Tribhuvan University
Faculty of Humanities and Social Sciences

"Work Progress Tracker"

A PROJECT REPORT

Submitted to:
Department of Computer Application
Kathmandu Business Campus

In partial fulfillment of the requirements for the Bachelors in Computer Application

Submitted by:

Name/Roll No: Salina Maharjan /19

Name/Roll No:Rikin Tuladhar/17

Under the Supervision of

Supervisor

Tribhuvan University
Faculty of Humanities and Social Sciences
Kathmandu Business Campus

Supervisor's Recommendation

I hereby recommend that this project prepared under my supervision by Salina Maharjan and Rikin Tuladhar entitled **"Work Progress Tracker"** in partial fulfillment of the requirements for the degree of Bachelor of Computer Application is recommended for the final evaluation.

SIGNATURE

SUPERVISOR

Tribhuvan University
Faculty of Humanities and Social Sciences
Kathmandu Business Campus

LETTER OF APPROVAL

This is to certify that this project prepared by Salina Maharjan and Rikin Tuladhar entitled **"Work Progress Tracker "** in partial fulfillment of the requirements for the degree of Bachelor in Computer Application has been evaluated. In our opinion it is satisfactory in the scope and quality as a project for the required degree.

SIGNATURE of Supervisor	**SIGNATURE of HOD/ Coordinator**
SIGNATURE of Internal Examiner	**SIGNATURE of External Examiner External**

Kathmandu Business Campus

Ref No:

Date:

Subject: Approval of Project Proposal

The project entitled "Work Progress Tracker" proposed by Ms. Salina Maharjan and Mr. Rikin Tuladhar for the partial fulfillment of the requirement for Bachelor in Computer Application (BCA), fourth semester has been approved for further development.

Proposal Evaluation Committee

1. _____

2. _____

3. _____

4. _____

_____

Mr.

Campus Chief (.)

Table of contents

1. Introduction

"Work Progress Tracker" is a work progress tracking site that can be accessed throughout the organization with the proper provided login information. This system helps employers or HR managers keep track of the employment work progress of their staff. It can be used to monitor various aspects of an employee's work progress including performance evaluation of the employee, working capacity. This system has two types of accessing mode - "User/Employee" and "Administrator/Manager".

Typically, a work progress tracker can be implemented on a website. This feature allows managers to assess the performance of their employees and provide feedback on their progress. Overall, a work progress tracker can help employers manage their workforce more effectively, while also providing employees with a transparent and fair way to track their progress and performance.

Overall, a work progress tracker can provide numerous benefits to both the organization and employees. By tracking various aspects of an employee's status and performance, it can help improve productivity, morale, and job satisfaction, while also providing employers with valuable insights into their workforce.

2. Problem Statement

In context of Nepal,

- Many companies do not use tracking apps for their employees which might decrease the productivity of that company.
- Without a system for tracking employee status and performance, it can be difficult for managers to keep track of who is doing what, how well they are doing it, and whether they are meeting their goals and objectives.
- Without regular performance evaluations and feedback, employees may not know where they stand or what they need to improve. This can lead to low morale and decreased job satisfaction.

3. Objectives

The main objective of this project is to build web applications to track work progress.

- To assign tasks to the employee with deadlines.
- To provide employees with a platform to track their task progress.
- To provide feedback to employee from their supervisors after completion of task.

4. Scope and Limitations

Every website has its own unique features and its limitations. This website offers following scope and limitation following things:

4.1 Scope

- Companies of all sizes can use work progress trackers to help their employees stay on track of assigned task.
- This application can be used to meet deadlines and achieve their goals.

4.2 Limitations

- The app may be limited in its ability to accurately track certain types of work, such as creative work like problem solving or non-computer-based work.
- The app is limited in providing resources like file sharing, chatting between manager and employees as it is only used for assigning tasks with deadlines.

5. Literature Review

For this project, we researched and reviewed some of the related websites and applications like (jira[1],trello[2],basecamp[3] etc). Throughout the research, we found out that there are very few websites or applications related to work progress tracking websites. There was no proper documentation on the performance of their employees. Also, the duration of the work was not mentioned. The feedback option was not available for the manager for guiding employees on some of the websites that we reviewed.

Another flaw we saw was that employees were not able to archive a task after they completed it. For different departments they have different platform services which makes user hard to keep up and some users may find it confusing.

Our approach is to achieve the limitation other system could not fulfill. Our system has the features like providing proper documentation (progress bar) on the performance of the employee, the manager can also give feedback as the feedback option is also available, also to archive task that has been completed.

6. Methodology

We are going to use the waterfall methodology while building this website. This project has specific documentation, fixed requirements, and well- understood technology so to build this system, waterfall methodology is the most appropriate system development life cycle.

The Waterfall model is a traditional project management methodology that follows a linear sequential approach with distinct phases. It is very simple to understand and use. In a waterfall model, each phase must be completed before the next phase can begin and there is no overlapping in the phases. It is easy to arrange tasks and clearly defined stages.

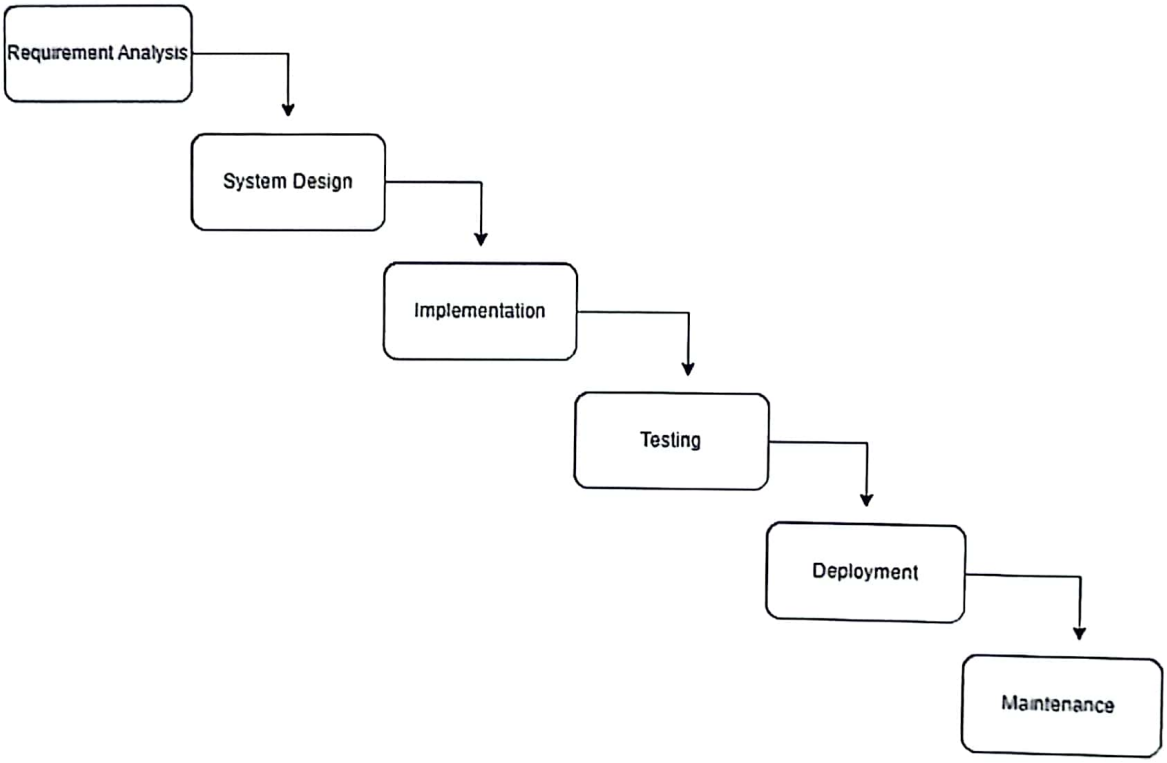

Fig: Waterfall software development model

Overall, the Waterfall model provides a structured approach to the development of an employee work tracking website. It ensures that all necessary phases are completed before moving on to the next, reducing the risk of errors and ensuring that the final product meets the needs of end-users.

6.1 System Analysis

System analysis is the process of studying and understanding complex systems to identify their components, relationships, and behaviors. It involves breaking down a system into its constituent parts, examining their interactions and dependencies, and evaluating the system's overall performance.

The goal of system analysis is to develop an understanding of the system's structure and function, as well as any problems or inefficiencies that may exist within it. This information can then be used to propose changes or improvements to the system, with the aim of increasing its efficiency, effectiveness, or other desirable qualities.
System analysis is used in a wide range of fields, including engineering, computer science, business, and management. It is a key part of the process of designing, developing, and implementing new systems, as well as improving and optimizing existing ones.

6.1.1 Requirement Identification:

Requirement analysis is done while developing a system and before implementing it, it is necessary to analyze the whole system requirement. It is categories into mainly two parts:

i. Functional requirements
ii. Non-functional requirements

6.1.2 Feasibility Study

A feasibility study is an analysis that considers all the project's affecting factors like economic, technical, legal and scheduling considerations.

- **Technical Feasibility:**
  To design this system, we will be using existing technologies, software and hardware so there is no technological hurdle to build this system.

- **Operational Feasibility:**
  These include reliability, maintainability, usability, support ability. The proposed system is operationally feasible as it is reliable for all types of users i.e., whether the user has knowledge of a computer or not. The proposed system is supported for a small to large-scale organization. It is simple and easy to use due to its simple user interface and its operational feasible.

Tools:

Front-End:
- HTML
- CSS
- JAVASCRIPT

Back-End:
- PHP
- MySQL

6.2 System Design

Context Level:

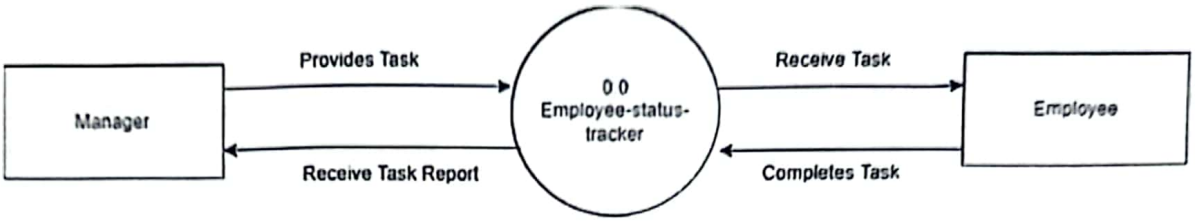

Fig: context level Diagram

ER Diagram:

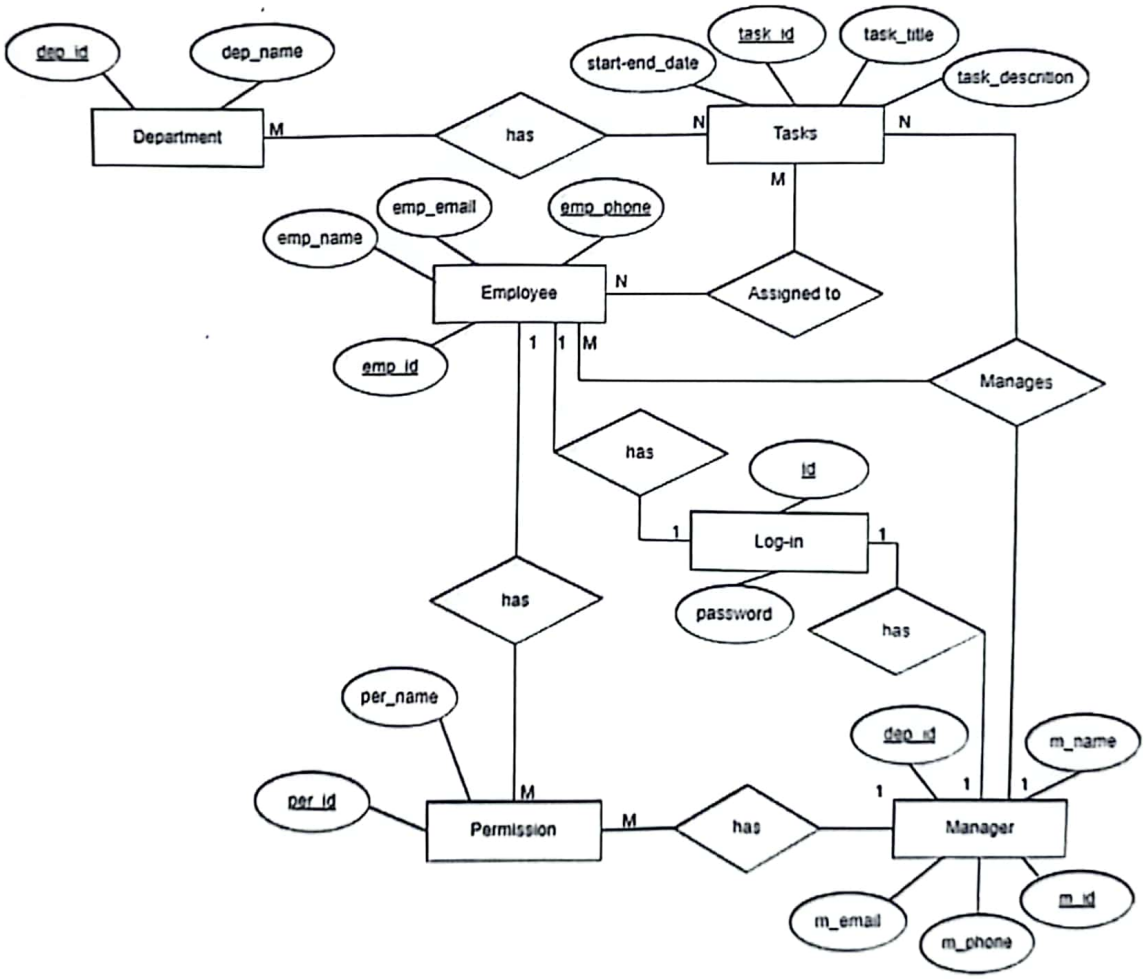

Fig:ER diagram

Gantt Chart (Project Schedule):

A Gantt chart is a type of bar chart that illustrates a project schedule. It shows the start and end dates of individual tasks, as well as their dependencies and duration ,Gantt chart are commonly used in project management to visualize project timelines and help track progress.

Fig: Gantt chart

According to our Gantt chart,

Task 1. Planning is the first step in the project and is expected to take 5 days. We did plan form Mar-15 till Mar-20. In planning, we discussed the problem statement, objectives, scope and limitation and literature review.

Task 2. Analysis is expected to take 5 days. We did an analysis from Mar-25 to Mar-30. In the analysis, We discussed the methodology to use requirement identification, feasibility study, and tools

Task 3. Design is expected to take 6 days. We did design from Apr-3 till Apr-9. We design DFD and ER-diagrams.

Task 4. Coding is expected to take 30 days.We will be doing coding from APr-16 to May16 .We will be building the entire system.

Task 5. Testing is expected to take 7 days.We will be testing the system from May-20 till May-27. We will be doing various testing like unit testing, validation testing, system testing and so on.

Task 6 Delivery is expected to take 6 days. This is our last task and we will deliver the system.

By using a Gannt char, we can visualize the project schedule, identify critical path task, and manage dependencies to ensure that the project is completed on time and within budget.

Expected Outcome

After the system is completed within the scheduled time, users will be able to register and log in to the system and take the advantage of the system's features like receiving works or tasks provided by the manager, get guidance as well as support, check their capabilities and efficiency of completing task or any works assigned by the managers. The employees can also work on themselves for better performance.

For manager will be able to login to the system for the management for generating reports and managing employee information. The admin can also assign, update and delete tasks, assign date of completion of any task, give positive and negative remarks to the employee according to their work performance.

Conclusion

Overall, a work progress tracker will provide the services for any organization that wants to keep track of the status of its work assigned to the employee. The system provides real-time data on employees, work progress, performance, and other important information that helps managers make informed decisions. With this system, organizations can easily identify areas that need improvement and take corrective action where necessary. Therefore, it is a must-have tool for any organization that wants to succeed in today's fast-paced business environment.

References

Works Cited

[1] Student Projects Guide, "Task Management System DFD Diagram,"Student Projects Guide,[Online].Available:https://studentprojectguide.com/project-report/system-design/task-management-system-dfd-diagram/ [Accessed 21 3 2023].

[2] Slide Share,"Employee Time and Task Tracking System,"Slide Share,[Online].Available: https://www.slideshare.net/imranjdar/employee-time-and-task-tracking-system[Accessed 21 3 2023]

[3] Project Manager,"Task Management,"Project Manager,[Online].Available: https://www.projectmanager.com/guides/task-management [Accessed 21 3 2023]