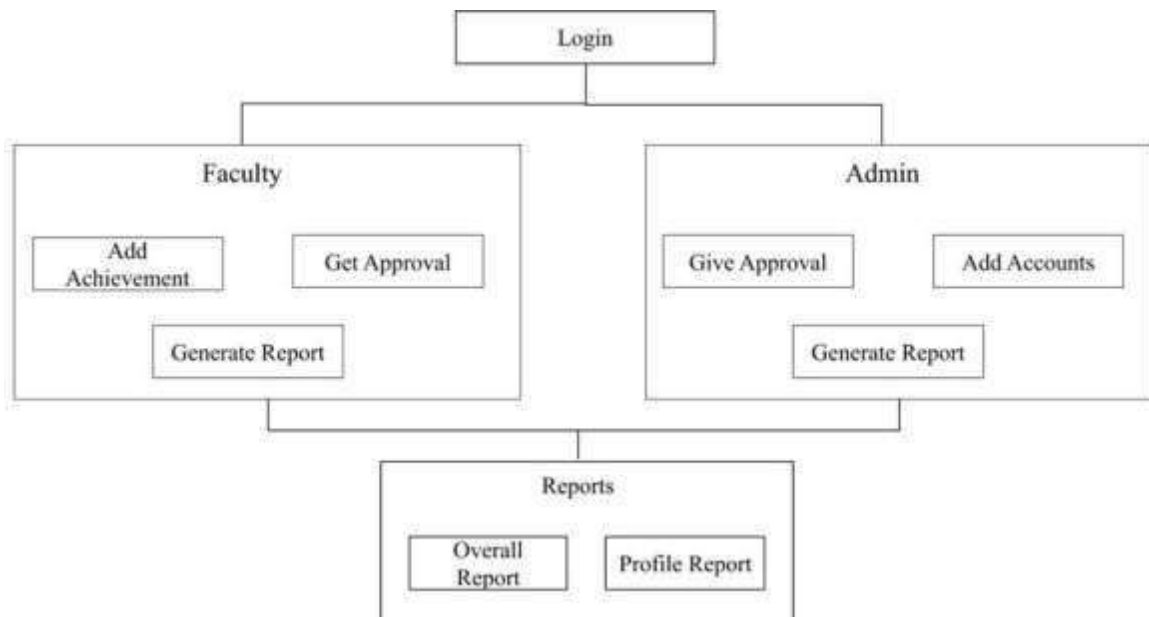


Figure 3.1: Project Architecture for Faculty report generation system

3.1 DESCRIPTION

Enter Username And Password: Input data is captured with the help of text boxes.

Verify Username And Password: The entered Username and password is captured with the help of html id's and then verified with the actual values available in the database^[3].

Navigate to Dashboard: Once the entered values are verified with the values in the database if they are correct the user will be redirected to the dashboard.

Perform Crud Operations: Once the user is navigated to the dashboard he will be able to perform all the crud operations.

Generate reports : The user can generate his reports.

Logout: After all the operations are performed users can safely logout.

3.2 USE CASE DIAGRAM

In the use case diagram we have basically three actors who are the system, admin and faculty. Admin and Faculty will login, system will verify their details and gives access. Admin has access to add faculty, add admin, verify faculty and generate reports. Faculty has access to update achievements, update profile and generate report. The system will have access to email verification and backup.

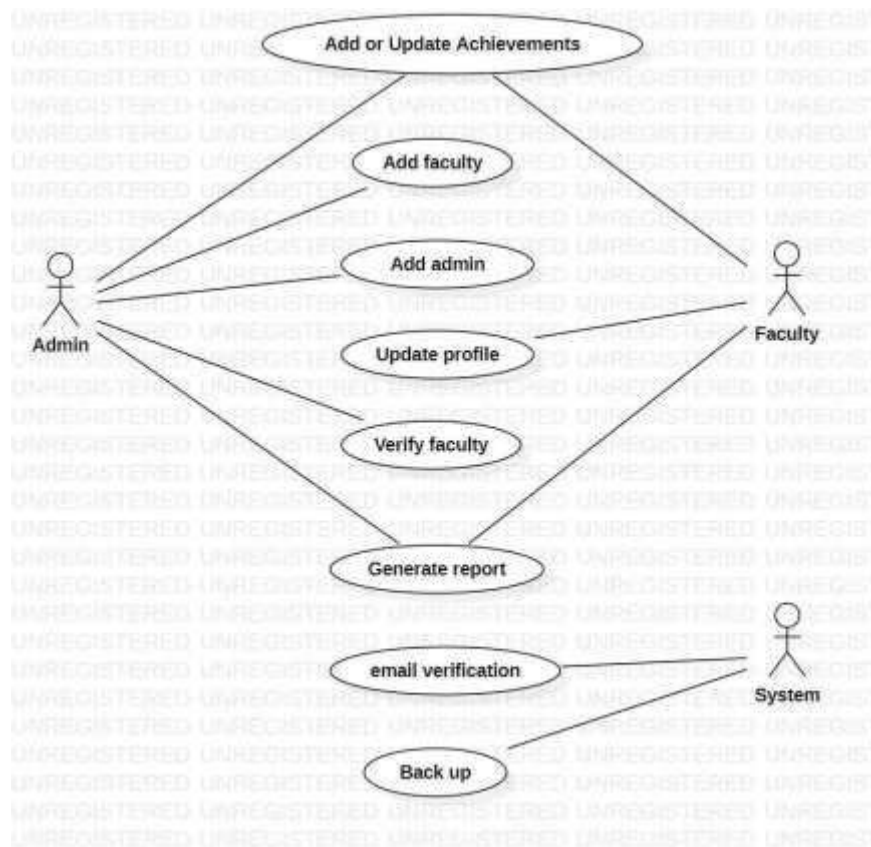


Figure 3.2: Use Case Diagram for Faculty report generation system

3.3 CLASS DIAGRAM

Class Diagram is a collection of classes and objects. In our FACULTY REPORT GENERATION SYSTEM we have admin login, faculty login, insert achievements and generate reports. In admin login class it has admin login and verify user, in faculty login class it has faculty login and update profile, in insert achievements class it has add achievements and view achievements and in generate reports class it has generate reports, monthly reports and yearly reports functions.

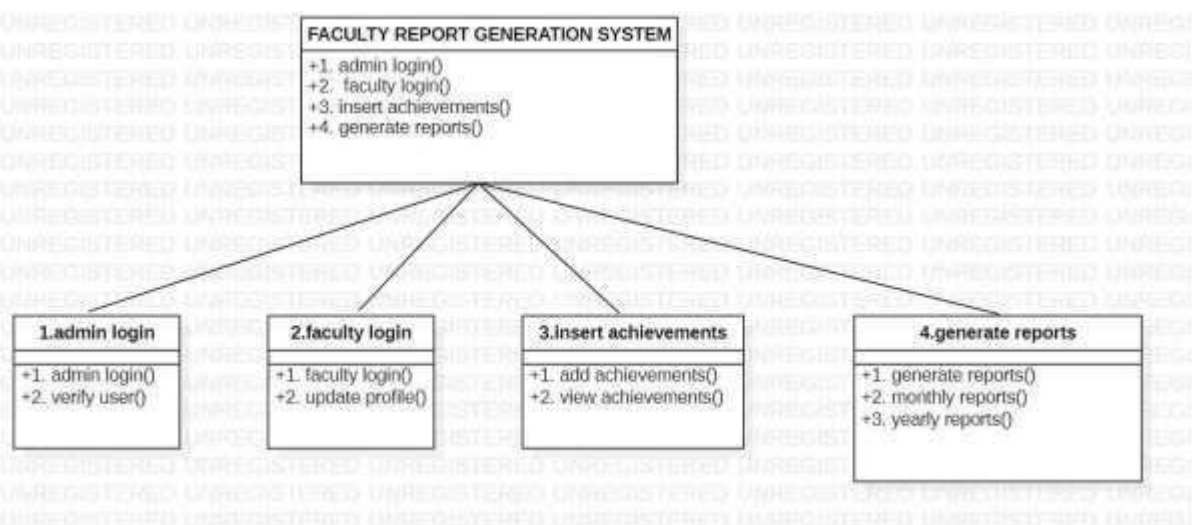


Figure 3.3: Class Diagram for Faculty report generation system

3.4 SEQUENCE DIAGRAM

A **sequence diagram** or system **sequence diagram** (SSD) shows object interactions arranged in time sequence in the field of software engineering. In our FACULTY REPORT GENERATION SYSTEM we have 3 major roles they are Admin role, Faculty role, System role and all the sequential process is represented below.

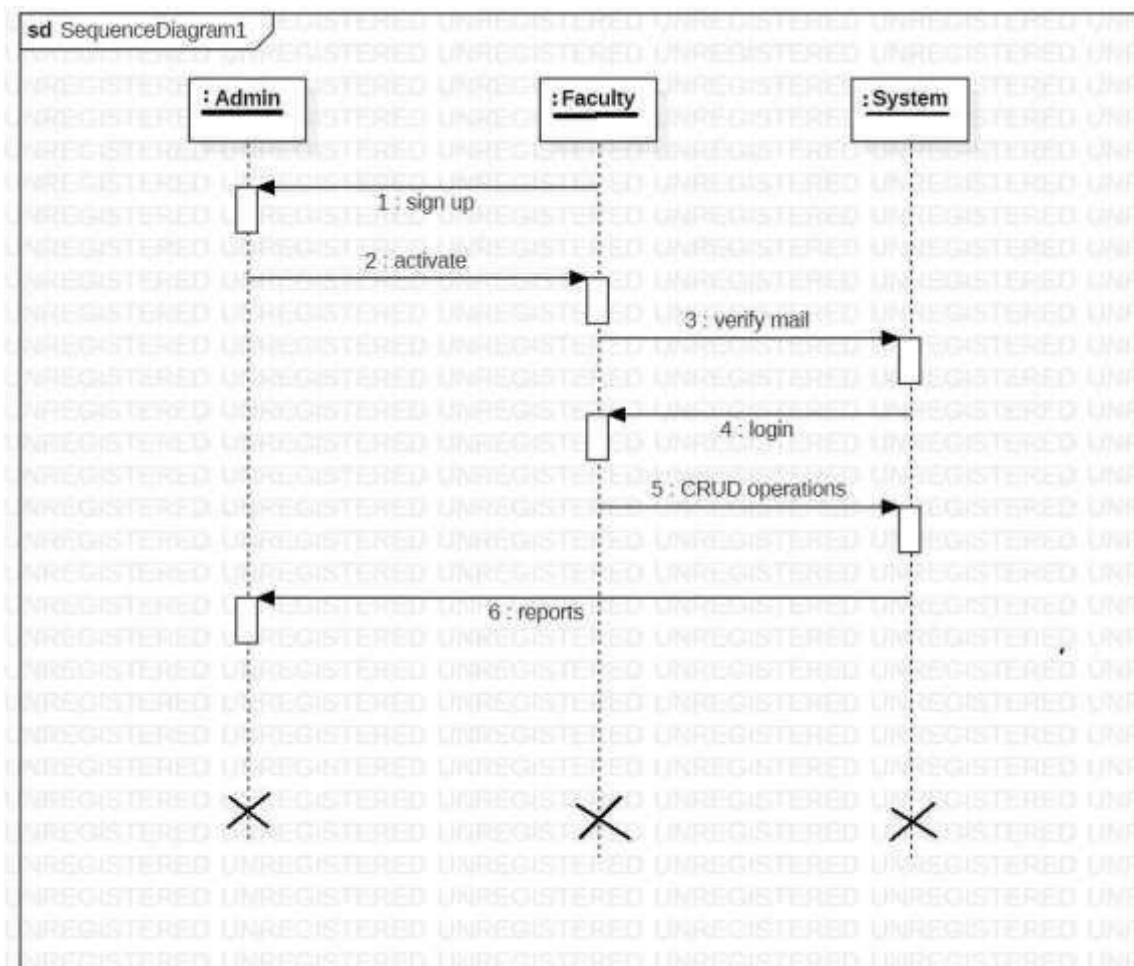


Figure 3.4: Sequence Diagram for Faculty report generation system

3.5 ACTIVITY DIAGRAM

It describes the flow of activity states. In our FACULTY REPORT GENERATION SYSTEM the first activity is entering username followed by entering password and then the system verifies both the username and password in the database if it matches system redirects to dashboard else followed by error messages.

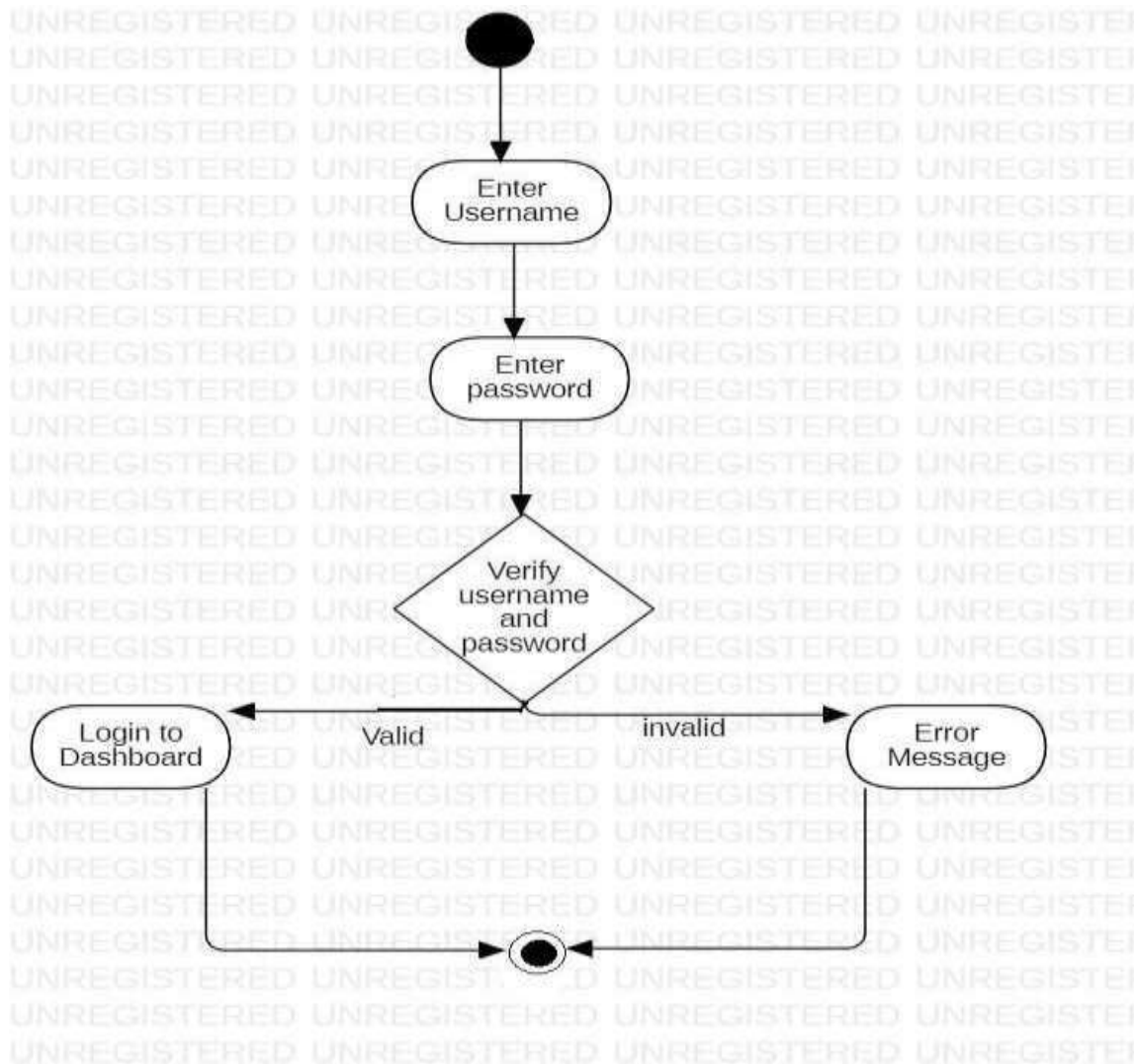


Figure 3.5: Activity Diagram for Faculty report generation system

4. IMPLEMENTATION

4. IMPLEMENTATION

4.1 SAMPLE CODE

index.php

```

<body>
<!-- Left Panel -->
<aside id="left-panel" class="left-panel">
<nav class="navbar navbar-expand-sm navbar-default">
<div id="main-menu" class="main-menu collapse navbar-collapse">
<ul class="nav navbar-nav">
<pre>
</pre>
<li>
<a href="dashboard.php"><i class="menu-icon fa fa-laptop"></i>Dashboard</a>
</li>
<li>
<a href="myprofile.php"><i class="menu-icon fa fa-user"></i>Personal Information</a>
</li>
<li>
<a href="achievements.php"><i class="menu-icon fa fa-trophy"></i>Achievements </a>
</li>
<li class="menu-item-has-children dropdown">
<a href="#" class="dropdown-toggle" data-toggle="dropdown" aria-
haspopup="true"aria-expanded="false"> <i class="menu-icon fa fa-
file"></i>Reports</a>
<ul class="sub-menu children dropdown-menu">
<li><i class="menu-icon fa fa-file"></i><a href="personalreport.php">Personal
Report</a></li>
<li><i class="menu-icon fa fa-file"></i><a href="overallreport.php">Overall
Report</a></li>
</ul>
</li>

```

```

<li class="menu-item-has-children dropdown">
<a href="#" class="dropdown-toggle" data-toggle="dropdown" aria-
haspopup="true"aria-expanded="false"> <i class="menu-icon fa fa-
file"></i>Manage</a>
<ul class="sub-menu children dropdown-menu">
<li><i class="menu-icon fa fa-file"></i><a href="year.php">Year</a></li>
<li><i class="menu-icon fa fa-file"></i><a href="semester.php">Semester</a></li>
<li><i class="menu-icon fa fa-file"></i><a href="branch.php">Branch</a></li>
<li><i class="menu-icon fa fa-file"></i><a href="course.php">Course</a></li>
</ul>
</li>
<li>
<a href="faculty.php"><i class="menu-icon fa fa-user"></i>Faculty</a>
</li>
</ul>
</div><!-- /.navbar-collapse -->
</nav>
</aside><!-- /#left-panel -->
<!-- Left Panel -->
<!-- Right Panel -->
<div id="right-panel" class="right-panel">
<!-- Header-->
<header id="header" class="header">
<div class="top-left">
<div class="navbar-header">
<a class="navbar-brand" href="index.php"></a>
<a class="navbar-brand hidden" href="index.php"></a>
<a id="menuToggle" class="menutoggle"><i class="fa fa-bars"></i></a>
</div>
</div>
<div class="top-right">

```

```

<div class="header-menu">
<div class="header-left">
</div>
<div class="user-area dropdown float-right">
<a href="#" class="dropdown-toggle active" data-toggle="dropdown" aria-
haspopup="true"aria-expanded="false">

</a>
<div class="user-menu dropdown-menu">
<a class="nav-link" href="myprofile.php"><i class="fa fa-user"></i>My Profile</a>
<a class="nav-link" href="logout.php"><i class="fa fa-power-off"></i>Logout</a>
</div>
</div>
</div>
</div>
</div>
</header>

<!-- Header-->
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/sweetalert/1.1.3/sweetalert.min.css">
<script
src="https://cdnjs.cloudflare.com/ajax/libs/sweetalert/1.1.3/sweetalert.min.js"></script>
<div class="content">
<div class="animated fadeIn">
<div class="card">
<div class="card-header">
<strong class="card-title">Teaching and Classwork</strong>
<button class="btn btn-info btn-sm float-right ml-3" onclick="history.back()">Go
Back</button>
<a class="btn btn-success btn-sm float-right" href="teachingandclassform.php">Add</a>
</div>
<div class="card-body">

```

```

<form method="post">
<div class="input-daterange">
<div class="row">
<div class="col-md-4">
From<input type="date" name="fromDate" class="form-control" value="2022-04-18" />
</div>
<div class="col-md-4">
To<input type="date" name="toDate" class="form-control" value="2022-04-18" />
</div>
</div>
<!-- <div class="col-md-4 pt-3">
<input type="submit" name="export" value="Export to CSV" class="btn btn-info" />
</div-->
</form>
</div>
<br />
<table id="bootstrap-data-table" class="table table-striped text-center table-bordered">
<thead>
<tr>
<th>S.No</th>
<th>Academic Year</th>
<th>Branch Name</th>
<th>Year & Semester</th>
<th>Course Name</th>
<th>Upload Date & Time</th>
<th>Status</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>

```

```

<td>2022-03-25</td>
<td>CSE</td>
<td>2022-03-10</td>
<td>CSE</td>
<td><span class="badge badge-primary">2022-04-06</span><span class="badge badge-
infoml-3"> 10:16:10</span></td>
<td>
<span class='badge badge-success'><a
href='?type=status&operation=deactive&id=4'
style='color:white'>Approved</a></span>&nbsp;
</td>
<td>
<a href="edit.php"><i class="fa fa-pencil-square mr-2" style="color:#28a745"></i></a>
<a href="test.php" target="_blank"><i class="fa fa-eye mr-2"
style="color:#17a2b8"></i></a>
<a href="edit.php"><i class="fa fa-trash mr-2" style="color:#dc3545"></i></a>
</td>
</tr>
</tbody>
</table>
</div>
</div>
</div>
</body>
</html>
<!-- Header-->
<link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/sweetalert/1.1.3/sweetalert.min.css">
<script
src="https://cdnjs.cloudflare.com/ajax/libs/sweetalert/1.1.3/sweetalert.min.js"></script>
<div class="content">
<div class="animated fadeIn">
<div class="card">

```

```

<div class="card-header">
<strong class="card-title">Teaching and Classwork</strong>
<button class="btn btn-info btn-sm float-right ml-3" onclick="history.back()">Go
Back</button>
<a class="btn btn-success btn-sm float-right" href="teachingandclassform.php">Add</a>
</div>
<div class="card-body">
<form method="post">
<div class="input-daterange">
<div class="row">
<div class="col-md-4">
From<input type="date" name="fromDate" class="form-control" value="2022-04-18" />
</div>
<div class="col-md-4">
To<input type="date" name="toDate" class="form-control" value="2022-04-18" />
</div>
</div>
<!-- <div class="col-md-4 pt-3">
<input type="submit" name="export" value="Export to CSV" class="btn btn-info" />
</div>-->
</form>
</div>
<br />

<table id="bootstrap-data-table" class="table table-striped text-center table-bordered">
<thead>
<tr>
<th>S.No</th>
<th>Academic Year</th>
<th>Branch Name</th>
<th>Year & Semester</th>
<th>Course Name</th>

```

```

<th>Upload Date & Time</th>
<th>Status</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2022-03-25</td>
<td>CSE</td>
<td>2022-03-10</td>
<td>CSE</td>
<td><span class="badge badge-primary">2022-04-06</span><span class="badge badge-
infoml-3"> 10:16:10</span></td>
<td>
<span class='badge badge-success'><a
href='?type=status&operation=deactive&id=4'
style='color:white'>Approved</a></span>&nbsp;
</td>
<td>
<a href="edit.php"><i class="fa fa-pencil-square mr-2" style="color:#28a745"></i></a>
<a href="test.php" target="_blank"><i class="fa fa-eye mr-2"
style="color:#17a2b8"></i></a>
<a href="edit.php"><i class="fa fa-trash mr-2" style="color:#dc3545"></i></a>
</td>
</tr>
</tbody>
</table>
</div>
</div>
</div>
</body>
</html>

```

5. SCREENSHOTS

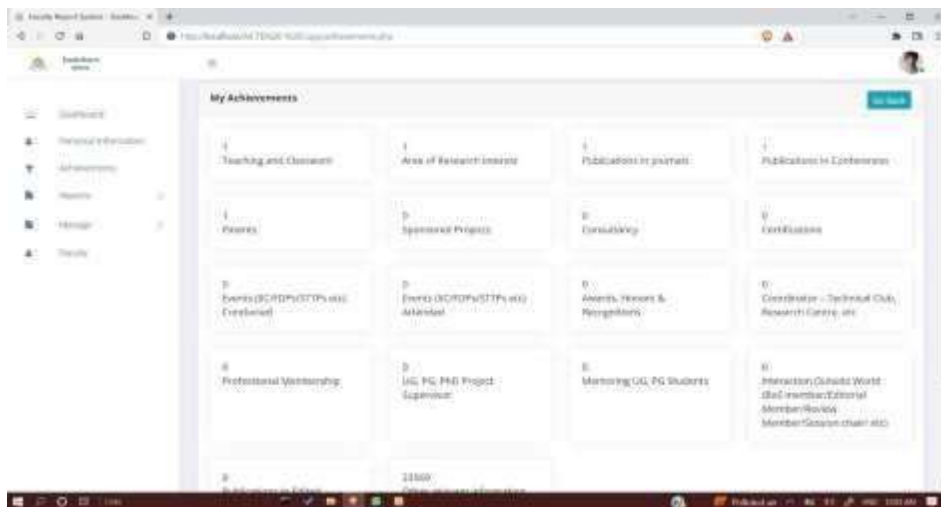
5. SCREENSHOTS

5.1 LOGIN SCREEN RESULT



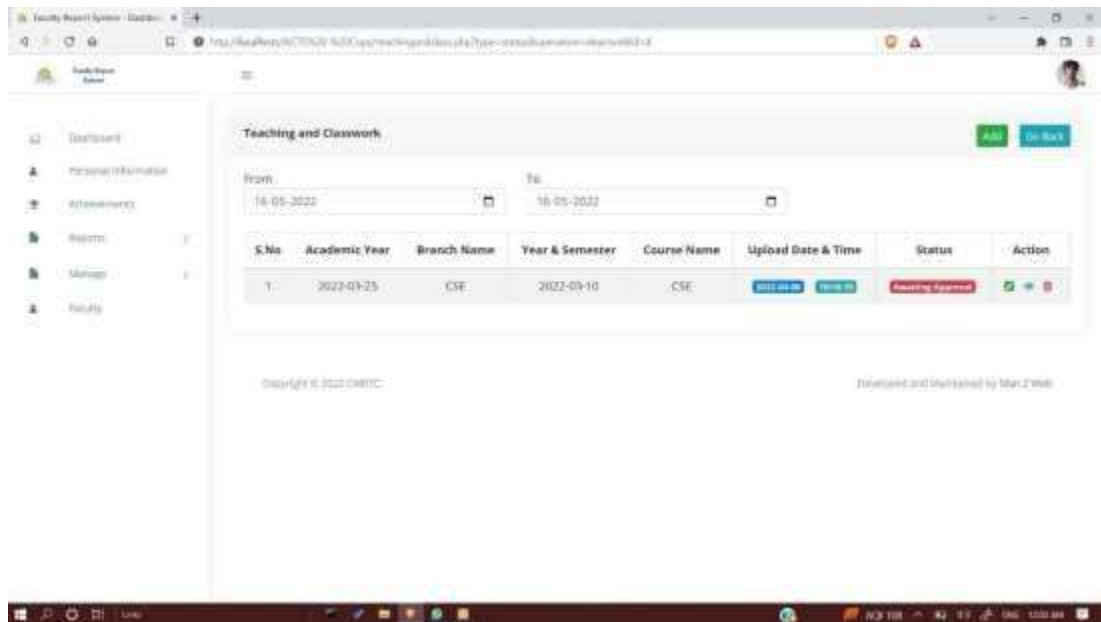
Screenshot 5.1: Login Screen for Faculty report generation system

5.2 ACHIEVEMENTS SCREEN



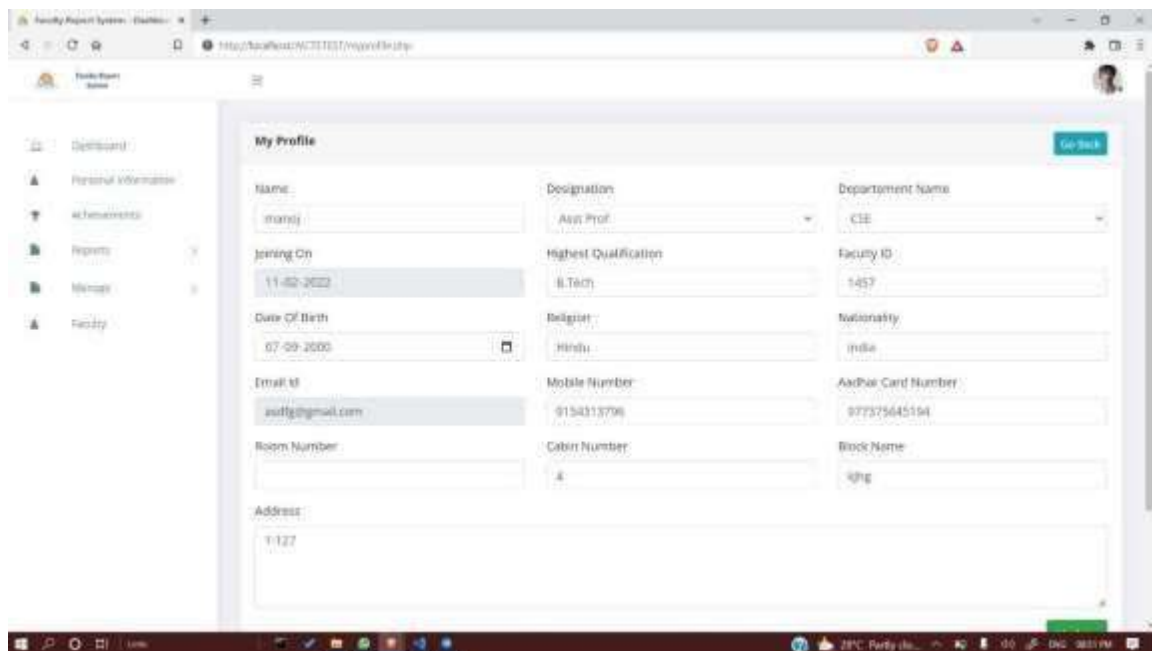
Screenshot 5.2: Result of Faculty Achievements

5.3 UPLOAD ACHIEVEMENT SCREEN



Screenshot 5.3: Upload Achievement Screen

5.4 FACULTY PROFILE SCREEN



Screenshot 5.4: Faculty Profile Screen

6. TESTING

6. TESTING

6.1 INTRODUCTION TO TESTING

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault or weakness in a work product. It provides a way to check the functionality of components, subassemblies, assemblies and/or a finished product. It is the process of exercising software with the intent of ensuring that the Software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of tests. Each test type addresses a specific testing requirement.

6.2 TYPES OF TESTING

6.2.1 UNIT TESTING

Unit testing involves the design of test cases that validate that the internal program logic is functioning properly, and that program inputs produce valid outputs. All decision branches and internal code flow should be validated. It is the testing of individual software units of the application. It is done after the completion of an individual unit before integration. This is a structural testing that relies on knowledge of its construction and is invasive. Unit tests perform basic tests at component level and test a specific business process, application, and/or system configuration. Unit tests ensure that each unique path of a business process performs accurately to the documented specifications and contains clearly defined inputs and expected results.

6.2.2 INTEGRATION TESTING

Integration tests are designed to test integrated software components to determine if they actually run as one program. Testing is event driven and is more concerned with the basic outcome of screens or fields. Integration tests demonstrate that although the components were individually satisfactory, as shown by successful unit testing, the combination of components is incorrect and inconsistent. Integration testing is specifically aimed at exposing the problems that arise from the combination of components.

6.2.3 FUNCTIONAL TESTING

Functional tests provide systematic demonstrations that functions tested are available as specified by the business and technical requirements, system documentation, and user manuals.

Functional testing is centered on the following items:

Valid Input :Identified classes of valid input must be accepted.

Invalid Input :Identified classes of invalid input must be rejected

Functions : Identified functions must be exercised.

Output : Identified classes of application outputs must be exercised.

Systems/Procedures: interfacing systems or procedures must be invoked.

Organization and preparation of functional tests is focused on requirements, key functions, or special test cases. In addition, systematic coverage pertaining to identifying Business process flows; data fields, predefined processes.

6.3 TEST CASES

6.3.1 CAPTURING IMAGES

Test case ID	Test case name	Purpose	Test Case	Output
1	Login	Authenticati on	User enters username and password to access the portal	Login Success
2	File Upload	Use as proof	The admin captures the users image with webcam	Captured successfu lly

7. CONCLUSION

7. CONCLUSION & FUTURE SCOPE

7.1 PROJECT CONCLUSION

After the development of this proposed project, a college management^[4] will be in a position to generate a report of faculty based on their achievements which makes their work easier and reduces overhead.

7.2 FUTURE SCOPE

The use of this portal with profile appraisal and faculty ranking improves the organization's profile value and its ranking in the nation. In future this platform can be shifted to a cloud based platform to boost its performance. In the future after successful development and deployment of this project in colleges, we can collect data from servers of clients as educational data and use for development of a company's^[1] understanding towards an organization's employees and its growth, parallelly we can send reports to colleges even for their growth.

8. REFERENCES

8. BIBLIOGRAPHY

8.1 REFERENCES

- [1] Symon C. Lubanga at (Standing Conference of Eastern, Central and Southern Africa Library and Information Associations (SCESCAL)) on “Web Based Student Information Management System In Universities”.
- [2] Content Delivery Networks: State of the Art, Trends, and Future Roadmap by Behrouz Zolfaghari, Gautam Srivastava, Swapnoneel Roy, Hamid Nemati
- [3] Enterprise Systems for Faculty Information In Universities by Tarun K. Sen (Professor Emeritus, Pamplin College of Business, Virginia Tech Director, Entigence Corporation)
- [4] A Research Paper on College Management System by Lalit MohanJoshi

8.2 WEBSITES

https://github.com/manojbhargavram2014/faculty_report_system

9.PAPER PUBLICATION

FACULTY REPORT GENERATION SYSTEM

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ABSTRACT

Nowadays, in educational institutions, each achievement and document management is done manually. These manually performed operations are documents stored in ledgers and hard drives. All achievements are kept in files, hard drives, or paper documents and there is no proper reporting technique for achievements and jobs. Manual processes take a long time to execute, data loss can occur, and can cause delays in actual work. With the rapid growth of the network, this process must be automated to facilitate manual work. This can significantly increase the economic growth of college management and manage all faculty events very smoothly with all information directed to one portal. Due to the manual management of faculty records, management faces several challenges where they waste a lot of time in binding the data together. So to overcome these types of problems, our portal contains different modules like teacher information, documents, achievements, and report generation. All faculty data is kept in this portal, one can view all their achievements and generate or print their reports. So each document is kept in the database and there is no data loss and access to the document is very quick.

Key Words — Organization, manual management, Network

1. INTRODUCTION

People say document management is hectic, but we understand the organization's pressure and efforts in their maintenance. So we tried developing a one-stop solution titled “Faculty Report Generation System”. Where faculty can manage their documents and achievements in the portal. The goal of our system is to develop a cost-effective and sustainable system. It is most suited to the user’s analysis and is the heart of the process.

The analysis is the study of the various operations performed by the system such as (adding, updating, deleting, reading, searching details) and maintaining relationships within the system. During analysis, data was collected on the files, decision points, and transactions handled by the present system. The System can be accessed using a username and password. It is accessible by an administrator and even by the faculty. The data can be retrieved easily with a single click. The data is organized in a well systematic fashion. If any of the faculty lose their data, it can be easily retrieved from the database. Here the data will be stored in the database so that the data will be stored for a long period of time. It can be accessed by any person who has permission to do so.

2. LITERATURE SURVEY

As mentioned in “Web Based Student Information Management System In Universities” by Symon C. Lubanga at (Standing Conference of Eastern, Central and Southern Africa Library and Information Associations (SCESCAL))[1] a dedicated web based application to store and review data of students of his university is developed, where they managed to onboard each and every minor asset of college digitally and used a single login for the whole system which is a great disadvantage to overcome that we have two separate logins for both the management and faculty (users).

Our literature survey reviewed that most of the digital platforms for maintaining records used Content Delivery Network's[2] to develop their portals which is actually the best idea to host sites which have high usage among people, but we found using them locally on the server will result in less loading speed and faster content delivery compared to Content Delivery Networks.

Tarun K. Sen (Professor Emeritus, Pamplin College of Business, Virginia Tech Director, Entigence Corporation) mentioned about implementational challenges in his article (Enterprise Systems for Faculty Information In Universities)[3] like using a centralized database which inspired us to follow the same model in developing our application

3. PROPOSED METHODOLOGY

In the proposed methodology, in order to solve all the drawbacks and issues with the current system we implemented a digital portal which stores the data of the employees of an organization where all the services are single click away. Proposed system includes admin and faculty modules, where faculty can upload all their data and awaits for admin approval; finally college management[4] can generate monthly, quarterly and overall reports. Fig 3.1 describes about the total methodology.

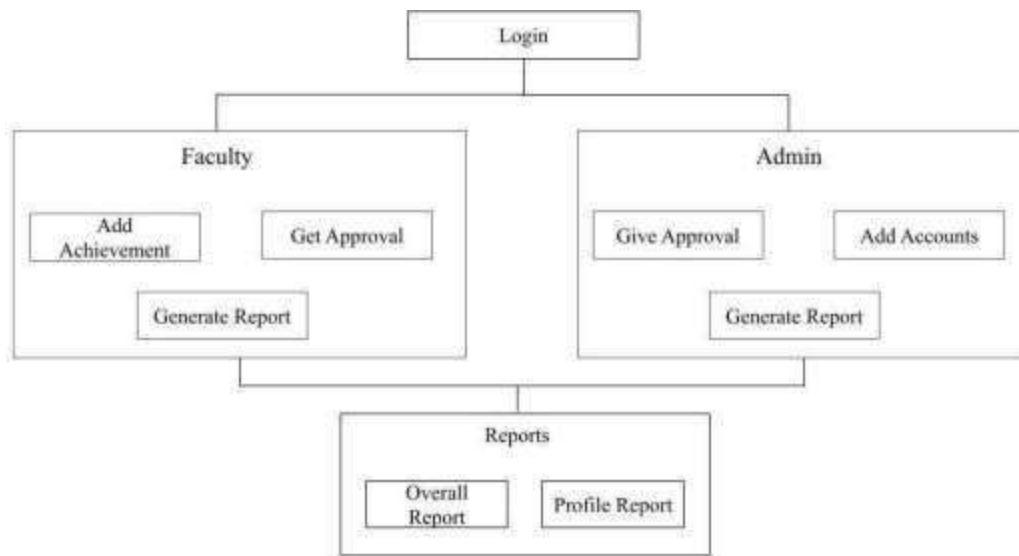


Fig 3.1: Project Functionality

4. ELEMENTS REQUIRED

Hosting Server: This is where the web application is hosted and available to use for all its end users. To develop this project a hosting space of 100 GB SSD, Mysql Server, Minimum of 1 TB bandwidth and an FTP Account.

SSL Certificate: An Secure Socket Layer Certificate is must for platforms like these, An SSL Certificate is an electronic document used to prove the validity of a public key and ensures security.

Domain: A domain is needed in order to access the platform, every individual can not remember ip address of website, so domain makes the taks easier.

5. RESULTS

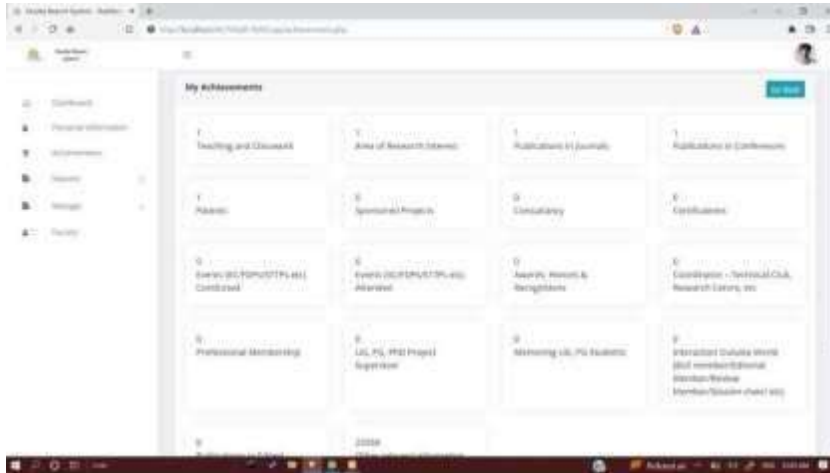


Fig 5.1: Screenshot Of Achievements Screen



Fig 5.2: Login Screen

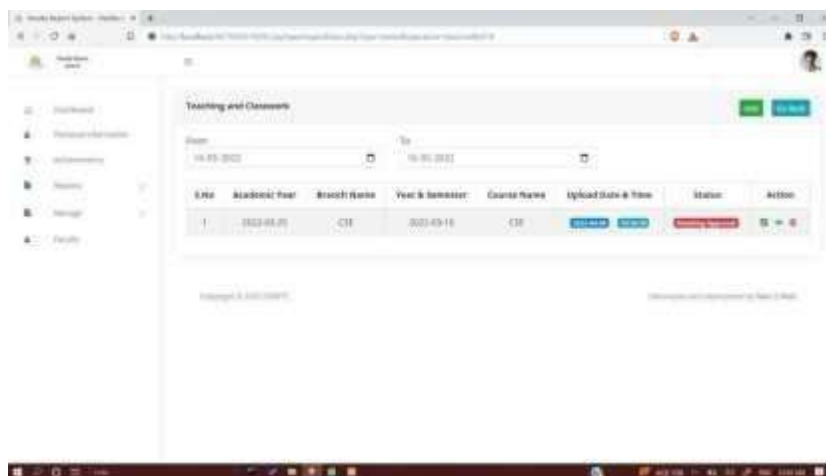


Fig 5.3: Screenshot of Upload Achievements



The screenshot displays a web application interface for a Faculty Profile Report. The report is titled 'Report OT Meraj (104)' and is presented as a table with four columns: 'S/N', 'Affiliation', 'Count', and 'Action'. The table contains ten rows of data, each with a green 'View' button in the 'Action' column. The data is as follows:

S/N	Affiliation	Count	Action
1	Teaching & Class Work	7	View
2	Area of Research Interest	7	View
3	Publications in journals	2	View
4	Publications in Conferences	2	View
5	Patents	1	View
6	Optimized Projects	0	View
7	Consultancy	0	View
8	Lectureships	0	View
9	Events Conducted	0	View
10	Events Attended	0	View

Fig 5.4: Screenshot of Faculty Profile Report

6. FUTURE SCOPE

The use of this portal with profile appraisal and faculty ranking improves the organizations profile value and it's ranking in the nation. In future this platform can be shifted to a cloud based platform to boost it's performance.

CONCLUSION

After the development of this proposed project, a college management will be in a position to generate a report of faculty based on their achievements which make their work easier and reduces overhead.

REFERENCES

1. Symon C. Lubanga at (Standing Conference of Eastern, Central and Southern Africa Library and Information Associations (SCESCAL)) on "Web Based Student Information Management System In Universities".
2. Content Delivery Networks: State of the Art, Trends, and Future Roadmap by Behrouz Zolfaghari, Gautam Srivastava, Swapnoneel Roy, Hamid Nemati
3. Enterprise Systems for Faculty Information In Universities by Tarun K. Sen (Professor Emeritus, Pamplin College of Business, Virginia Tech Director, Entigence Corporation)
4. A Research Paper on College Management System by LalitMohanJoshi

10.CERTIFICATES

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