Mini Project On

Self-Appraisal System

By

Udit Kulkarni (2020510038)
Tanay Srivastava (2020510061)

Under the guidance of

Internal Supervisor

Prof. Dr. Pooja Raundale

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

Contents

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). Users will get a verification email for successful registration.

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:

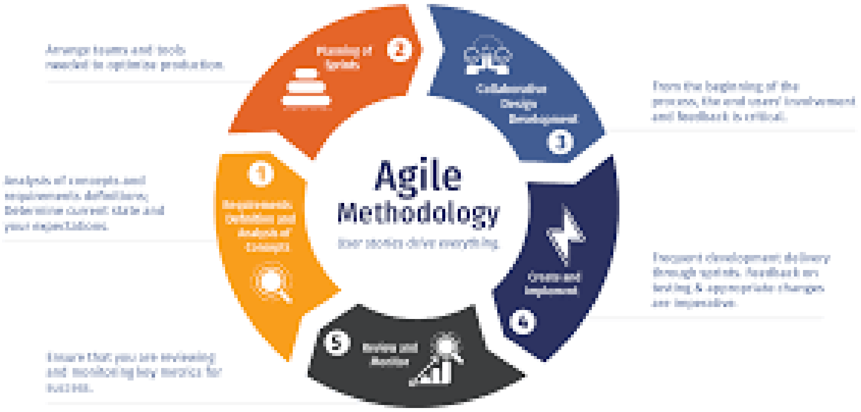
- Professor: The Professor category is divided into 3 sub-categories, 1) Professors 2) Associate Professors 3) Assistant Professors

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.


Arrange teams and tools needed to optimize production.
Planning of Sprints
2
Collaborative Design Development
3
From the beginning of the process, the end users' involvement and feedback is critical.
Analysis of concepts and requirements definitions; Determine current state and your expectations.
1
Requirements Definition and Analysis of Concepts
Agile
Methodology
User stories drive everything.
Create and Implement
4
Frequent development delivery through sprints, feedback on testing & appropriate changes are imperative.
Ensure that you are reviewing and monitoring key metrics for success.
5
Review and Monitor

3.1.1: Diagrammatic Representation of the Agile Methodlogy

3.2 Modules

3.2.1 Activity diagram

Activity_Diag.jpg

3.2.1: Activity Diagram

3.2.2 Communication Design

CommDia.JPG

3.2.2: Communication Diagram

3.2.3 Work Breakdown Structure

WBS.JPG

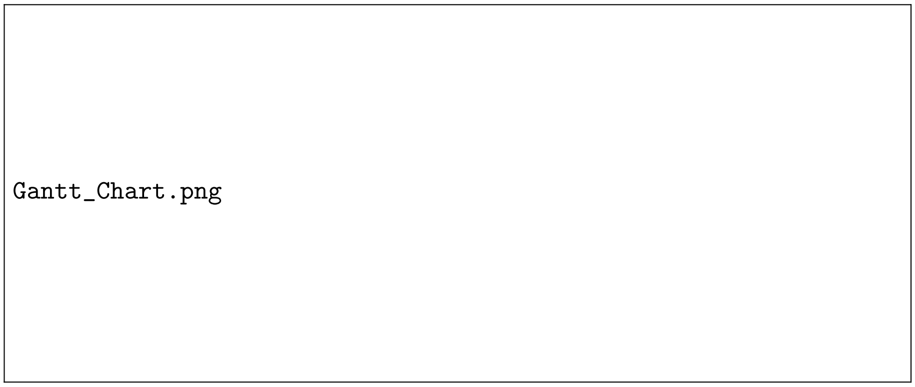
3.2.3: Work Breakdown Structure

3.2.4 PERT Chart

Pert_Chart.png

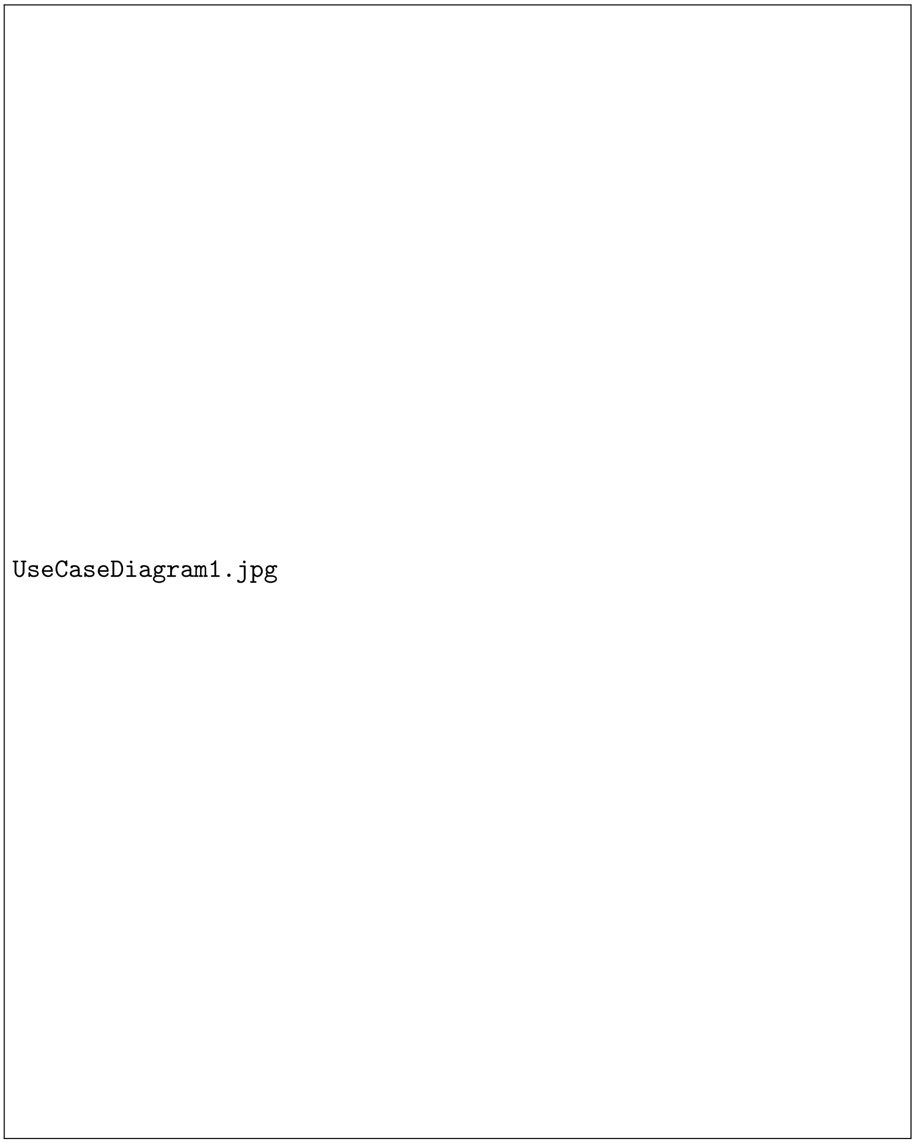
3.2.4: PERT Chart

3.2.5 Gantt Chart



3.2.5: Gantt Chart

3.2.6 Use-Case



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 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 Professors
Pre-Condition	They must register themselves first
Post-Condition	User can view their form according to their 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 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 Professors
Pre-Condition	Login
Post-Condition	The users can submit their filled form to the database after clicking on submit button

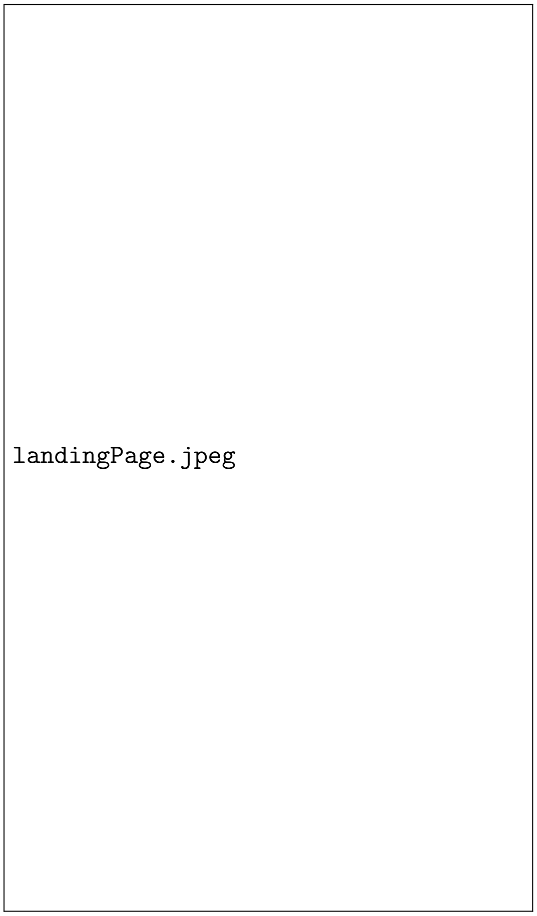
4 Project Implementation and Testing

4.1 Login and Register

Login_Register.jpg

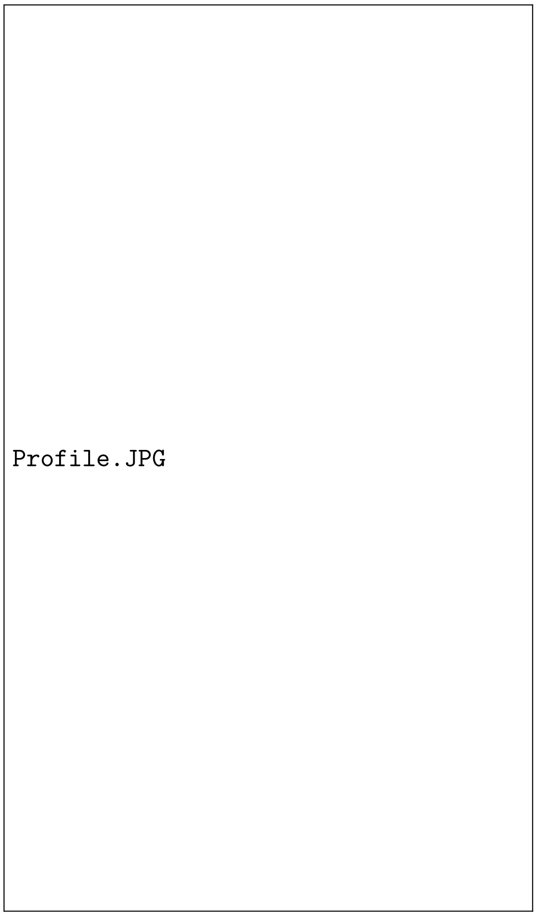
4.1.1: Login and Register

4.2 Home - Landing View



4.2.1: Home View

4.3 Profile



4.3.1: Profile

4.4 Report Generation

4.4.1: Report View

4.5 Code 1

Code1.jpg

4.6 Code 2

Code2.jpg

4.7 Code 3

Code3.jpg

5 Test Cases

Table 6.1: Test Case - Login and Register

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 error	Prompt error	Pass
3	User enter user id and password	Valid user id and password 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 to login.

Part 2 – 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

9.1 Web References

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