Mini Project On IQAC Portal

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

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 $\begin{array}{c} \text{Under the guidance of} \\ \textbf{Internal Supervisor} \end{array}$

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CERTIFICATE OF APPROVAL

This is to certify that the following students

Akash Sawale (2018450044)

Have satisfactorily carried out work on the project entitled

"IQAC Portal"

Towards the fulfilment of project, as laid down by Sardar Patel Institute of Technology during year 2018-19.

Project Guide: Dr. Pooja Raundale

PROJECT APPROVAL CERTIFICATE

This is to certify that the following students

Akash Sawale (2018450044)

Have successfully completed the Project report on "IQAC Portal", 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

As of present, there is no database or registry for IQAC Portal. Sometimes the report is generated by using word documents. But sometimes a faculty may not be able to make these reports because of busy schedules or other valid reasons. This is a meticulous process, as there is no (partially or fully) automated method to facilitate the process. Also, storing such hard copies is cumbersome, and often inefficient. Using a web server-based application (website) can ease up the process and prevent a lot of redundancy of data.

Objectives

The Web-Application "IQAC Portal" is used

- To records details of events.
- To record details of personal achievements.
- To record personal publications done by Faculties.
- To generate a report of all the above mentioned events, achievements, publications.
- To provide a proper database for sufficient retrieval of data.

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1 Introduction

1.1 Problem Definition

There is no current system to provide a platform to report details of a event and other personal achievements, publications. These processes are needed to keep a track of reports. These Portal are an opportunity to reflect the institutes performance. Using a dedicated website would considerably reduce the effort which goes into maintaining a fine storage system or handling paper documents.

1.2 Objectives and Scope

1.2.1 Objectives

The Web-Application "IQAC Portal" is used

- To create a website using which faculty at different designations can fill the details of events, achievements, publications and submit for report generation.
- To create a system that should provide high-designation users with the tool to review the submitted forms.
- To create a database, with normalized tables, for efficient and secure retrieval and storage of data.
- To create server-side codes, which are not prone to SQL injections and such..

1.2.2 Scope

To achieve the objectives of this project, it is important to use a relatively fast and secure method of storing and transferring data over the internet. In this project, focus is laid on the ease of use and simplicity of the content such as links and buttons.

1.3 Existing System

For the time being there is no available system. The available system is done on manual basis. Reports are done by faculties in word documents. These just produces redundant hard copies.

• No Platform

There is no such existing system in the institute which provides such submission platform.

• Limited Information

Sometimes there is no full access to the information of an event which was not recorded.

• No Report generation

There is no system which provides automatic report generation.

1.4 Proposed System

The Proposed system is a website which will be available to all faculties, students and non-teaching faculties.

The user can log-in with their username and password provided to them. After log-in they can choose the type of submission they want to submit.

The submission form will be provided online with proper details that are needed to be filled. After submitting a report will be generated which can be saved in a pdf format which the user can save to their own machine.

Some of the advantages of our system are as follows:

- User Friendly
 It provides attractive interface to the user for proper guidance.
- Quick Access
 Can be accessed much faster as it will be available on college website.
- Less time consuming
 Users can easily fill the form without delay and automatic report generation will save their time.

1.5 System Requirements

• Hardware Requirements on Server Side

Table 1.5.1: Hardware Requirements on Server Side

Processor	Minimum Requirement
RAM	Minimum Requirement
Internet	At least 2 Mbps connection

• Hardware Requirements on Client Side

Table 1.5.2: Hardware Requirements on Client Side

Processor	Minimum Requirement
RAM	Minimum Requirement
Internet	At least 2 Mbps connection

 $\bullet\,$ Software Requirements on Server Side

Table 1.5.3: Software Requirements on Server Side

Operating System	OS Independent
Software	Web Browser
Host	Apache Server
Database	MySQL

• Software Requirements on Client Side

Table 1.5.3: Software Requirements on Client Side

Operating System	Any OS
Software	Any web browser that supports Bootstrap

2 Software Requirement Specification[SRS] and Design

2.1 Purpose

- The purpose of this SRS Document is to present a description of project. This SRS outlines the process followed to gather the requirements for the project. This document will also describe how the requirement statements gathered from the stakeholders make their way into features of the system
- This document will, in addition, explain the scope, interfaces, and features as well as graphically describe the processes, functions and phases of the Software Development Life-cycle

2.2 Definition

A software requirements specification (SRS) is a comprehensive description of the intended purpose and environment for software under development. The SRS fully describes what the software will do and how it will be expected to perform.

2.3 Overall Description

2.3.1 Product Functions

The product function includes:

- 1. Authentication: Users/Admins are required to Sign-up and Log-in.
- 2. Submission: It helps you to submit the information in a form.
- 3. Automatic report generation: A report is generated on the basis of information provided.

2.3.2 User Characteristics

There are two types of users:

- User: User can Sign-up and Log-in to the Web Portal and use it various services.
- Admin: Admin can use the services of the Users as well as he even has access to the database.

2.4 Specific Requirement

2.4.1 Functional Requirements

The System aims at providing an efficient interface to the user for automatic report generation which shall also provide the user varied options.
 The design is such that the user just have to register once in the application.

2.4.2 Non-functional Requirements

1. Availability: The system must be available for access 24 hours, 7 days a week. Also in occurrence of any major malfunctioning, the system should online again as soon as possible. Also system will give the same performance even if many users log-on at the same time.

3 Project Analysis and Design

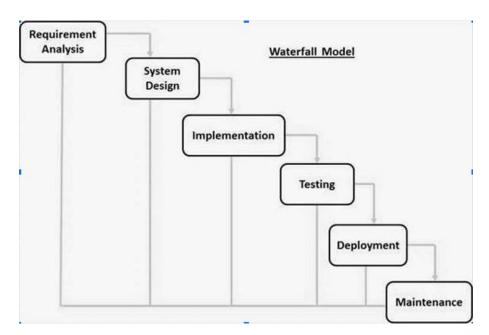
3.1 Methodologies Adapted

In Waterfall model, very less customer interaction is involved during the development of the product. Once the product is ready then only it can be demonstrated to the end users.

Once the product is developed and if any failure occurs then the cost of fixing such issues are very high, because we need to update everything from document till the logic.

Need of Waterfall Model:

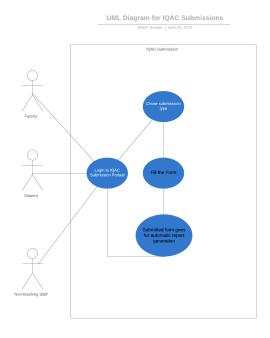
- This model is used only when the requirements are very well known, clear and fixed.
- Product definition is stable.
- Technology is understood.
- There are no ambiguous requirements
- Ample resources with required expertise are available freely



3.1.1: . Diagrammatic Representation of Waterfall Model

3.2 Modules

3.2.1 UML Diagram-Use Case Diagram with Report



3.2.1: . Use Case Diagram

Use Cases:

- 1. Login
- 2. Choose Submission
- 3. Form Filling Report generation

Table 4.2.1: Use Case Table - Login

Use Case ID	1
Use Case Name	Login
Actor	User
Pre-Condition	They must register themselves first
Post-Condition	User can use all the features of application
Flow of events	Register, Login, Access System

Table 4.2.2: Use Case Table - Choose Submission

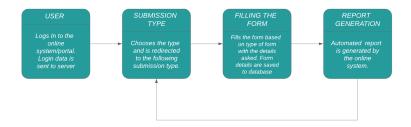
Use Case ID	2
Use Case	Choose Submission
Actor	User
Pre-Condition	Login
Post-Condition	User can Choose the submission type
Flow of events	Login, Choose Submission

Table 4.2.3: Use Case Table - Report Generation

Use Case ID	3
Use Case Name	Report Generation
Actor	User
Pre-Condition	Login
Post-Condition	PDF of the Submission will be generated.
Flow of events	Login, Choose Submission, Fill form

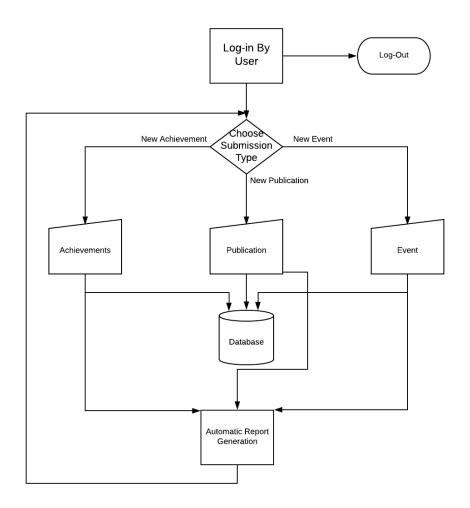
3.3 Database Schema/ Design

3.3.1 DFD diagram



3.3.1: . DFD Diagram

3.3.2 Flowchart diagram



3.3.2: . Flowchart Diagram

3.3.3 Database Schema Design

users table

	First_name	Varchar(20)
	Last_name	Varchar(20)
	Email_id	Varchar(20)
	Туре	Text
Unique	Username	Varchar(20)
	Password	Varchar(20)
	Department	Text

3.3.3: . users table

achievements table

unique	Achieve_id	Int(10)	
	Date	Date	
	Туре	Varchar(50)	
	Name_of_achieve	Varchar(50)	
	Prize	Varchar(20)	
	Reward	Varchar(20)	
	Nat_or_inter	Varchar(20)	
	Department	Varchar(50)	
	Photo	Varchar(50)	
unique	Username	Varchar(20)	

3.3.4: . achievements table

publications table

Unique	Publication_id	Int(10)
	Fac_name	Varchar(50)
	Title_paper	Varchar(50)
	Conference_name	Varchar(50)
	Date	date
	Organizer	Varchar(50)
	Published	Varchar(10)
	Presented	Varchar(10)
	Attended	Varchar(10)
	Paper	Varchar(50)
Unique	Username	Varchar(20)

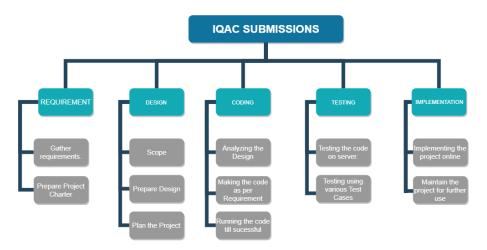
3.3.5: . publications table

events table

unique	Event_id	Int(10)
	Date	Date
	Time_from	Time(6)
	Time_to	Time(6)
	Place	Varchar(50)
	Name_of_event	Varchar(50)
	Type_of_event	Varchar(20)
	Resource_person	Varchar(20)
	Title	Varchar(50)
	Domain	Varchar(20)
	Details	Varchar(500)
	No_of_participants	int(10)
	Feedback	Varchar(50)
	Photos	Varchar(50)
	Organizers	Varchar(50)
unique	Username	Varchar(20)

3.3.6: . events table

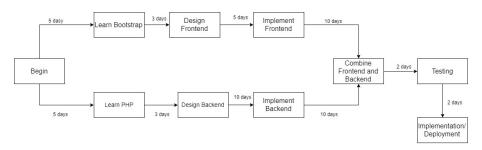
3.3.4 Work Breakdown Structure



3.3.7: . Work Break Down Structure

At the very top of the structure is the project name "IQAC Portal". This project was divided into 5 phases. They are Requirement, Design, Coding, Testing and Implementation. Requirement phase is further divided into Gather requirements phase and Project Charter phase. In Design phase, we discussed Scope, Prepare Design and Plan the Project. In Coding phase, the Design is analyzed, the system is coded according to requirement and executed till desired output is gained. In Testing Phase, Testing is done on server, also various test cases are used. In the last phase i.e. Implementation, the project is implemented online, maintenance of project is made further.

3.3.5 PERT Table



 $3.3.8\colon$. PERT Table

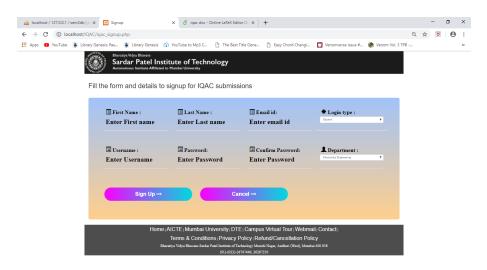
3.3.6 Gantt Chart



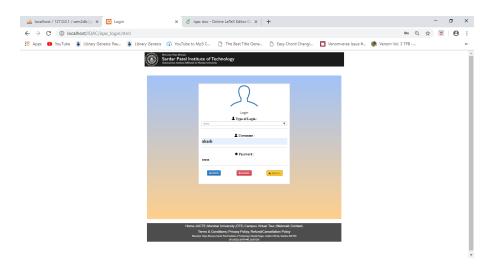
3.3.9: . Gantt Chart

4 Project Implementation and Testing

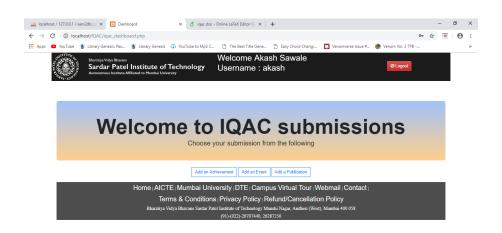
4.1 Snapshot of UI



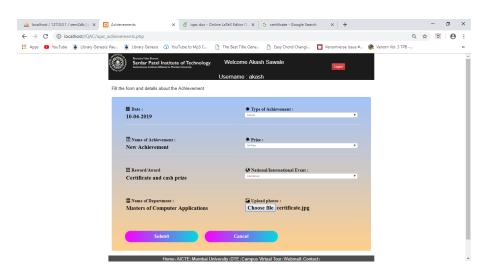
4.1.1: Signup Page



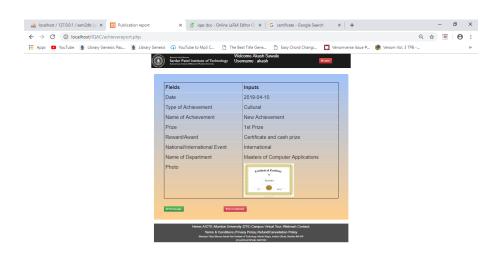
4.1.2: Login Page



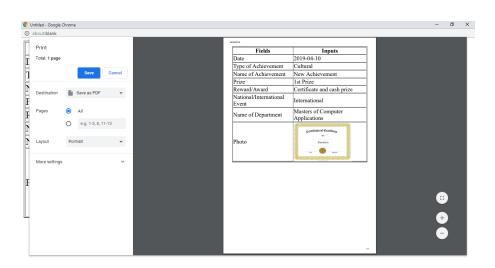
4.1.3: Dashboard Page



4.1.4: Achievement Page



4.1.5: Achievement details generated Page



4.1.6: Report pdf generated

4.2 Test Cases

Test Case 1 – Login

Test Case ID	Test Case Name	Test Data	Expected Output	Actual Output	Result
1	User Login	Enters Correct username and Password	Login Successful	Dashboard Page	Pass
2	User Login	Enters wrong Username and Password	Login Unsuccessful	Login page	Pass

4.2.1: Test Case 1

Test Case 2 - Register

Test Case ID	Test Case Name	Test Data	Expected Output	Actual Output	Result
1	User Registration	Input new Username and Password	Registration successful	Login Page	Pass
2	User Registration	Input Existing username and Password	Registration not successful	Signup Page	Pass

4.2.2: Test Case 2

5 Limitations

- The website does not provide data analysis.
- It does not have a system to notify users that there will be a new event.

6 Future Enhancements

- The website can provide push notifications through the browser.
- Can be implemented as an Android and iOS application for use in mobile devices.
- The website could include some low-level machine learning to analyse performances of various users and provide them with reports.

7 User Manual

Part 1 - Signup

Upon opening the Website, user will be greeted with the login screen. If the user has no account, user can click on signup and register an account. After Registration user's account will be saved in our database. The user can now proceed to login.

Part 2 - Login

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

Part 3 - Choosing type of submission

User is directed to a dashboard after successful login. Now the user has to choose between 3 options Achievement, Publication, Event .

Part 4 – Form filling

After choosing the type of submission user now will have to fill the form with specific details as per type of submission.

Part 5 – Report Generation

The user will be redirected to the page where table of contents entered by user will be shown . Now the user will have a choice to print it as a PDF file type which will be stored in users machine.

8 References

8.1 References

Articles: [1] IEEE Std 830-1998 (IEEE recommended practice for Software Requirements Specifications)

8.2 Web References

- [1] www.lucidchart.com
- [2] https://www.php.net/manual/en/index.php newline [3] https://www.w3schools.com