

# TASK MANAGEMENT SYSTEM

By

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DEPARTMENT OF SOFTWARE ENGINEERING ABAARSO TECH UNIVERSITY

2021

## **DECLARATION**

Signature	Date
	///
other award of a degree and published at any inst	titution of higher learning.
I declare that this thesis report is my original wor	rk and has not been submitted for any

#### **CERTIFICATE OF ORIGINALITY**

I hereby declare that this report, submitted to the Department of Software Engineering of the Abaarso Tech University as a partial fulfillment of the requirements for the Bachelor of Science in Software Engineering has not been submitted as an exercise for a degree at any other university. I also certify that the work described here is entirely my own except for excerpts and summaries whose sources are appropriately cited in the references. This report may be made available within the university library for the purposes of consultation.

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# **Approval Sheet**

This is to certify that this project report entitled "Task Management System" submitted by
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Software Engineering of the Department of Software Engineering, Abaarso Tech
University during the academic year 2020-2021 has been accepted.

Supervisor:
Signature:
Date: / /

#### **Abstract**

This project is about Task Management System that will Transfer manual system to computerized system. This system focused on Task management and project management. This system will used agile methodology in development process. Tools Will be used are Languages xampp as system interface development and Database MySql. This system is generating as to accomplish the Objectives that are to develop a Complete Task management system, to centralized a database in manage listed Project manager and project information and to produce documentation and report generation. (There are 3 types of system users which are the Admin, Project Manager, and the Regular Employee. The admin user is those users that has an access to all of the data stored in the database of the system especially on creating and managing system users.

The Project Managers are those users that manage the project details and progress under her/his management.

The Regular Employees will submit their work productivity in each task of the project which makes the system requires the employee to submit them start and end time range of their work on a certain task and this data will be calculated in the report as project members' work duration.)

**ACKNOWLEDGMENT** 

In the Name of Allah, the Most Gracious and Most Merciful

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not the least, I would like to thank all my friends and colleagues who share with me their

enthusiasm and knowledge, also gave me their assistance throughout this study.

**Mohamed Hiis Rooble** 

Suhayb Cabdi Yoonis

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## **ABBREVEVIATION**

DFD	
HTML	
MySql	
PHP	
XAMPP	

# Chapter One Introduction

#### 1.0 INTRODUCTION

A tasks management software could be a very crucial tool for each project because it aids the power to stay track of your project's deadlines, tasks complication, meetings and managing your team more effectively in real-time. As the project size increases and it increases the quantity of dependent task and sub-activities, it'll be hard to trace these tasks on a notepad or in a very diary. you would like a tool which is able to allow you to access those task list and allow you to take charge of these task in terms of deadlines and requirements. A task management software is formed to make a project, its task and who has to be doing them. Without such tools, it'll be hard for us to understand who is functioning on those tasks. A task management system enables everyone within the team to come back together and work together for project success.

#### 1.1 Problem Background of Task Management System.

Task management is that the process of managing a task through its life cycle: from planning, testing and tracking, to reporting on the end result. It involves managing all aspects of a task, from its status and priority to the time spent, people involved, and at last, financial resources needed. Task management methods, tools, and techniques provide you with and your team an in depth and real-time view of all the moving parts of a project as defined in our Project

#### 1.2 Problem Statement for Task Management.

Is solving is wide its combination of problems which leads failure to the organizations, these are problems are varying so task Management can facilitate your with:

- 1- Manage and Organize Your Workloads Organize your project into systematic work breakdown structure (WBS). which can provide you with a transparent picture of task targets and deadlines along with the priorities.
- 2- Access anytime from anywhere One of the foremost effective reasons for using an online task management software tool is, storing your data online over a cloud and never lose them. Also, that has you unrestricted access to the info anything you'd like from any device Set priority and code them never to miss out Online task management software tools allow you to prioritize and manage your tasks with features like, showing your pending, ongoing tasks, tasks that do not seem to be yet started, or tasks that are completed.

You can highlight your tasks and sub-tasks with unique and specific code for every task

so as that you just simply just understand and have better insights of your tasks.

#### Increase Efficiency and Production

With clearer task objectives and deadlines, a user knows what he or she has got to be doing daily and prioritize them accordingly. there's not any time wastage in understanding the necessity which enables an increase in efficiency and productivity.

#### • Drive Collaboration

A good task management system facilitates collaborations between team members. They will quickly communicate within the tools, assign and re-assign task to anyone within the team and set priorities for them to know well earlier.

#### • Be Profitable

Having a clearer task management tool enables the team to know project targets within deadline. Thus, saving ages and supreme your budgets. Be more profitable by deploying an honest project management tool

#### • Save time

Eliminate time spent thinking of what to undertake and do next will reducing wastage of some time on knowing the targets and deadlines.

#### 1.3 OBJECTIVES OF THE PROJECT:

#### 1.3.1 General Objectives

Every project, no matter size, includes a start date, an end date, and a series of milestones that require to be met. Achieving a given milestone means completing certain tasks. And successfully candling each task's is what task management is all about. But Our Project (Task Management) Is Your Key To:

#### 1.3.2 Specific Objectives

#### 1. Define organization goals: -

Setting objectives is not only critical to the success of any company, but it also serves a

spread of purpose. It must includes several difference kinds of managers in setting goals. The objectives set by the supervisors are provisional, supported an interpretation and evaluation of what the corporate can and will achieve within a specified time.

#### 2. Define employee objectives: -

Once the staff are briefed about the overall objectives, plan, and also the strategies to follow, the managers can start working with their subordinates on establishing their personal objectives. this may be a one-on-one discussion where the subordinates will let the managers understand their targets and which goals they will accomplish within a particular time and with what resources. they'll then share some tentative thoughts about which goals the organization or department can find feasible.

#### 3. Continuous monitoring performance and progress: -

Though the management by objectives approach is important for increasing the effectiveness of managers, it's equally essential for monitoring the performance and progress of every employee within the organization.

#### 4. Performance evaluation: -

Within the MBO's framework, the performance review is achieved by the participation's of the managers concerned. To design an application that may easily create, assign and investigate tasks, so an owner of task can always know real time progress and who is performing it.

#### 5. Providing feedback: -

the management by objectives approach, the foremost essentially step is that the continuous feedback on the results and objectives, because it enables the workers to trace and make corrections to their actions. the continued feedback is complemented by frequent formal evaluation meetings during which superiors and subordinates may discuss progress towards objectives, resulting in more feedback.

#### 6. Performance appraisal: -

Performance reviews are a routine review of the success of employees within MBO's organizations.

#### 1.4 Project Scope and its limit

#### 1.4.1 Project scope

This project (Task Management) is web based software it works and runs in web applications .it has different design for both users and management people the design is very human it designed to be simple to use and the application ,the task management

system is a simple project that can help certain company manage its project task progress

The system has 3 types of system users.

- The task management system users can be only created by admin user.
- ➤ The admin user or the project managers will create a new project at first along details.
- ➤ When creating a project, the admin or the project, managers must list all the employees that will handle the project's tasks.
- After the creation of the project, the regular employees are limited.
- Employees are only allowed to edit the data of the progress that they only submitted.

#### 1.4.2 The project limitation

This project is a web based application we believe it's the best application we have built so far but there are some features that it does not have, as we know every application has limitation.

This application is not working whit neither face nor voice recognitions.

#### 1.1 Methodology

There are so many different ways to use for developing any kind of applications you desire we use to build this project using:

- Html
- Php, mysql
- Css. JavaScript (jQuery,ajax)
- ❖ Bootstrap for the designs

We choose to use this because:

- ✓ Its design is not complicated for clients –
- ✓ It's easy to maintain-
- ✓ Code accuracy

#### 1.7 Expected Outcome

The change or the effects we are expecting to take place after people use our software is to improve the lives of the beneficiaries, these days people really need a program

that helps them to achieve their goal whit a short period of time and that's the kind of change we are hoping for to make.

## CHAPTER TWO LITERATURE REVIEW

#### 2.0 DESCRIPTION OF THE EXISITING SYSTEM

#### 2.1 INTRODUCTION

Growing in technology is currently pushing developed business processes that exist within an enterprise. Where technology made tools and media work and services performance improvement. Technology information systems also made a supporting decision-making by a company, therefore, the information system is essential for the sustainability of the company itself. But nonetheless there are still some points of the process on a company or Government agencies that still have not been able to adopt the technology as a tool supporting the process evenly

to each Division, the reason is varied, ranging from any system which does complicated, or even its human resources are still not able to adapt such technology will be One of them is the task management or task management that is in PT.

#### 2.2 RELATED WORK

Task management or task management is the process of managing tasks through its life cycle. This involves planning, testing, tracking and reporting. Task management can help an individual achieve a goal, or a group of individuals collaborate and share their knowledge for the achievement of common goals. It is also distinguished by the complexity of the task, from low to high Management tasks that require effective management of all aspects of the task, including the status, priority, time, human resources and financial resources, notifications and so on. This can be combined in General into a basic activity is the management of the task. Manage multiple assignments of individuals or teams may require special applications, such as workflow or project management software (Thomas, 2010).

Task management can be a part of project management and process management and can serve as the Foundation for an efficient workflow within an organization. Tracking literally means celebrates the street, or in the sense of free will, is an activity to follow the trail of an object. Understanding Tracking in this instance is that the activities to monitor the status of a performance Engineer. According to ABET (Accreditation Board for Engineering and Technology, or the ECPD engineer's Council for Professional Development) in America, Engineer is a profession in which knowledge of mathematics and natural sciences gained through education, experience, in practice was applied properly to find economical ways in utilizing ingredients and natural abilities for the sake of the benefit of the human race. Object-oriented Unified Modeling approach language (UML. 2.0) from the Object Management Group (OMG) and is found by Grady Brooch, James Rumbaugh and Ivar Jacobson. Model-driven

approach, the analysis starts with use cases and scenarios then defining class domain problems involved the work of the users. Including models UML (Unified Modeling Language) diagrams Use case requirements, description of Use case diagrams, activity diagrams and sequence. (Alan Dennis, 2012) UML) a notation, family help and describing software design, especially systems that are built using object-oriented programming (OOP). Other languages such as UML also defines the notation and syntax, UML is derived from some previous notation i.e. Grady Brooch OOD (Object-Oriented Design), Jim Rumbaugh OMT (Object Modeling Technique) and Ivar Jacobs noose (Object-Oriented Software Engineering).

#### **2.3 METHOD**

Narrative Task Management Procedures are:

- 1. Give power, the user gave the task to the Engineer, which according to the user has time to spare and ability in the related manual farmed ingredients
- 2. Approves the task, next the Manager approves the task given user
- 3. Accept the task, engineer receives a task that has been approved by the German Manager, as well as the time and place specified by the user
- 4. Complete the task, engineer job in accordance with ability in their field, and then make a report completed on the document
- 5. confirm the Status of the task, if you already get data Task the user confirm the status of the tasks that have been executed Engineer.

#### 2.4. The main activities

- 1. Do requests, Engineer
- 2. View and the removal of the update progress
- 3. Do change the status of the task by way of validation The following activities can do Task Application Engineer on Management that will be developed:
- 1. Look at the list of tasks that will be carried out
- 2. Update progress

#### 2.5. Functions of the existing system

- 1. Look at the list of tasks that are being worked on
- 2. Do the additions, changes, deletions and updates the estimated time when necessary
- 3. Do the print report Task

#### 2.6. Documents used in the existing system

The following is the implementation of the program in accordance with the design of the screen that have been

created, among other:

O Skill User



admin admin Online

Dashboard

Task Management Application

Task Management Application

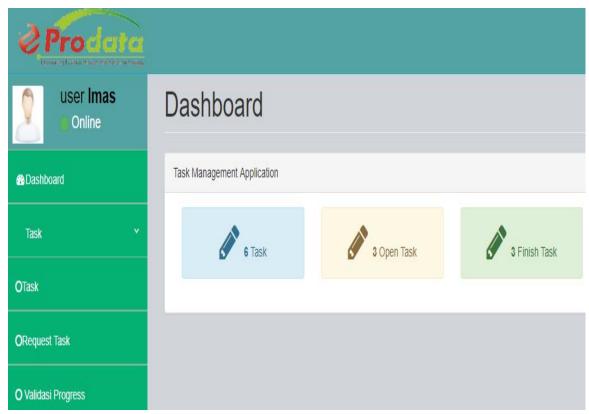
Task Management Application

O User

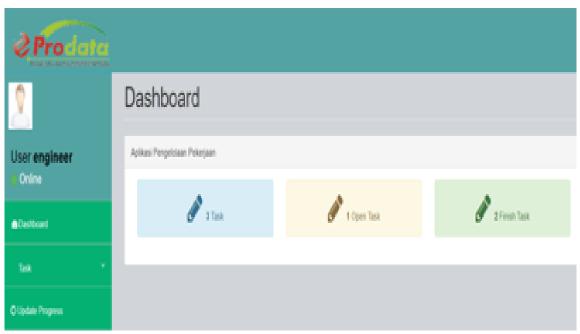
O Skill

O Client

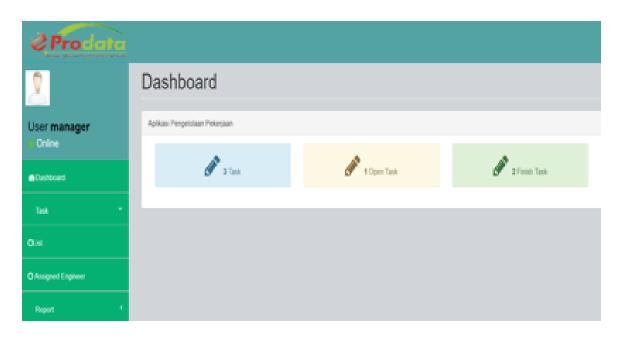
**Admin Dashboard** 



**Users Dashboard** 



**Engineer Dashboard** 



**Manager Dashboard** 

#### CHAPTER THREE ANALYSIS

#### 3.0 Introduction

System analysis is the process of collecting and gathering information about the system (existing), The Task Management System is a project that can help a certain company manage its project task progress. The system has 3 types of system users which are the Admin, Project Manager, and the Regular Employee. The admin user is those users that has an access to all of the data stored in the database of the system especially on creating and managing system users. The Project Managers are those users that manage the project details and progress under her/his management. The Regular Employees will submit their work productivity in each task of the project which makes the system requires the employee to submit their start and end time range of their work on a certain task and this data will be calculated in the report as project members' work duration.

#### 3.1 Existing System Description

Task management can help an individual achieve a goal, or a group of individuals collaborate and share their knowledge for the achievement of common goals. It is also distinguished by the complexity of the task, from low to high Management tasks that require effective management of all aspects of the task, including the status, priority, time and human resources, notifications and so on. This can be combined in General into a basic activity is the management of the task.

#### 3.2 Requirements specifications of the proposed system

In this phase, it should be produced the requirements of the user by analyzing what the system have to do or what operations or features it have to do. It is generated from user needs, and it is known as business requirement or user requirement as follows:

☐ To have the admin manage have complete access and all privileges to the system.
☐ Assigning Project Manager, her/his on their project holding.
☐ To register new project.
☐ Save time, manage the tasks.

#### 3.2.1 Functional Requirements

- Log on: the system defines the user to identify his/her access levels and what he/she can see.
- Insert the project info: here the project Manager should be able to list his/her property information of the Task's.
- The Regular Employees will submit their work productivity in each task of the project.
- The Project Managers are those users that manage the project details and progress under her/his management.

#### 3.2.2 None Functional requirements

- The system should work in all operating systems since it is online.
- Portability: The system should be running in all Browsers in all times.
- Security: The system should be secure that only admin can make. Changes.
- Performance the system must be in the accurate speed and not be slow.

3.2.3 Hardware requirements

Minimum System requirement
3,00000 00,40000000000000000000000000000
2.16 GHZ processor speed
128 MB RAM or hiegher
30 GB or more
800 x 600 colors (1024 x 768 High color-
16 bit Recommended)
-

3.2.4 Software requirements

Software	Minimum System requirement
Operating System	Windows 7 or later
Database	MYSQL
Programming languages	Html, Css, JavaScript, PHP
Compiler	Xampp
Web browser	Firefox, Chrome etc.

## 3.3 Requirement (Functional) modeling of the proposed system

Since the system needs to handle a lot of Task management data, an online login function is essential for ensuring security.

Users who do not have the correct access rights will be prevented from connecting to the database and the ones that have access can only view specific attribute according to their access limits. There are three groups of users of the system with different access rights: Functional requirements specify particular results of a system.

This should be contrasted with non-functional requirements which specify overall characteristics such as cost and reliability.

Functional requirements drive the application architecture of a system, while non-functional requirements drive the technical architecture of a system.

This function also allows users to change their own password.

This function allows the personal information of users, such as their name, phone, address, etc., to be managed. Using this function, a Task management System owner can:

- Insert a new project.
- Make changes to the tasks.
- Also has the ability to assign project manager on more projects.

## **❖** Project manager

- ➤ Login: can log in the system.
- Register: Owner can register his/her details
- > project managers must list all the employees that will handle the project's tasks. After the creation of the project.

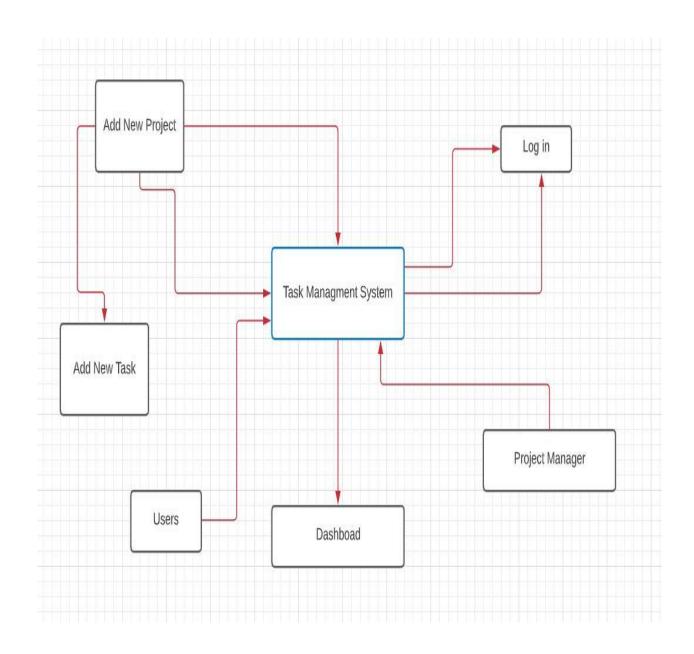
## 3.3.1 Data Flow Diagrams (DFD)

A Data Flow Diagram (DFD) is a traditional way to visualize the information flows within a system. A neat and clear DFD can depict a good amount of the system requirements graphically. It can be manual, automated, or a combination of both.

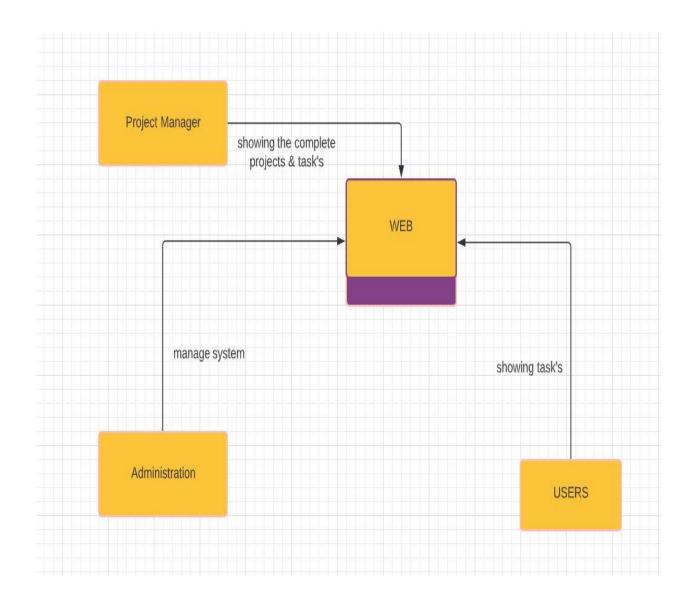
It shows how information enters and leaves the system, what changes the information and where information is stored. The purpose of a DFD is to show the scope and boundaries of a system as a whole. It may be used as a communications tool between a systems analyst and any person who plays a part in the system that acts as the starting point for redesigning a system.

It is usually beginning with a context diagram as level 0 of the DFD diagram, a simple representation of the whole system. To elaborate further from that, we drill down to a level 1 diagram with lower-level functions decomposed from the major functions of the system. This could continue to evolve to become a level 2 diagram when further analysis is required.

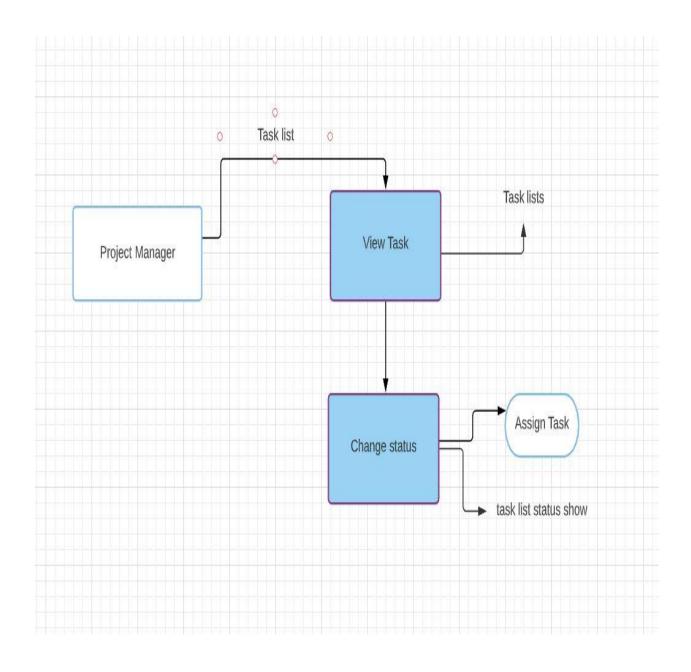
# 3.3.1.1 Context Diagram (sample)



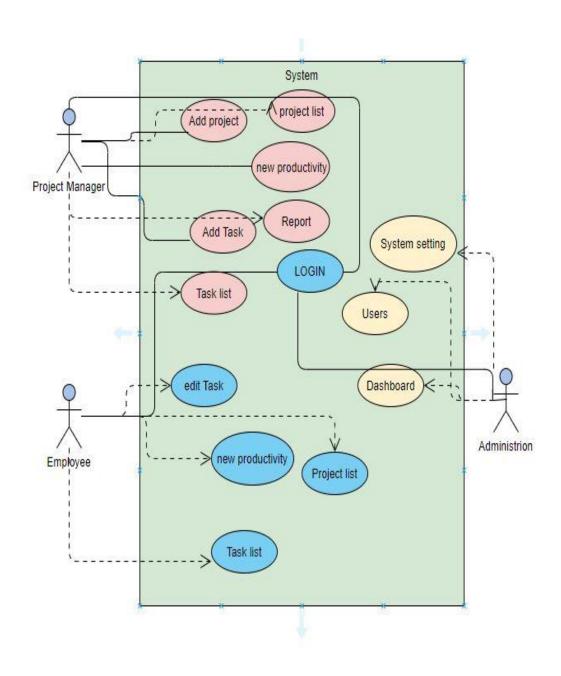
# 3.3.1.2 Level-0 Diagram (sample)



# 3.3.1.3 Level 1 Diagram (for Process 1.0)



# 3.3.1 Use Case Diagram



## 3.3.1.1 Use Case Descriptions

Create an activity diagram and a set of detail use case descriptions for the following system. Task Management system. Task Management system users can be only created by admin users. The admin user or the Project Managers will create a new project at first along with some important details and references of the users. When creating a project,

the admin or project managers must list all the employees that will handle the project's tasks. After the creation of the project,

the regular employees are limited only to adding their work progress for the task of the project that they are assigned. They are also allowed to edit the data of the progress that they only submitted.

Then, as the employees regularly updating the system about the progress, they have done the project managers will read or scan their activities so the project manager can check or decide if the certain task is done and need to update the task status in the system.

For the printable report of the system, only the admin users and project managers has an access to this function or feature of the system.

Task management system prints information from its database.

Use Case Name	Login
Participating Participating	Adminstrator
actors	
Entry condition	Actor must log in as project manager and Adminstratior
Basic course of	Checking username and password if its authorized allows
action	actor to do user activities
Exit condition	When the actors exits the system
Pre –condition	The actor should Open the page
Post condition	The actor is either grated access or denied access

Alternative course of	inserted information about project the system display in the
action	Dashboard

Use Case Name	Employee or regular Employee
Participating Participating	Employee
actors	
Entry condition	Actor must log in as employee
Basic course of	Adding the information of the task
Exit condition	When the actors exits the system
Pre -condition	The actor must be registered as User
Post condition	The Task Management system is saved to database

Alternative course of	inserted information of the Task in the project that assign
action	this task.

Use Case Name	New project
Participating	Administration
actors	
Entry condition	Actor must log in as Admin
Basic course of action	Adding the information of requested the project
Exit condition	When the actors exits the system
Pre -condition	The actor must be registered as Real Estate Owner
Post condition	The system is saved to database
Alternative course of	inserted information is correct the system display's
action	data saved successful

# 3.3.2 Activity Diagrams

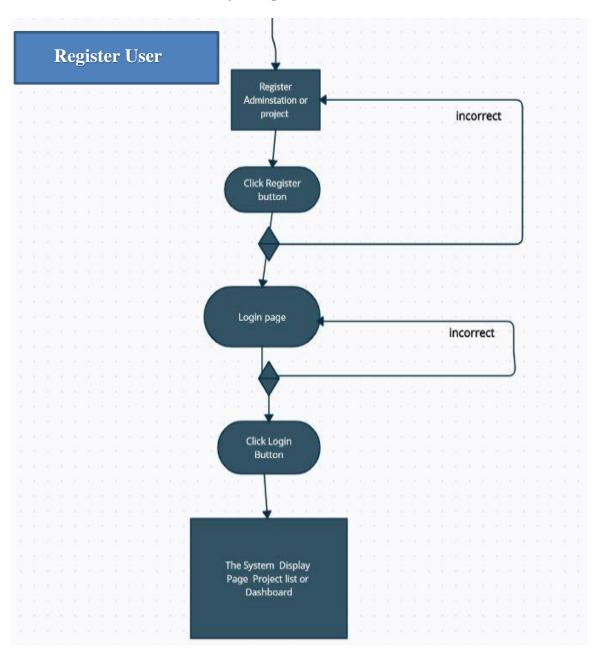


Figure Activity diagram

# 3.3.3 Sequence Diagrams (Login: project manager)

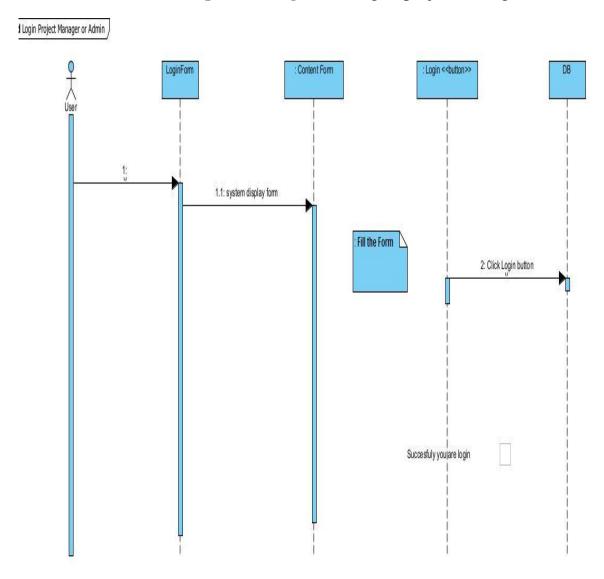


Figure Sequence diagram

#### 3.3 Object modeling of the proposed system (Class Diagram) tms\_db users g id: int(30) @ firstname : varchar(200) @ lastname : varchar(200) email: varchar(200) v o trus db system\_settings @ password : text # type : tinyint(1) a id: int(30) name : text @ avatar : text @ email : varchar(200) and date created datetime e contact : varchar(20) o tms\_db project\_list g id: int(30) address text @ cover\_img : text @ name : varchar(200) @ description : text status : tinyint(2) start\_date : date end\_date : date o lms\_db user\_productivity # manager\_id : int(30) g id : int(30) @ user\_ids : text # project\_id : int(30) m date created : datetime # task id : int(30) @ comment : text v o tms db task\_list g id: int(30) a date : date # project\_id : int(30) m start time : time @ task : varchar(200) end\_time : time description : text # user\_id : int(30) # status : tinvint(4) # time\_rendered : float n date\_created : datetime g date\_created : datetime

# 3.4.1 Data modeling of the proposed system (Conceptual Data Modeling using ERD)

A logical data model describes the data and the relationships in detail at a very high level. This does not include how data is represented physically in the database, but describes at a very abstract level. It basically includes the entities and the relationships among them along with attributes of each entity.

Task management System is a web site made for all kinds of projects. At first the user register him/her self to access the page then views a display of the pervious listed projects.

#### 3.4.1.1 Tools/ Design and Development Tools

#### 1. Php5

**PHP**: **Hypertext Preprocessor** (or simply PHP) is a server-side scripting language designed for Web development, but also used as a general-purpose programming language. It was originally created by Ramus Lerdorf in 1994, the PHP reference implementation is now produced by The PHP Group. PHP originally stood for Personal Home Page,[5] but it now stands for the recursive acronym PHP: Hypertext Preprocessor

PHP code is usually processed on a web server by a PHP interpreter implemented as a module, a daemon or as a Common Gateway Interface (CGI) executable. On a web server, the result of the interpreted and executed PHP code – which may be any type of data, such as generated HTML or binary image data – would form the whole or part of an HTTP response. Various web template systems, web content management systems,

and web frameworks exist which can be employed to orchestrate or facilitate the generation of that response. Additionally, PHP can be used for many programming tasks outside of the web context, such as standalone graphical applications and robotic drone control. PHP code can also be directly executed from the command line.

The standard PHP interpreter, powered by the Zend Engine, is free software released under the PHP License. PHP has been widely ported and can be deployed on most web servers on almost every operating system and platform, free of charge.

The PHP language evolved without a written formal specification or standard until 2014, with the original implementation acting as the *de facto* standard which other implementations aimed to follow. Since 2014, work has gone on to create a formal PHP specification.

#### 2. MySQL server

MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Wideness's daughter and "SQL", the abbreviation for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements.

MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation. For proprietary use, several paid editions are available, and offer additional functionality.

A database management, or DBMS, gives the user access to their data and helps them transform the data into information. Such database management systems include dBase, paradox, IMS, Sql Server and SQL Server. These systems allow users to create, update and extract information from their database.

A database is a structured collection of data. Data refers to the characteristics of people, things and events. SQL Server stores each data item in its own fields. In SQL Server, the fields relating to a particular person, thing or event are bundled together to form a single complete unit of data, called a record (it can also be referred to as raw or an occurrence). Each record is made up of a number of fields. No two fields in a record can have the same field name.

During an SQL Server Database design project, the analysis of your business needs identifies all the fields or attributes of interest. If your business needs change over time, you define any additional fields or change the definition of existing fields.

#### **SQL Server Tables**

SQL Server stores records relating to each other in a table. Different tables are created for the various groups of information. Related tables are grouped together to form a database.

## **Primary Key**

Every table in SQL Server has a field or a combination of fields that online task management system project report uniquely identifies each record in the table. The Unique identifier is called the Primary Key, or simply the Key. The primary key provides the means to distinguish one record from all other in a table. It allows the user and the database system to identify, locate and refer to one particular record in the database.

#### **Relational Database**

Sometimes all the information of interest to a business operation can be stored in one table. SQL Server makes it very easy to link the data in multiple tables. Matching an employee to the department in which they work is one example. This online task management system is what makes SQL Server a relational database management system, or RDBMS. It stores data in two or more tables and enables you to define relationships between the table and enables you to define relationships between the tables.

# Foreign Key

When a field is one table matches the primary key of another field is referred to as a foreign key. A foreign key is a field or a group of fields in one table whose values match those of the primary key of another table.

# **Referential Integrity**

Not only does SQL Server allow you to link multiple tables, it also maintains consistency between them. Ensuring that online task management system project report the data among related tables is correctly matched is referred to as maintaining referential integrity.

#### **Data Abstraction**

A major purpose of a database system is to provide users with an abstract view of the data. This online task management system system hides certain details of how the data is stored and maintained. Data abstraction is divided into three levels.

**Physical level**: This online task management system is the lowest level of abstraction at which one describes how the data are actually stored.

**Conceptual Level:** At this online task management system level of database abstraction all the attributed and what data are actually stored is described and entries and relationship among them.

**View level:** This online task management system is the highest level of abstraction at which one describes only part of the database.

# **Advantages of RDBMS**

- Redundancy can be avoided
- Inconsistency can be eliminated
- Data can be Shared
- Standards can be enforced
- Security restrictions ca be applied
- Integrity can be maintained
- Conflicting requirements can be balanced
- Data independence can be achieved.

# **Disadvantages of DBMS**

A significant disadvantage of the DBMS system is cost. In addition to the

cost of purchasing of developing the software, the hardware has to be upgraded to allow for the extensive programs and the workspace required for their execution and storage. While centralization reduces duplication, the lack of duplication requires that online task management system project report the database be adequately backed up so that online task management system project report in case of failure the data can be recovered.

## FEATURES OF SQL SERVER (RDBMS)

SQL SERVER is one of the leading database management systems (DBMS) because it is the only Database that online task management system project report meets the uncompromising requirements of today's most demanding information systems. From complex decision support systems (DSS) to the most rigorous online transaction processing (OLTP) application, even application that online task management system project report require simultaneous DSS and OLTP access to the same critical data, SQL Server leads the industry in both performance and capability.

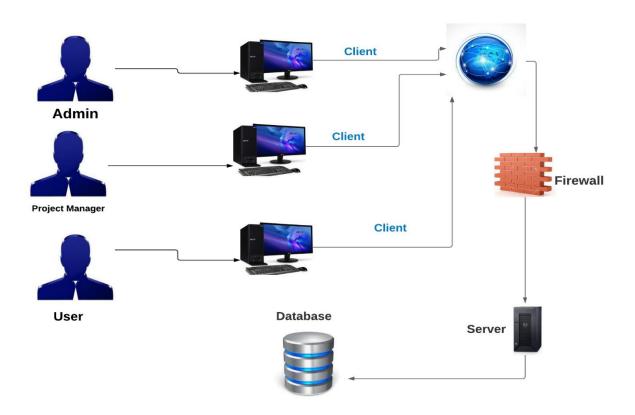
#### 3. Microsoft word 2016

**Microsoft Word** (or simply Word) is a word processor developed by Microsoft. It was first released on October 25, 1983 under the name Multi-Tool Word for Xenix systems. Subsequent versions were later written for several other platforms including IBM PCs running DOS (1983), Apple Macintosh running the Classic Mac OS (1985), AT&T Unix PC (1985), Atari ST(1988), OS/2 (1989), Microsoft Windows (1989), SCO Unix (1994), and OS X (2001). Commercial versions of Word are licensed as a standalone product or as a component of Microsoft Office, Windows RT or the discontinued Microsoft Works suite. Microsoft Word Viewer and Office Online are freeware editions of Word with limited features.

# CHAPTER FOUR SYTEM DESIGN

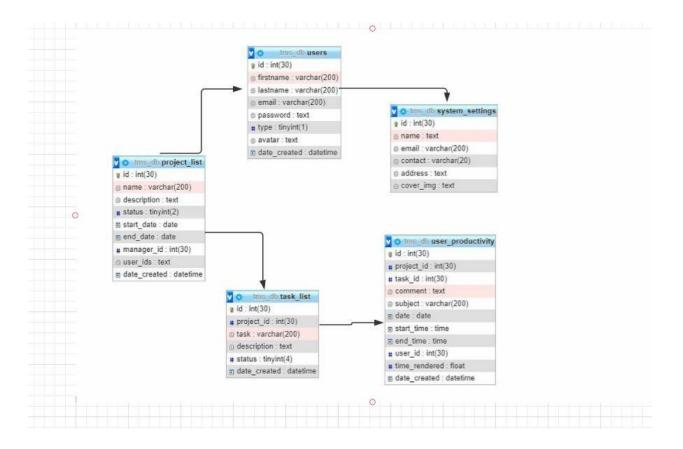
The Design section documents the design decisions that have been taken. The structure of the system and its components has to be established.

# **Architectures Design**



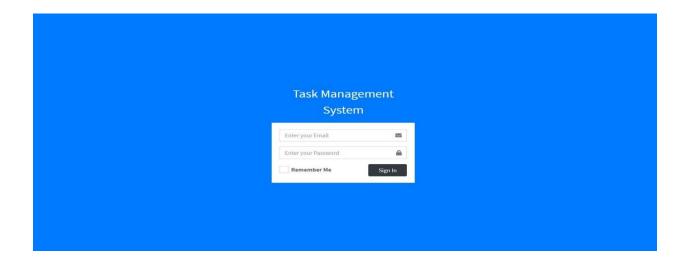
## 4.3 Physical Database Design

Is the process of transforming a logical data model into an actual **physical database**? Physical database modeling deals with designing the actual database based on the requirements gathered during logical database modeling. All the information gathered is converted into relational models and business models. Objects are defined at a level called a schema level. A schema is considered a group of objects which are related to each other in a database

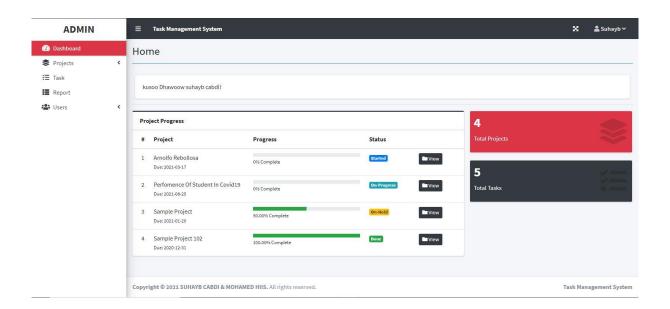


# **Interface Design and Public**

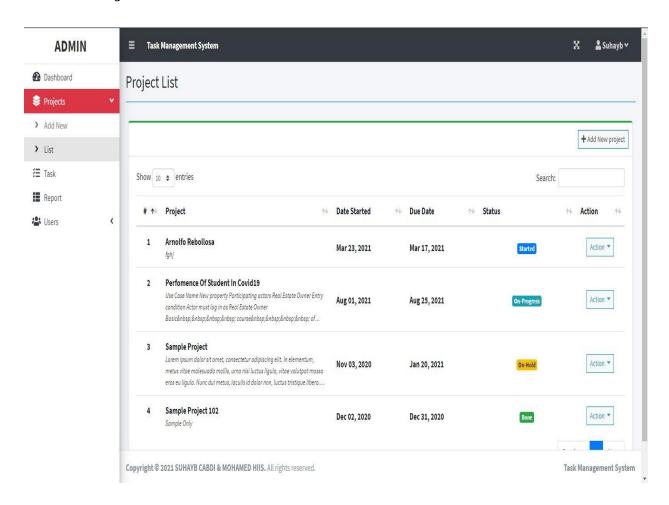
# Login form



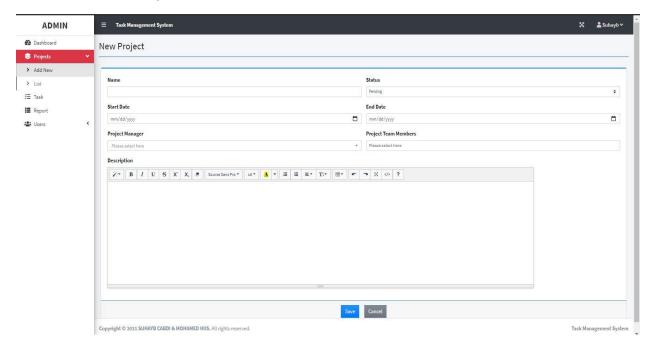
# $\square$ Home page or Dashboard



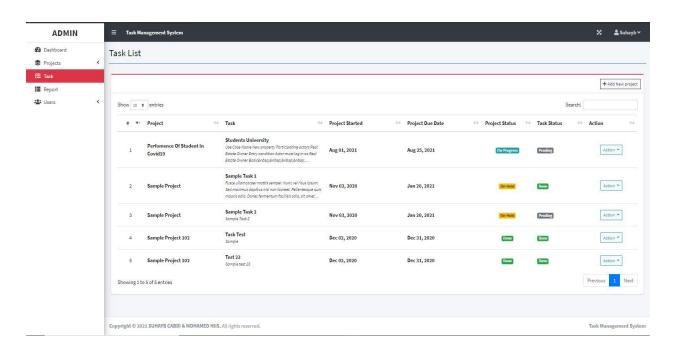
# **❖** Project list



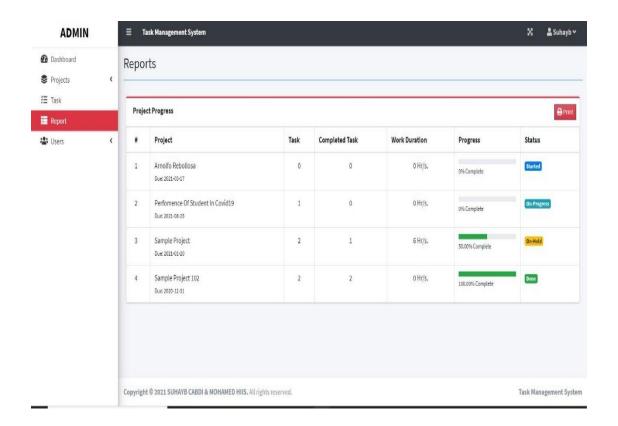
#### \* Add New Project



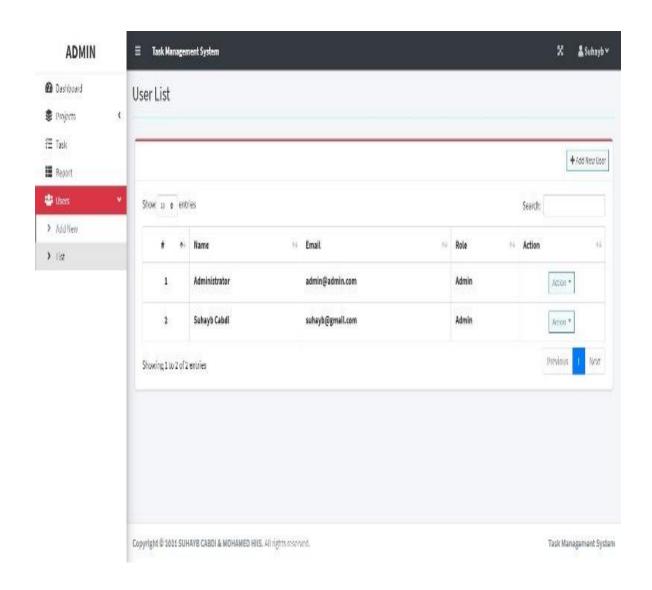
# **❖** Task list



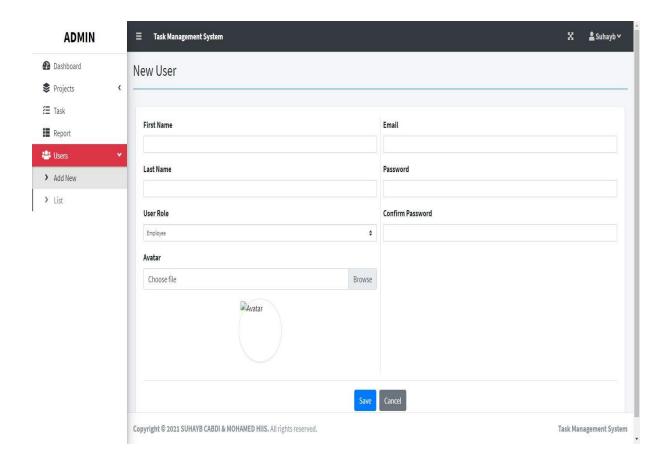
# □ Report



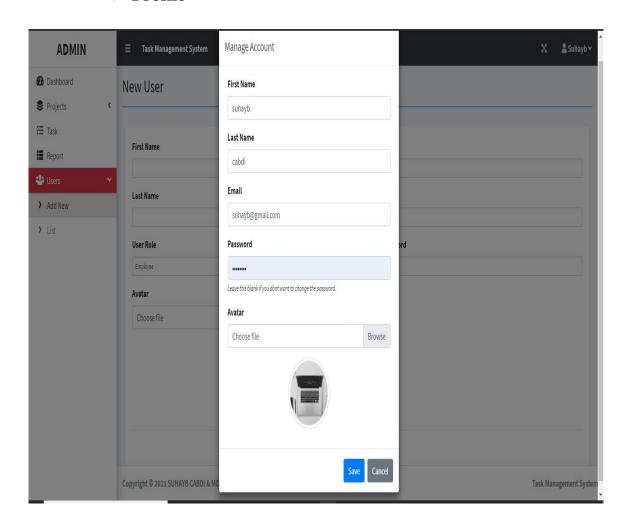
# □ Users



\* Registration for Admin, project manager, employee user



# \* Profile



#### **CHAPTER FIVE**

## **Implementation and Testing**

## 5.0 Implementation

The implementation chapter describes how the different components in the project have been implemented. The implementation phase constructs, installs and operates the new system. This stage was the hardest and most crucial stage in achieving a new successful system that it will work efficiently and effectively.

### 5.0.1 Development tools and environments

#### **❖** Sublime Text Editor

Sublime Text is a proprietary cross-platform source code editor with a Python application programming interface (API). It natively supports many programming languages and markup languages, and functions can be added by users with plugins, typically community-built and maintained under free-software licenses.

#### **❖** Notepad++

Notepad++ is distributed as free software. At first the project was hosted on SourceForge.net, from where it has been downloaded over 28 million times, and twice won the Source Forge Community Choice Award for Best Developer Tool. The project was hosted on Tux Family (for) from 2010 to 2015 since 2015 Notepad++ has been hosted on GitHub. Notepad++ uses the Scintilla editor component.

#### \* MySQL

The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements.

#### \* XAMMP

is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, Maria DB database, and interpreters for scripts written in the PHP and Perl programming languages. XAMPP stands for Cross-Platform (X), Apache (A), Maria DB (M), PHP (P) and Perl (P). It is a simple, lightweight Apache distribution that makes it extremely easy for developers to create a local web server for testing and deployment purposes. Everything needed to set up a web server – server application (Apache), database (Maria DB), and scripting language (PHP) – is included in an extractable file. XAMPP is also cross-platform, which means it works equally well on Linux, Mac and Windows. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local

test server to a live server extremely easy as well

The web server solution stack installed in Personal PC or the development system faces common issues of having the common port numbers requested by XAMPP. Most commonly Skype or MySQL installed in PC have common conflict due to the same port number being requested by XAMPP. Although a port number conflict can be bypassed by stopping the applications using the same port, the better solution is to change the port number. The most common MySQL port can be found in my.ini, config.inc.php and php.ini files from XAMPP control panel.

The port number are 3306 for MySQL, 80 for Apache and 443 for SSL, the port numbers can be replaced with subsequent number like 3307 or 3308. Find the port numbers in respective files, for which port need to be changed, then replace with subsequent port number. the same port numbers should also be replaced in XAMPP Service and Port number settings.

#### **☐** Google Chrome

Google Chrome is a cross-platform web browser developed by Google. It was first released in 2008 for Microsoft Windows built with free software components from Apple Web Kit and Mozilla Firefox. It was later ported to Linux, macOS, iOS, and Android where it is the default browser built into the OS. The browser is also the main component of Chrome OS, where it serves as the platform for web applications.

Most of Chrome's source code comes from Google's free and open-source software project *Chromium*, but Chrome is licensed as proprietary freeware.

Web Kit was the original rendering engine, but Google eventually forked it to create the Blink engine; all Chrome variants except iOS now use Blink.

Stat Counter estimates that Chrome has a 65% worldwide browser market share (after peaking at 72.38% in November 2018) on personal computers (PC), is most used on tablets (has surpassed Safari), and is also dominant on smartphones, and at 63.59% across all platforms combined. Because of this success, Google has expanded the "Chrome" brand name to other products: Chrome

OS, Chromecast, Chromebook, Chromebit, Chromebox, and Chromebase.

Google is an American multinational technology company that specializes in Internet-related services and products, which include online advertising technologies, search engine, cloud computing, software, and hardware. Google was founded in 1998 by Larry Page and Sergey Brin while they were Ph.D. students at Stanford University, California.

# **5.0.2** Implementation of different modules

## **5.0.2.1 Implementation stages:**

#### Planning

This first phase begins during the project management process and then continues. During this period, the project team will be created. There will be initial meetings and documentation developed as the team works to identify current issues and potential Solutions. An important part of this phase is task management the project plan, which will serve as a guide throughout the rest of the project.

#### • Design

What will the Task management system will look like and how will it be used in the organization? In the Design phase, the developers will be working out the various configurations for the new system, defining roles, and documenting standard procedures.

#### Development

The purpose of the development phase is to prepare the entire system for going live. This includes activities such as completing any necessary customizations, developing user trainings, and importing data. With Task Management system implementations, like any custom software development projects – "First, Solve the problem. Then, write the code."

#### Testing

The Testing and Development phases will often overlap, as the implementation and project teams jump between the two – constantly fine tuning the configuration. By the end of this phase admins will be comfortable doing their jobs in the new system. This is the final step before diving into the live system.

#### Deployment

The developers will assess the situation and make the final go or no-go decision. Prior to going live, the final data will be loaded and validated. The project team will train admins who will then start working in the new Project, and manage it

#### Ongoing Support

Once the Task management System has gone live, the purpose of the admin will Manage it.

as the way the users work within the system evolves, adjustments and changes to the system configuration may be needed.

This System was proved to be valuable and usefully by many since been uploaded online

and all Reported Back their satisfaction with the Task management System Provides.

# **5.0.3** Sample codes of the main

Pieces of logic (including standards and conventions)

## 5.0.3.1 Inserting New project

```
<?php if(!isset($conn)){ include 'db_connect.php'; } ?>
<div class="col-lg-12">
  <div class="card card-outline card-primary">
     <div class="card-body">
       <form action="" id="manage-project">
     <input type="hidden" name="id" value="<?php echo isset($id) ? $id : " ?>">
     <div class="row">
       <div class="col-md-6">
         <div class="form-group">
            <label for="" class="control-label">Name</label>
            <input type="text" class="form-control form-control-</pre>
sm" name="name" value="<?php echo isset($name) ? $name : " ?>">
         </div>
       </div>
       <div class="col-md-6">
         <div class="form-group">
            <label for="">Status</label>
            <select name="status" id="status" class="custom-select custom-select-sm">
              <option value="0" <?php echo isset($status) && $status == 0 ? 'selected' : " ?>>Pendin
g</option>
              <option value="3" <?php echo isset($status) && $status == 3 ? 'selected' : " ?>>On-
Hold</option>
              <option value="5" <?php echo isset($status) && $status == 5 ? 'selected' : " ?>>Done
option>
            </select>
         </div>
       </div>
     </div>
     <div class="row">
       <div class="col-md-6">
       <div class="form-group">
        <label for="" class="control-label">Start Date</label>
        <input type="date" class="form-control form-control-</pre>
sm" autocomplete="off" name="start date" value="<?php echo isset($start date) ? date("Y-m-
d",strtotime($start date)): "?>">
       </div>
      </div>
```

```
<div class="col-md-6">
       <div class="form-group">
        <label for="" class="control-label">End Date</label>
        <input type="date" class="form-control form-control-</pre>
sm" autocomplete="off" name="end date" value="<?php echo isset($end date) ? date("Y-m-
d",strtotime($end date)): "?>">
       </div>
      </div>
     </div>
     <div class="row">
       <?php if($_SESSION['login_type'] == 1 ): ?>
      <div class="col-md-6">
       <div class="form-group">
        <label for="" class="control-label">Project Manager</label>
        <select class="form-control form-control-sm select2" name="manager_id">
         <option></option>
         <?php
         $managers = $conn-
>query("SELECT *,concat(firstname,' ',lastname) as name FROM users where type = 2 order by conc
at(firstname, '', lastname) asc ");
         while($row= $managers->fetch_assoc()):
         ?>
         <option value="<?php echo $row['id'] ?>" <?php echo isset($manager id) && $manager id</pre>
== $row['id'] ? "selected" : " ?>><?php echo ucwords($row['name']) ?></option>
         <?php endwhile; ?>
        </select>
       </div>
      </div>
   <?php else: ?>
     <input type="hidden" name="manager_id" value="<?php echo $_SESSION['login_id'] ?>">
   <?php endif; ?>
      <div class="col-md-6">
       <div class="form-group">
        <label for="" class="control-label">Project Team Members </label>
        <select class="form-control form-control-</pre>
sm select2" multiple="multiple" name="user_ids[]">
         <option></option>
         <?php
         $employees = $conn-
>query("SELECT *,concat(firstname,' ',lastname) as name FROM users where type = 3 order by conc
at(firstname,' ',lastname) asc ");
         while($row= $employees->fetch_assoc()):
         <option value="<?php echo $row['id'] ?>" <?php echo isset($user_ids) && in_array($row['i</pre>
d'],explode(',',$user_ids)) ? "selected" : " ?>><?php echo ucwords($row['name']) ?></option>
```

```
<?php endwhile; ?>
        </select>
       </div>
      </div>
     </div>
     <div class="row">
       <div class="col-md-10">
         <div class="form-group">
            <label for="" class="control-label">Description</label>
            <textarea name="description" id="" cols="30" rows="10" class="summernote form-
control">
              <?php echo isset($description) ? $description : " ?>
            </textarea>
         </div>
       </div>
     </div>
     </form>
     </div>
     <div class="card-footer border-top border-info">
       <div class="d-flex w-100 justify-content-center align-items-center">
         <button class="btn btn-flat bg-gradient-primary mx-2" form="manage-
project">Save</button>
         <button class="btn btn-flat bg-gradient-secondary mx-
2" type="button" onclick="location.href='index.php?page=project_list"'>Cancel</button>
       </div>
     </div>
  </div>
</div>
<script>
  $('#manage-project').submit(function(e){
     e.preventDefault()
     start_load()
     $.ajax({
       url:'ajax.php?action=save_project',
       data: new FormData($(this)[0]),
       cache: false,
       contentType: false,
       processData: false,
       method: 'POST',
       type: 'POST',
       success:function(resp){
         if(resp == 1)
            alert_toast('Data successfully saved', "success");
            setTimeout(function(){
              location.href = 'index.php?page=project list'
```

# 5.0.4 Difficulties faced and how they were addressed.

- ❖ Coding Challenges that consumed huge amount of time
- ❖ Won't display error message if username is wrong.
- the Shortage of Recourses due to the lack of internet access
- Computer's performance issues

# And we addressed them with the steppes below:

- Sleeked the Help of the instructor
- ❖ Dedicated a Time of our Day for Development and went to places where internet access is available to access Recourses.
- Fixed the Computers.

#### **CHAPTER SIX**

#### SUMMARY AND CONCLUSION

#### **SUMMERY**

This project is called Task Management System it helps many agencies to be able to process their projects, the system is can be accessed through online and it's really good for both the Administrators and the employee as well the system would be able to do most of the activities like Registering a new user edit something, delete .... Etc. The Task Management System is a project that can help a certain company manage its project task progress.

The system has 3 types of system users which are the Admin, Project Manager, and the Regular Employee.

The admin user is those users that has an access to all of the data stored in the database of the system especially on creating and managing system users. The Project Managers are those users that manage the project details and progress under her/his management.

The Regular Employees will submit their work productivity in each task of the project which makes the system requires the employee to submit them start and end time range of their work on a certain task and this data will be calculated in the report as project members' work duration. Our system has a database that stores data and information inserted by admin.

#### **CONCLUSION**

Task Management System will perform many tasks and Process that's done by the agencies involve in this type of field (Project Management). Since it's an online platform it can be accessed anywhere and anytime all that you need is internet and a suitable pc for the conditions we mentioned earlier.

# APPENDIX IA

# FACE SHEET: DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Gender (Please Tick):		
1. Male		
2. Female		
3. Age		
Qualifications Under Education Discipline (Please Specify):		
Certificate Diploma Bachelors Masters Ph.D.		
Other qualifications other than education discipline		
Number of Years Teaching Experience (Please Tick):		
Less than/Below one year		
1- 2yrs		
3-4yrs		
5-6yrs		
6 years and above		

# Budget

Stationery	Amount in shillings
Printing	\$10
Coffleetc	\$4
Sweet and water	\$5
Total	\$19

# **Time-frame**

1 IIIIC-II aiiiC	
Writing Book	5 July15 August , 2021
Chapter one	5/7/021-12/7/2021
Chapter two	13/7/2021-20/72021
Chapter three	21/7/2021-13/7/2021
Chapter Four	15/7/2021-20/7/2021
Chapter Five	21/7/2021-01/8/2021
Chapter Six	03/8/2021-15/8/2021

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