Mini Project On Self-Appraisal System

 $\mathbf{B}\mathbf{y}$

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Department of Master Of Computer Application Sardar Patel Institute of Technology Autonomous Institute Affiliated to Mumbai University 2022-23

CERTIFICATE OF APPROVAL

This is to certify that the following students

Udit Kulkarni (2020510038) Tanay Srivastava (2020510061)

Have satisfactorily carried out work on the project entitled

"Self-Appraisal System"

Towards the fulfilment of project, as laid down by
Sardar Patel Institute of Technology during year
2022-23.

Project Guide: Prof. Dr. Pooja Raundale

PROJECT APPROVAL CERTIFICATE

This is to certify that the following students

Udit Kulkarni (2020510038) Tanay Srivastava (2020510061)

Have successfully completed the Project report on

"Self-Appraisal System",

which is found to be satisfactory and is approved

at

SARDAR PATEL INSTITUTE OF TECHNOLOGY, ANDHERI (W), MUMBAI

INTERNAL EXAMINER

EXTERNAL EXAMINER

HEAD OF DEPARTMENT

PRINCIPAL

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Abstract

The "Self-Appraisal System" developed is a systematic and periodic way of measuring work performance against established requirements of the job.It's a subjective evaluation of the employee's strengths and weaknesses, relative worth to the organization, and future development potential.

Once the user logs in the website, they can enter their details according to their designation I.e. Professors, Assistant Professors or Associate Professors using the user-interface which on click of a submit button, will be stored in a database. The user can generate a report to get a hard-copy of the details entered. The details of the particular user will be fetched from the database once they log in the app again.

The system designed will prevent paper-work, and save time. The data stored in the database can be further analysed to gain more insights.

Objectives

The Web based Application "Self-Appraisal System" is used

- To provide professors a secure and a user friendly platform for the self appraisal process.
- To save resources like paper, money and save time.
- To be able to generate reports of the data.
- To store user data in a database and gain more insights from the data.

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1 Introduction

1.1 Problem Definition

Self-Appraisal is currently being done manually, which involves a lot of paper-work. It consumes time and resources. The data that is filled by the professors is difficult to analyse.

1.2 Objectives and Scope

1.2.1 Objectives

The Web based application "Self-Appraisal System" is

- To provide professors a secure and a user friendly platform for the self appraisal process.
- To save resources like paper, money and save time.
- To be able to generate reports of the data.
- To store user data in a database and gain more insights from the data...

1.2.2 Scope

The professor can provide their details for registration and view their profile after logging in the website.

In the application the professors will be able to fill the self-appraisal form (after logging in to their profile) in an efficient way, reducing time and effort.

Our System is being made for reducing the paper work, and resources such as time and money, so that the professors can fill the self-appraisal form and once clicked on Submit their data will be stored in a database. This data can further be analysed to find trends and more insights.

1.3 Existing System

Currently no such kind of system exists in the institute. Each time a paper is circulated to get the information about the professors and a record has to be maintained for the same..

Some of the disadvantages of existing system are as follows:

- Time consuming, Manual work
 Every year the institute have to maintain all the paper-work for all the
 professors. This is time consuming and is a lot of manual work requiring
 greater effort than the system proposed.
- Redundancy
 Every year the details of the same professor is taken multiple times causing redundancy. Same paper form has to be filled every year. All this is very redundant and tiring.
- No efficient method of storing data
 As the data is stored on paper, there is no way to analyse the data.
 Also data-storage on paper requires space and time. It is also inefficient utilisation of money.

1.4 Proposed System

The User are the professors, assistant professors and associate professors who have to fill the self-appraisal form, will register (only using SPIT email address) and access the system features. This System will be deployed inside the institute and will be accessible to all the concerned users.

The professors will fill the self-appraisal form upon logging in and on click of submit button their data will be stored in the database securely. Once the user logs in their data is fetched automatically from the database, so they do not have to enter their data again the next year.

Some of the advantages of our system are as follows:

- User Friendly
 It provides attractive interface to the user for navigation through a dynamic flow of self-appraisal process in the website.
- More insights from the data
 The administrator can analyse the data that is stored in the database,
 which isn't possible in the existing system in use.

1.5 System Requirements

• Hardware Requirements on Server Side

Table 1.5.1: Hardware Requirements on Server Side

| Processor | Dual Core Processor or Above |
|-----------|--|
| RAM | Minimum 4 GB RAM |
| Storage | Minimum 10 GB Hard Disk Space for smooth run |

• Hardware Requirements on Client Side

Table 1.5.2: Hardware Requirements on Client Side

| Device | PC or a Mobile device |
|-----------|------------------------------|
| Processor | Dual Core Processor or Above |
| RAM | Minimum 2 GB RAM |
| Storage | Minimum 250 MB Storage Space |

• Software Requirements on Server Side

Table 1.5.3: Software Requirements on Server Side

| Operating System | OS Independent |
|------------------|-----------------|
| Database | MySQL WorkBench |

• Software Requirements on Client Side

Table 1.5.3: Software Requirements on Client Side

| Operating System | PC or Android/IOS Smartphone |
|------------------|------------------------------|
| Server | Not Required |

2 Software Requirement Specification (SRS) and Design

2.1 Purpose

The "Self-Appraisal System" developed is a systematic and periodic way of measuring work performance against established requirements of the job.It's a subjective evaluation of the employee's strengths and weaknesses, relative worth to the organization, and future development potential

The system designed will prevent paper-work, and save time. The data stored in the database can be further analysed to gain more insights.

2.2 Definition

To build a "Self-Appraisal System" so the professors can complete their self-appraisal with minimal effort.

2.3 Overall Description

2.3.1 Product Functions

The product function includes:

- 1. Authentication: Users are required to Sign-up and Log-in (only using SPIT id).
- 2. Profile: This will contain information (form) filled by that particular professor.
- 3. Different Users: The website contains different users, Professors, Associate Professors and Assistant Professors.
- 4. Report Generation: A report can be generated upon filling the form. It will allow the user to take a print out of the filled data, for further processing.
- 5. Database: The professors' data is stored in the database, which can be accessed by the administrator, and queries can be run to gain more insights from the data.

2.3.2 User Characteristics

There is only one type of user:

- Professor: The Professor category is divided into 3 sub-categories,
 - 1) Professors 2) Associate Professors 3) Assistant Professors

3 Project Analysis and Design

3.1 Methodologies Adapted

The Agile methodology is a way to manage a project by breaking it up into several phases. It involves constant collaboration with stakeholders and continuous improvement at every stage. Once the work begins, teams cycle through a process of planning, executing, and evaluating. Continuous collaboration is vital, both with team members and project stakeholders.

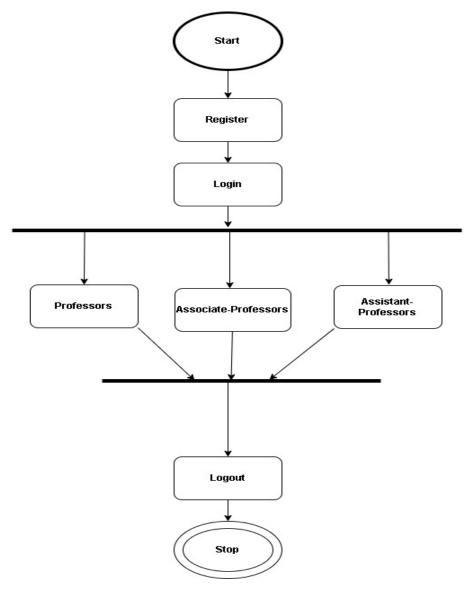
It's a process for managing a project that involves constant collaboration and working in iterations. Agile project management works off the basis that a project can be continuously improved upon throughout its life cycle, with changes being made quickly and responsively.



3.1.1: Diagrammatic Representation of the Agile Methodlogy

3.2 Modules

3.2.1 Activity diagram

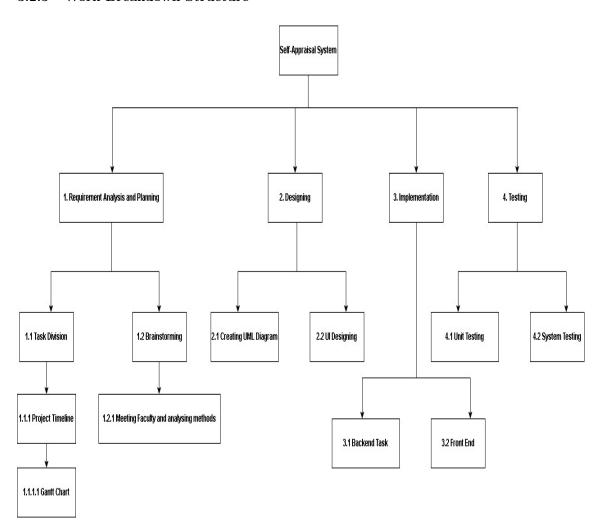


3.2.1: Activity Diagram

3.2.2 Communication Design CommDia. JPG

3.2.2: Communication Diagram

3.2.3 Work Breakdown Structure



3.2.3: Work Breakdown Structure

3.2.4 PERT Chart Pert_Chart.png

3.2.4: PERT Chart

3.2.5 Gantt Chart

Gantt_Chart.png

3.2.5: Gantt Chart

3.2.6 Use-Case UseCaseDiagram1.jpg

3.2.6: Use-Case Diagram

Use Cases:

- 1. Register
- 2. Login
- 3. View Profile
- 4. Update Profile
- 5. Generate Report
- 6. Submit Data

Table 4.2.1: Use Case Table - Register

| Use Case ID | 1 |
|----------------|--|
| Use Case Name | Register |
| Actor | Professors, Associate Professors, Assitant |
| ACTO | Professors |
| Pre-Condition | They must register themselves first |
| Post-Condition | User can login |
| Flow of events | Login,Register or Edit details |

Table 4.2.2: Use Case Table - Login

| Use Case ID | 2 |
|-----------------|---|
| Use Case Name | Login |
| Actor | Professors, Associate Professors, Assitant |
| Actor | Professors |
| Pre-Condition | They must register themselves first |
| Post-Condition | User can view their form according to their |
| 1 08t-Condition | designation. |
| Flow of events | Login,Register or Edit details |

Table 4.2.3: Use Case Table - View Profile

| Use Case ID | 3 |
|----------------|---|
| Use Case Name | View Profile |
| Actor | Professors, Associate Professors, Assistant Professors |
| Pre-Condition | Login |
| Post-Condition | User can view profile |

Table 4.2.4: Use Case Table - Update Profile

| Use Case ID | 4 |
|----------------|---|
| Use Case Name | Update Profile |
| Actor | Professors, Associate Professors, Assistant |
| ACTOL | Professors |
| Pre-Condition | Login |
| Post-Condition | User can view and update their profile |

Table 4.2.5: Use Case Table - Generate Report

| Use Case ID | 5 |
|----------------|---|
| Use Case Name | Generate Report |
| Actor | Professors, Associate Professors, Assistant Professors |
| Pre-Condition | Login |
| Post-Condition | Can Generate Report on click of Generate Report button |

Table 4.2.7: Use Case Table - Submit Data

| Use Case ID | 7 | | | | | | |
|------------------|---|--|--|--|--|--|--|
| Use Case Name | Submit Data | | | | | | |
| Actor | Professors, Associate Professors, Assistant | | | | | | |
| ACTOL | Professors | | | | | | |
| Pre-Condition | Login | | | | | | |
| Post-Condition | The users can submit their filled form to the | | | | | | |
| 1 08t-Colldition | database after clicking on submit button | | | | | | |

4 Project Implementation and Testing

4.1 Login



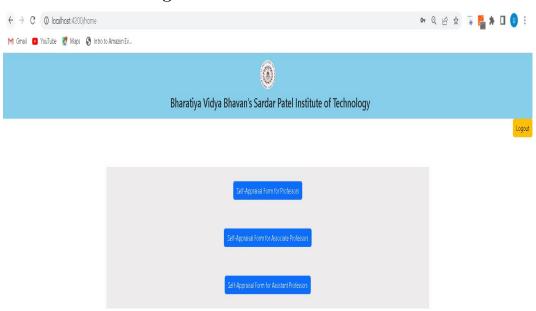
4.1.1: Login

4.2 Register

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| Usemane | | | | | | | |
| Enter your Username | | | | | | | |
| Email | | | | | | | |
| Enter your Email | | | | | | | |
| Pasword | | | | | | | |
| Enter your Password | | | | | | | |
| Confirm Password | | | | | | | |
| Confirm Password | | | | | | | |
| Submit Back to Login | | | | | | | |

4.2.1: Register

4.3 Home - Landing View



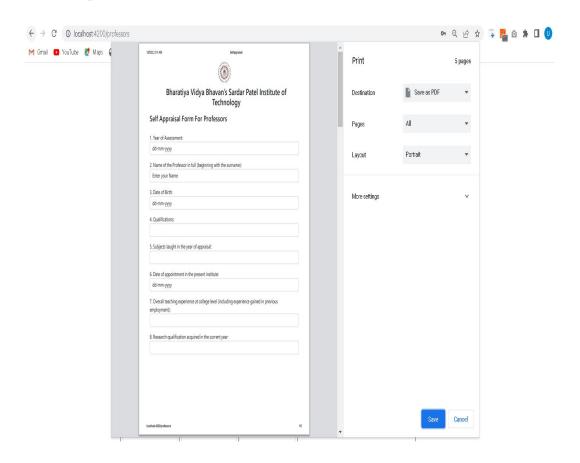
4.3.1: Home View

4.4 Profile

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|--------------|--|---|-------------|---------------------------------------|--|----------------------------------|---------|
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| atat res | FT-3999 | | | | | | |
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4.4.1: Profile

4.5 Report Generation



4.5.1: Report View

4.6 Code 1

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4.7 Code 2

4.8 Code 3

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| Fig. | Side | Selection | New | So | Run | Terminal | Help | Professorscomponentities | Help professors | Temperature | Temper
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4.9 Code 4

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| File Edit Selection View on Run | Immuno | Help | professor componentics | The professor componentics
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5 Test Cases

Table 6.1: Test Case - Login and Register

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|---|---------------------------------------|--|----------------------------|-------------------|--------|--|--|--|
| Test Case ID | Test Case Name | Test Data | Expected Output | Actual Output | Result | | | |
| 1 | User enter user id and password | Enters the correct user id and password | Log in Successful | Home Page | Pass | | | |
| 2 | User enter user id and password | Enters the user id and password | Prompt er- ror | Prompt er- ror | Pass | | | |
| 3 | User enter user id and password | Valid user id and pass- word which doesn't exist in Database | Registered Successfully | Login Page | Pass | | | |
| 4 | User enter user id and password | Invalid user id and password which contains in Database | Prompt error | Prompt error | Pass | | | |

6 Limitations

- It needs internet to be accessed.
- It does not have a feature to submit the data to HOD of respective departments.
- For any change in the form the administrator has to be contacted.
- Graphical representation for "Self-Appraisal" data are not shown

7 Future Enhancements

- User should be able to send the data to HOD of their respective departments.
- The HOD of their respective departments can edit , update or add any field in the form.
- ML algorithms can be run on the data to gain more deeper insights compared to queries run in the database.
- Graphical representation of "Self-Appraisal" data need to be shown

8 User Manual

Part 1 - Register

Upon opening the application, user will be greeted with the registration screen. If the user has no account, user can click on register and register self.

User's account details will be saved in our database. The user can now proceed

Part 2 – Login

to login.

User needs to enter email first and then password. If there is an active internet connection, user can proceed to login.

Part 3 - Profile

User can access/add/update form details. User can update this details anytime.

Part 4 – Generate Report

User can generate a report of the filled form by clicking on the Generate Report button.

Part 5 – Submit

User can submit their data by clicking on submit button, upon which their filled data will be securely stores in our database

9 Bibliography

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