A

Project Report

on

PROJECT MANAGER

Submitted in partial fulfillment of the requirement of Project – V (BIT279C0)

of

Bachelor of Information Technology (BIT)

Submitted To



Purbanchal University Biratnagar, Nepal

Submitted By

Sarowar Malla (353028)

Samir Shrestha (353027)

Melina Rayamajhi (353024)

KANTIPUR CITY COLLEGE

Putalisadak, Kathmandu Feb 23, 2023

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Project Supervisor

Saroj Pandey HOD of IT Department

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ABSTRACT

Project manager is a web-based platform that is useful to students and project managers for the management, tracking and supervision of projects.

Project manager is the concept of making the project successful through knowledge, processes, methods and experience. This website acts as an intermediate between students and super admin. The main objective of a project manager is to achieve project goals within the estimated time with quality.

ACKNOWLEDGEMENT

The project members would like to express our sincere gratitude to our project supervisor Mr. Saroj Pandey for his continuous support, motivation and enthusiasm. We are deeply grateful to the project supervisor for supervising, motivating and being co-operative, we would like to thank KCC for providing opportunities that help us to know more about PHP.

We are immensely obliged to our friends for their deviating inspiration, encouraging guidance and kind supervision in the completion of our project.

Group Members

Sarowar Malla (353028)

Samir Shrestha (353027)

Melina Rayamajhi (353024)

SUPERVISOR'S APPROVAL

This is to certify that the major project report entitled "Project Manager"

undertaken and demonstrated by Sarowar Malla (353028), Samir Shrestha

(353027) and Melina Rayamajhi (353024) has been successfully completed

under my supervision as a partial fulfillment of the requirements for the degree of

Bachelor of Information Technology, 5th semester under Purbanchal University,

Biratnagar Nepal. I, henceforth, approve this project to be awarded the certificate

by the concerned authority.

During supervision, I found students hardworking, skilled and ready to undertake

any professional work related to this field in future.

Mr. Saroj Pandey

HOD, Department of IT

Project Supervisor

Bachelor of Information Technology

Date: 23rd Feb. 2023

CERTIFICATE FROM SUPERVISOR

This is to certify that the project report entitled "Project Manager" submitted to the Department of IT, Kantipur City College - Putalisadak is a bonfire record of work done by Sarowar Malla (353028), Samir Shrestha (353027) and Melina Rayamajhi (353024) has fulfilled the requirement of Project – V (BIT279C0) and completed under my supervision.

Mr. Saroj Pandey

Project Supervisor

Kantipur City College

Putalisadak, Kathmandu

Chapter 1: INTRODUCTION

We looked through a variety of websites and discovered the project management website to be quite intriguing. So, we made the decision to create the project manager website, which aids in team organization, monitoring, and project execution. Students can communicate with the super admin using this website.

For the management, tracking, and supervision of projects, project managers and students can both benefit from the web-based platform known as "Project Manager." The idea of project management is to make a project successful through information, procedures, techniques, and experience. This website serves as a liaison between students and the top management. Planning, monitoring, and reporting on projects can be done in an organized manner with the help of a project manager. The primary goal of a project manager is to complete the project on schedule and to specification.

1.1 Overview

A project manager serves as a good example for controlling how a project is carried out. It can offer a structure for controlling expectations, assigning duties, and establishing procedures. A project manager may make use of standard business software programs or specialized project management software. A project manager is a collection of approaches and tools that help you plan, organize, and schedule all that is necessary for a project to be successful.

A project plan is a collection of official documents outlining the project's execution and control phases. In addition to addressing scope, cost, and schedule baselines, the plan takes risk management, resource management, and communications into account.

1.2 Problem Statement

We have discovered that managing a project often entails a number of responsibilities, such as planning, team cooperation, scheduling, etc. By researching various systems or applications about classical time. These duties can be time-consuming, challenging to coordinate, and labor-intensive. Hence, the need for effective time management develops. They might not be safe. Papers are prone to damage by water, fire, and other natural disasters by their sheer nature. This technology makes it possible to manage time through digital processes that take less time. When compared to traditional time, this is more secure.

1.3 Objectives

Our main objective of this project are as follows:

- To track activities of projects in an efficient way.
- To develop efficient communication and productive guidelines.
- To achieve project goals within the estimated time with quality.

1.4 Features

Some important features of this project are as follows:

- It has efficient monitoring.
- It has group evaluation.
- It has time management.
- It has task feedback.

1.5 Significances/Importance

Some main significances of this project are as follows:

- It has a clear concept.
- It has quality control.
- It has orderly process

1.6 Scope and limitation

Scope: Project Manager can be used in various project management institutes.

Limitation: The website is not responsive.

1.7 Organization of document

Chapter	Heading	Content
Chapter 1	Introduction	1.1 Overview
		1.2 Problem Statement
		1.3 Objectives of the project
		1.4 Features of the project
		1.5 Significance of the project
		1.6 Scope and Limitation
		1.7 Documentation organization
Chapter 2	Literature Review	2.1 Redmine
		2.2 ProjectPier
		2.3 Collabtive
		2.4 DotProject
		2.5 Project HQ
		2.6 PHPProjekt
Chapter 3	Methodology	3.1 System development life cycle
		3.2 Technologies and Tools used
		3.3 Assignment of Roles and
		Responsibilities
Chapter 4	System Analysis	4.1 Requirement Analysis
		4.2 Feasibility Study
Chapter 5	System Design	5.1 System Architecture
		5.2 Procedure Oriented
Chapter 6	System Development and	6.1 Programming Platform
	Implementation	6.2 Operating Environment

Chapter 7	Testing and Debugging	7.1 Tools use in testing
		7.2 Test cases
Chapter 8	Conclusion	
Chapter 9	Refrences	

Chapter 2: LITERATURE REVIEW

Project management systems are software applications that help manage tasks, schedules, budgets, and resources associated with a project. In this literature review, we will explore some of the popular project management systems that use PHP as the primary programming language.

2.1 Redmine

Redmine is an open-source project management tool written in Ruby on Rails but can run on PHP. It provides features such as issue tracking, Gantt chart, calendar, wiki, and time tracking. It also supports multiple databases like MySQL, PostgreSQL, and SQLite.

2.2 ProjectPier

ProjectPier is a free, open-source, self-hosted project management software written in PHP. It offers features like task management, file sharing, wiki, and time tracking. It supports MySQL and PostgreSQL databases and has a simple user interface.

2.3 Collabtive

Collabtive is a free, open-source, web-based project management software written in PHP. It has features like task management, time tracking, file sharing, and calendar. It also supports multiple languages and is compatible with MySQL and PostgreSQL databases.

2.4 DotProject

DotProject is an open-source, web-based project management software written in PHP. It provides features like task management, file sharing, Gantt chart, and calendar. It supports multiple languages and databases like MySQL and PostgreSQL.

2.5 Project HQ

Project HQ is a free, open-source, web-based project management software written in PHP. It provides features like task management, document management, and time tracking. It also supports multiple databases like MySQL, PostgreSQL, and SQLite.

2.6 PHProjekt

PHProjekt is an open-source, web-based project management software written in PHP. It offers features like task management, file sharing, Gantt chart, calendar, and time tracking. It supports multiple languages and databases like MySQL and PostgreSQL.

In conclusion, the above-listed project management systems are just a few examples of the many project management tools available that use PHP. Each system has its unique features and functionalities, making them suitable for different types of projects and organizations. It is important to evaluate and select a system that meets your project requirements and aligns with your organization's goals.

Chapter 3: METHODOLOGY

3.1 Software Development Life Cycle

We used a prototype model to develop our system. Prototype model is a software development methodology that involves creating a working model of the software application before building the full system. The prototype models to understand project feasibility and reduce cost.

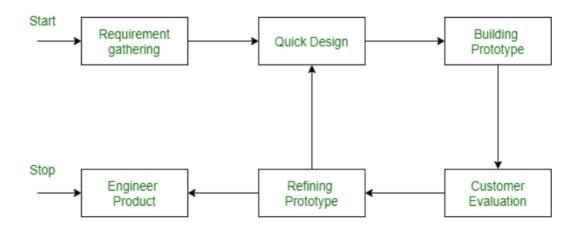


Fig 3.1 Prototype Model

3.1.1 Requirement Gathering and Analysis

A prototyping model starts with requirement gathering and analysis. In this phase the requirement of the system is defined in detail. During this process users of the system are interviewed to know what is their expectation from the system.

3.1.2 Quick Design

In this stage a simple design of the system is created. It is not a complete design of the system but gives a brief idea of the system to the user.

3.1.3 Build a Prototype

In this stage an actual prototype is designed based on the information gathering from second phase quick design.

3.1.4 Initial User Evaluation

In this stage the system is presented to the user for an initial evaluation. It helps to find out the strength and weakness of the system and suggestions are collected from the user and provided to the developer.

3.1.5 Refining Prototype

If the users are not happy with the system then it refines the system according to the user's feedback and suggestion. This stage will not be over until all the requirements specified by the user are met. Once the user is satisfied with the software then the final system is developed.

3.1.6 Implement Product and Maintain

In this stage the final system is developed based on the final prototype. The system undergoes routine maintenance for minimizing downtime and preventing large scale failures.

3.2 Technologies and Tools used

3.2.1 PHP

Popular server-side scripting language for web development is PHP (Hypertext Preprocessor). Its main uses are web apps and dynamic web pages. PHP code runs on the server to produce client-side web technologies including HTML, CSS, and JavaScript, which are then transmitted to the user's browser to be displayed. In

addition to handling form data, creating and manipulating files, and performing a number of other operations frequently required in web development, PHP can connect with databases.

Since PHP is an open-source language, a sizable developer community contributes to its growth and upkeep. Most web hosting services accept it, and it is frequently used in conjunction with well-known web frameworks like Laravel, Symfonys, and CodeIgniter.

3.2.2 PHPMYADMIN

A free and open source web application called PHPMyAdmin is used to manage and oversee MySQL databases. Users can import and export data as well as run SQL queries in addition to creating, editing, and deleting databases, tables, and fields.

Web developers and administrators frequently use PHPMyAdmin as a tool to manage MySQL databases for websites and web applications. It offers a graphical user interface (GUI) that may be easier to use and more accessible than a command-line interface for managing databases.

3.2.3 VS CODE

Microsoft created the free and open source code editor known as VS Code (Visual Studio Code). It supports a large number of programming languages and frameworks and is available for Windows, macOS, and Linux.

3.2.4 XDebug

Popular open-source PHP extension Xdebug gives PHP programs additional debugging and profiling features. By providing thorough details on the execution

flow and variable values, it enables developers to hunt out defects and performance issues in their programs.

3.3 Assignment of roles and responsibilities

Table 1.1: Assignment roles and responsibilities of the members

Member's Name	Symbol No.	Task Performed
Sarowar Malla	353028	Research, Documentation, Coding, Requirement gathering.
Samir Shrestha	353027	Research, Documentation, Coding, Requirement gathering.
Melina Rayamajhi	353024	Research, Documentation, Coding, Requirement gathering.

Chapter 4: SYSTEM ANALYSIS

4.1 Requirement Specification

After the selection of the development process of the system. The first thing we did was to specify the requirement, which has been divided into two parts according to the requirement of the system.

4.1.1 Functional Requirement

Super Admin Requirements:

- The admin can approve/reject projects.
- The admin can monitor all the project progress.
- The admin can view, edit and delete user details.
- The admin can view and take actions on the report.

Teacher Requirements:

- The teacher can assign tasks to the projects.
- The teacher can monitor the progress of projects assigned to him/her.
- The teacher can report the specific project in any inconvenience.

Student Requirements:

- The student can submit a maximum of two abstract.
- The students can request a meeting schedule.
- The student can report the supervisor for inconvenience.

System Requirements:

• Project Manager offers logout functionality to end user's sessions.

- Project Manager will only accept valid login details to access their respective projects.
- Project Manager will provide a password recovery facility.

4.1.2 Nonfunctional Requirement

- Performance: To provide load the page fast we avoid using the loading system so users can change the page without showing any loading system.
- User friendly: We develop the website in a simple way so users can find the information easily.

4.2 Feasibility study

4.2.1 Technical Feasibility

During the study of this process we studied the requirements of the technical equipment for the development of the system and found out all the equipment is fully filled except the development platform of the system, which was initially downloaded.

4.2.2 Economical Feasibility

Here we deal with the cost benefit of the project. Since this project is developed to meet our academic project, there is no funding process done to the project so the study of the process was skipped.

4.2.3 Schedule Feasibility

During the study we studied about the time required to complete the development of the system. And to check whether the system can be completely developed in the given time.

4.2.3.1 Gantt chart

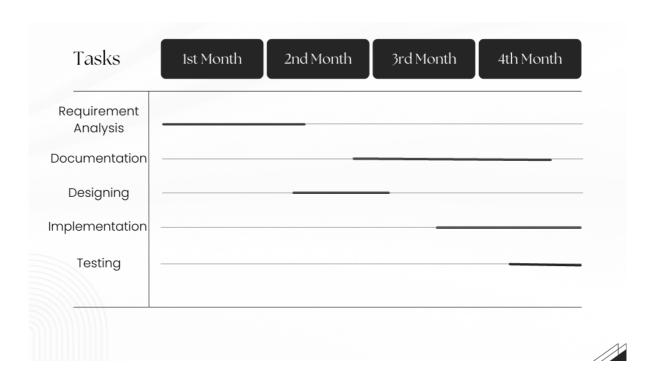


Fig 4.2.3.1 Gantt Chart

Chapter 5: SYSTEM DESIGN

5.1 System Architecture

A system that hosts, provides, and manages the majority of the resources and services that the client requests is known as a client-server architecture. This approach, also known as the networking computing model or client server network, involves the delivery of all requests and services across a network.

The client first transmits their request using a network-capable device. The network server then acknowledges and handles the user request. The server then sends the response to the client.

5.2 Procedure Oriented

5.2.1 Context Level(Level 0)

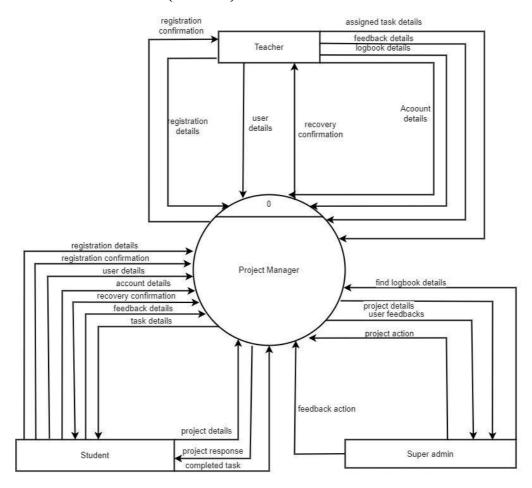


Fig 5.2.1 Level 0 DFD

5.2.2 Level 1 DFD

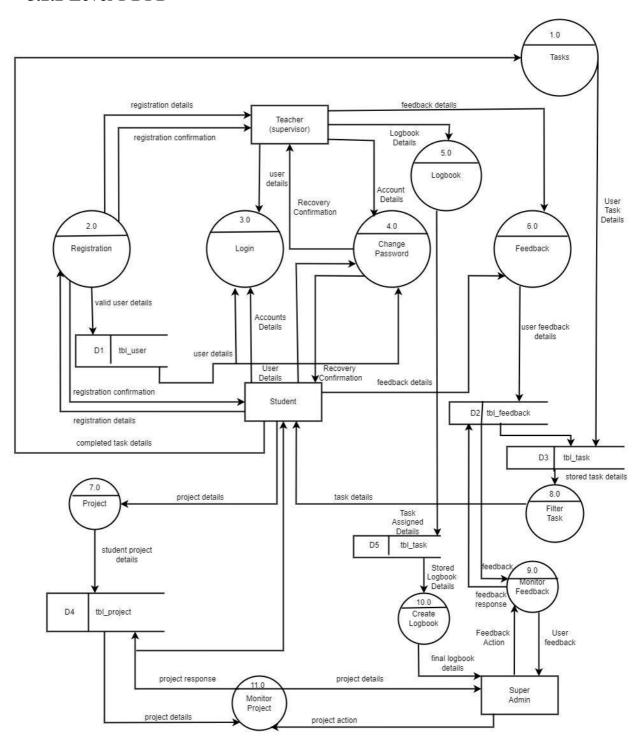


Fig 5.2.2 Level 1 DFD

5.2.3 Use Case Diagram

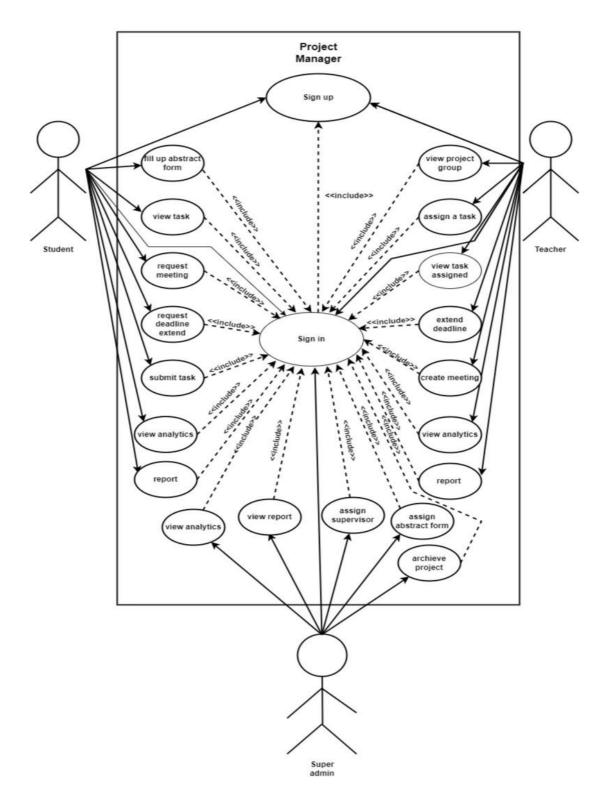


Fig 5.2.3 Use Case Diagram

5.3 Database Design

5.3.1 ER Diagram

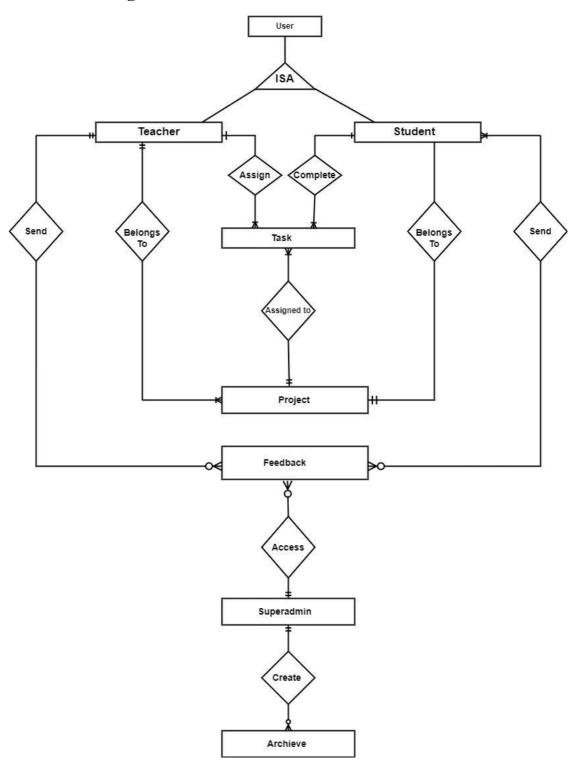
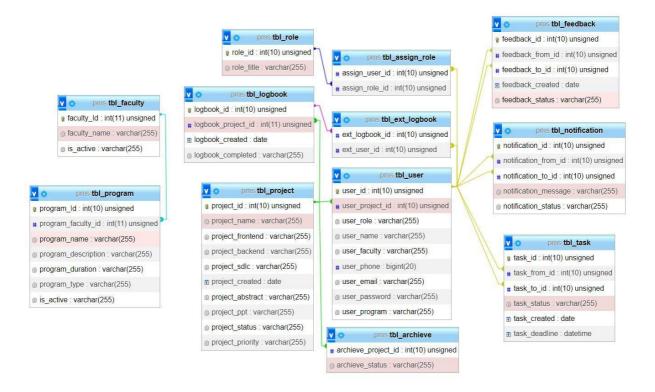


Fig 5.3.1 ER Diagram

5.3.2 Relational Data Structure



5.3.3 Data Dictonary

pms

tbl_archieve

Column	Туре	Null	Default	Links to	Comments	Media type
archieve_project_id	int(10)	No		tbl_project -> project_id		
archieve_status	varchar(255)	No	Completed			

Indexes

Keyname	Туре	Unique	Packed	Column	Cardinality	Collation	Null	Comment
foreign_project_archieve	BTREE	No	No	archieve_project_id	0	А	No	

tbl_assign_role

Column	Туре	Null	Default	Links to	Comments	Media type
assign_user_id	int(10)	No		tbl_user -> user_id		
assign_role_id	int(10)	No		tbl_role -> role_id		

Indexes

Keyname	Туре	Unique	Packed	Column	Cardinality	Collation	Null	Comment
foreign_role_assign	BTREE	No	No	assign_role_id	0	А	No	
foreign_user_assign	BTREE	No	No	assign_user_id	0	А	No	

tbl_ext_logbook

Column	Туре	Null	Default	Links to	Comments	Media type
ext_logbook_id	int(10)	No		tbl_logbook -> logbook_id		
ext_user_id	int(10)	Yes	NULL	tbl_user -> user_id		

Indexes

Keyname	Туре	Unique	Packed	Column	Cardinality	Collation	Null	Comment
foreign_logbook_ext	BTREE	No	No	ext_logbook_id	0	А	No	
foreign_user_ext	BTREE	No	No	ext_user_id	0	А	Yes	

tbl_faculty

Column	Туре	Null	Default	Links to	Comments	Media type
faculty_ld (Primary)	int(11)	No				
faculty_name	varchar(255)	No				
is_active	varchar(255)	No	Yes			

Indexes

Keyname	Туре	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	faculty_ld	3	А	No	

tbl_feedback

Column	Туре	Null	Default	Links to	Comments	Media type
feedback_id (Primary)	int(10)	No				
feedback_from_id	int(10)	Yes	NULL	tbl_user -> user_id		
feedback_to_id	int(10)	Yes	NULL	tbl_user -> user_id		
feedback_created	date	No	current_timestamp()			
feedback_status	varchar(255)	No				

Indexes

Keyname	Туре	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	feedback_id	0	А	No	
foreign_from_feedback	BTREE	No	No	feedback_from_id	0	А	Yes	
foreign_to_feedback	BTREE	No	No	feedback_to_id	0	А	Yes	

tbl_logbook

Column	Туре	Null	Default	Links to	Comments	Media type
logbook_id (Primary)	int(10)	No				
logbook_project_id	int(11)	No		tbl_project -> project_id		
logbook_created	date	No	current_timestamp()			
logbook_completed	varchar(255)	No				

Indexes

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Keyname	Туре	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	logbook_id	0	А	No	
foreign_project_logbook	BTREE	No	No	logbook_project_id	0	А	No	

tbl_notification

Column	Туре	Null	Default	Links to	Comments	Media type
notification_id (Primary)	int(10)	No				
notification_from_id	int(10)	No		tbl_user -> user_id		
notification_to_id	int(10)	No		tbl_user -> user_id		
notification_message	varchar(255)	No				
notification_status	varchar(255)	No	Unseen			

Indexes

Keyname	Туре	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	notification_id	0	А	No	
foreign_from_notification	BTREE	No	No	notification_from_id	0	А	No	
foreign_to_notification	BTREE	No	No	notification_to_id	0	А	No	

tbl_program

Column	Type	Null	Default	Links to	Comments	Media type
program_id (Primary)	int(10)	No				
program_faculty_id	int(11)	No		tbl_faculty -> faculty_ld		
program_name	varchar(255)	No				
program_description	varchar(255)	No				
program_duration	varchar(255)	No				
program_type	varchar(255)	No				
is_active	varchar(255)	No	Yes			

Indexes

Keyname	Туре	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	program_id	2	А	No	
foreign_faculty_program	BTREE	No	No	program_faculty_id	2	А	No	

21

Column	Туре	Null	Default	Links to	Comments	Media type
task_created	date	No	current_timestamp()			
task_deadline	datetime	No				

Indexes

Keyname	Туре	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	task_id	0	А	No	
foreign_from_task	BTREE	No	No	task_from_id	0	А	Yes	
foreign_to_task	BTREE	No	No	task_to_id	0	А	Yes	

tbl_user

Column	Туре	Null	Default	Links to	Comments	Media type
user_id (Primary)	int(10)	No				
user_project_id	int(10)	Yes	NULL	tbl_project -> project_id		
user_program_id	int(10)	Yes	NULL	tbl_program -> program_ld		
user_role	varchar(255)	No				
user_name	varchar(255)	No				
user_faculty	varchar(255)	No				
user_phone	bigint(20)	No				
user_email	varchar(255)	No				
user_password	varchar(255)	No				

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	user_id	3	А	No	
foreign_project_user	BTREE	No	No	user_project_id	3	А	Yes	
foreign_program_user	BTREE	No	No	user_program_id	3	А	Yes	

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Chapter 6: System Development and Implementation

6.1 Programming Platform

To program the entire website, we used VS code. Which platforms are HTML, CSS and JavaScript compatible.

6.2 Operating Environment

To operate this website users need

- Any operating systems
- Server
- Browsers which support HTML5, CSS3, Javascript and PHP.

Chapter 7: Testing and Debugging

7.1 Tools Used in Testing

S.NO	Tool	Specification		
1	Hardware (Computer/ Laptop/Mobile)	Core: i5 or more Generation: 8th or more		
2	Vs Code	Version: 1.75.1		
3	Postman	Version: 10.0		
4	Xdebug	Version: 3.2.0		

7.2 Testing and Debugging

S.NO	Test	Expected Result	Actual Result
1	Check whether teacher is registered or not	Teacher should be registered	Teacher is registered
2	Check whether student is registered or not	Student should be registered	Student is registered
3	Check whether user session is created after login or not	User session should be created	User session is created
4			
5			

Chapter 8: Conclusion

For organizing projects, tasks, and resources, Project manager can be a very useful tool. They make it possible for teams to work together more productively, monitor deadlines, and track progress.

Project manager solutions can assist teams in staying organized and guaranteeing projects are finished on time and within budget using features like Gantt charts, work assignment, time tracking, and resource management.

Chapter 9: References

[1] Web Technology I, 6th Edition. Published by Tata McGraw Hill Education Private Limited,7 West Patel Nagar, New Delhi 110 008

[2] Website: www.W3school.com .Accessed: 2022-10-12.

[3] Website: <u>www.javatutorial.com</u>. Visited on 2022-10-16.

APPENDIX

Appendix (Output Screenshots)

