

Documentation for task manager system

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Introduction

Task management is an activity in which an individual or team leader follows his task cycle and makes decisions based on progress. Tasks are managed with software tools that help you effectively organize and manage tasks by using functions like task creation, planning, customization, project progress, tasks, and reporting. The reports created help in the management analysis, the overall efficiency of the individual, department or organization.

In fact, many people believe that task management should serve as a foundation for project management activities. Task management may form part of project management and process management and can serve as the foundation for efficient workflow in an organization. Project managers have a detailed and up-to-date project schedule, and are usually good at directing team members and moving the project forward.

Task manager system provides for managers and employees many features that help them do their work more accurately and quickly and help to increase efficiency and speed of delivery and good organization such as:

- Projects and Tasks, assignment and reassignment, prioritization, task sharing, etc.
- Notification and report generation.
- Calendar.
- Security and access control.

The team leader is responsible for creating, assigning, prioritizing and monitoring a task to ensure that it is completed on time. When managing a task assigned to a group, some tools provide a real-time view and easy access to all related content and discussions. Administrative features allow administrators to change priorities, reassign tasks, add more time or people to handle the tasks and approve tasks when finished.

Through task management system is possible to track and identify an employee based on what he/she is doing, determine the time a task will take and to determine the

employee's efficiency. Most tools allow users to visually manage a task and to see the history of completed, pending, overdue and on-going tasks.

The reports generated by the tools may contain details such as the start date, deadline, overdue date, task budget, main tasks and time allocation.

Task management is therefore an important process that allows supervisors to monitor the time employees spend on a task, the on-going and completed tasks, and an employee's workload and performance. This information can be used to balance workloads, forecast bottlenecks and guard against delays and missed deadlines.

Problem Definition

Today, the quality of work is measured by its efficiency, speed of delivery and organization in more effective ways, but due to the lack of staff capabilities, it is difficult for them to communicate with each other. The assignment of tasks to the employees takes a lot of time and effort from the managers and the search for a specific employee or a specific ID or any Information in the paper files makes it worse and all this increases the time required to complete the project, which increases the budget of the project and the effort made and reflect negatively on customers.

System Objective

Projects are made up of tasks, and knowing how to manage your tasks is the secret to get your projects complete on time.

The Task Management System provides many features to help managers and employees perform their tasks.

The system allows all users to secure their information and account by not logging in to their account without entering their username and password.

Managing tasks is manager's duty but now it's not, because task manager will do this job faster, more accurately and save time for managers.

It allows manager to manage projects and employees information, also can view projects and tasks history and see the time plan for them so that will make him keep tracking the projects and tasks, and for sure assigning employees to projects is the manager's job so task manager makes it easy to do this job with just one click, instead of searching for a specific employee or any information in paper files

The manager can search with any information he wants by his keyboard (such as ways to communicate with them and their salaries) and task manager will do the search job for him so it saves time for all and have the work done faster.

Task manager views him all Projects, tasks, comments and reports on any of them also allows him to modify the data of employees and projects and tasks.

It also allows him to add new employees and new projects and to divide them into tasks and set the date of starting and delivery and appoint an employee for each task and allows him to add comments or reports on any project.

Employees can view assigned projects and the tasks of specific project for them, so they can immediately start doing their tasks, and they can write comments on the task to help them or others to finish the task quickly and on time, after finishing the task they change the status of the task to close so the manager is notified that the task has been done, also they can view all previous tasks, and forward task for specific employee "So the task will be added to the new employee after his approval".

The system also calculates the number of working hours of each employees and the salary account of each one and registration.

Requirements

1. User Requirements:

1. Every user must login by his/her user name and password.
2. View all information about specific employee, project or task.
3. Add new employees.
4. Add new projects.
5. Assign an employee to do task.
6. Edit employee, project or task information.
7. Add comments on tasks.
8. Change the projects and the tasks status to Completed.
9. Assign a specific task to a specific employee after his / her approval.
10. Calculate the salary of each employee.

2. System Requirements:

1. Every user must login by his/her user name and password:
 - 1.1. Enter user name and password.
 - 1.2. If they are valid, the system stores the registration time and the user interface appear either as administrator or employee.

- 1.3. If they are wrong, the computer will print a message that one of them is wrong.
2. View all information about specific employee, project or task:
 - 2.1. The system prints all employees, projects or tasks before the user.
 - 2.2. The system searches for the employee using id or name and prints the system data if the employee is found.
 - 2.3. Or search for the project or task either by id or name and the system prints the project or task information if the project or task is found.
3. Add new employees:
 - 3.1. Enter employee data from name, phone, etc. The program stores information.
4. Add new projects:
 - 4.1. Enter the project data from the address and the customer's data and so on.
 - 4.2. It inserts the number of tasks in this project and splits it and inserts data for each task.
 - 4.3. Enter the employee data responsible for each task.
5. Assign an employee to do task:
 - 5.1. Search for the project.
 - 5.2. Choose a specific task.
 - 5.3. Enter specific employee information.
6. Edit employee, project or task information:
 - 6.1. Search for the employee or project to be modified.
 - 6.2. The user will change the incorrect data correctly.
 - 6.3. Update databases.
7. Add comments on tasks:
 - 7.1. Search for the task.
 - 7.2. Write comments about the task and the system records employee data and date of writing.
8. Change the projects and the tasks status to Completed:
 - 8.1. Search for a project or mission.
 - 8.2. Change the status of the project or task to be completed and update the rules of the data.
9. Assign a specific task to a specific employee after his / her approval:
 - 9.1. Choose a specific task.
 - 9.2. Enter the employee information to which the task will be assigned.
 - 9.3. Waiting for employee approval If approved, the job will be transferred to him and if disapproval, the job will remain with the previous employee.

10. Calculate the salary of each employee:

10.1. The system calculates the number of working hours based on the employee's tasks.

10.2. The salary of each employee is calculated based on the number of working hours and the cost of an hour.

3. Functional Requirements:

- 1. The user shall login by his/her user name and password.**
- 2. The manager shall view all information about specific employee, project or task.**
- 3. The manager shall add new employees.**
- 4. The manager shall add new projects.**
- 5. The manager shall divide each project into tasks.**
- 6. The manager shall assign an employee to do specific task.**
- 7. The manager shall modify employee, project or task information.**
- 8. The manager shall change the project status to Completed.**
- 9. The employee shall view all information about a specific project or task.**
- 10. The employee shall assign a specific task to a specific employee after his / her approval.**
- 11. The employee shall add comments on tasks.**
- 12. The employee shall change the status of the task to done.**

4. Non-Functional Requirements:

- 1. A system should keep data about each project, task, employee, manager and client.**
- 2. Change the status of the project to the completion of completion of all tasks related to it.**
- 3. Automatically update information every short period.**
- 4. Calculate the salary of each employee.**

Time Plan

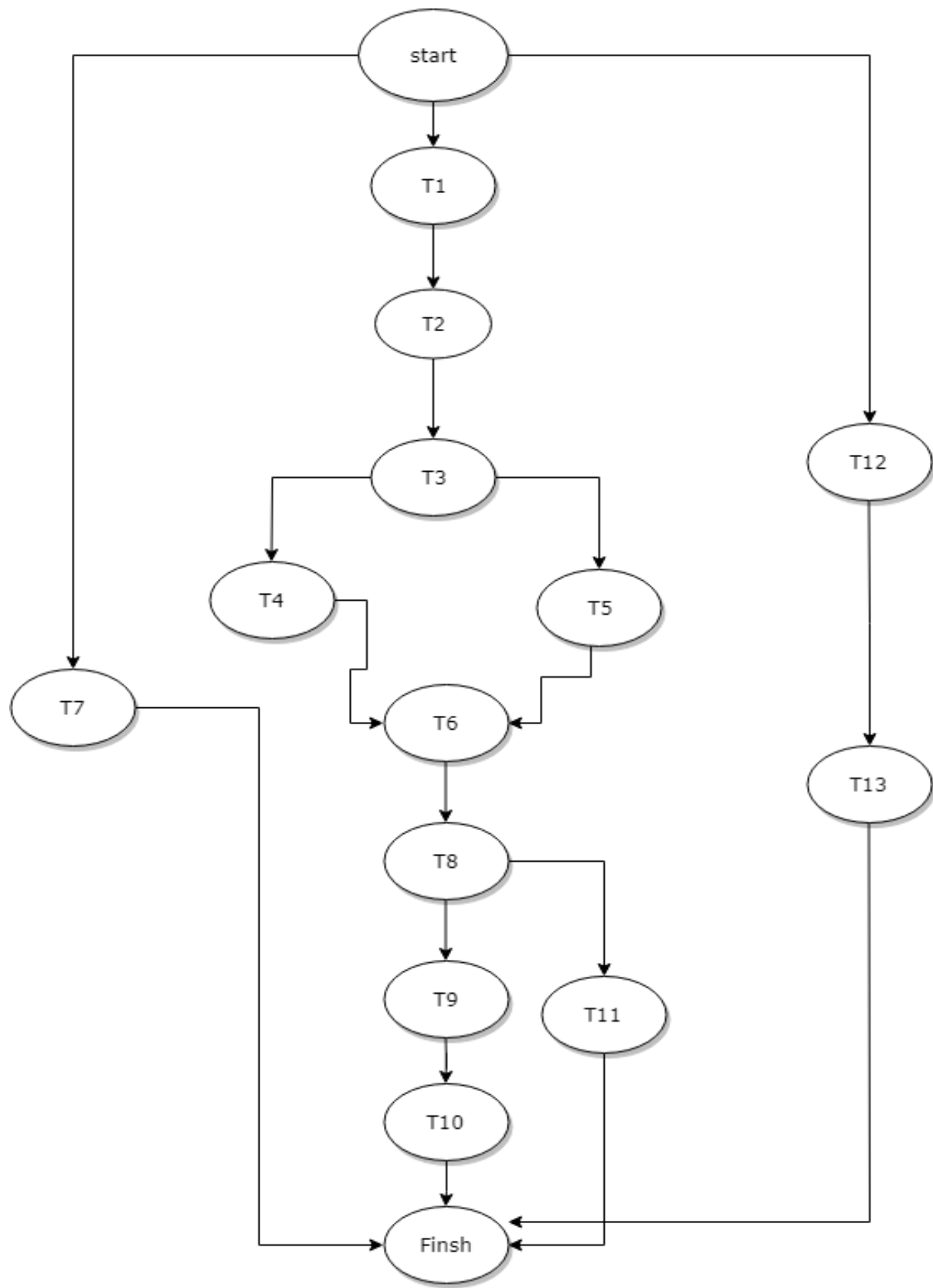
1. Time plan without mile-stones

Task No	Task Name	Duration	Depend
Task 1	Database	8 Days	
Task 2	Design (GUI)	8 Days	T1
Task 3	Login function	3 Days	T2
Task 4	Add employee / project function	6 Days	T3
Task 5	Edit employee / project function	5 Days	T3
Task 6	Assign employee to task function	4 Days	T4,T5
Task 7	Calculate salary function	5 Days	
Task 8	View assigned project / tasks function	6 Days	T6
Task 9	Forward task to specific employee	5 Days	T8
Task 10	Employee accept forward task	4 Days	T9
Task 11	Add comment on tasks function	5 Days	T8
Task 12	View project / tasks history and status	6 Days	
Task 13	Priority order for tasks / project	5 Days	T12

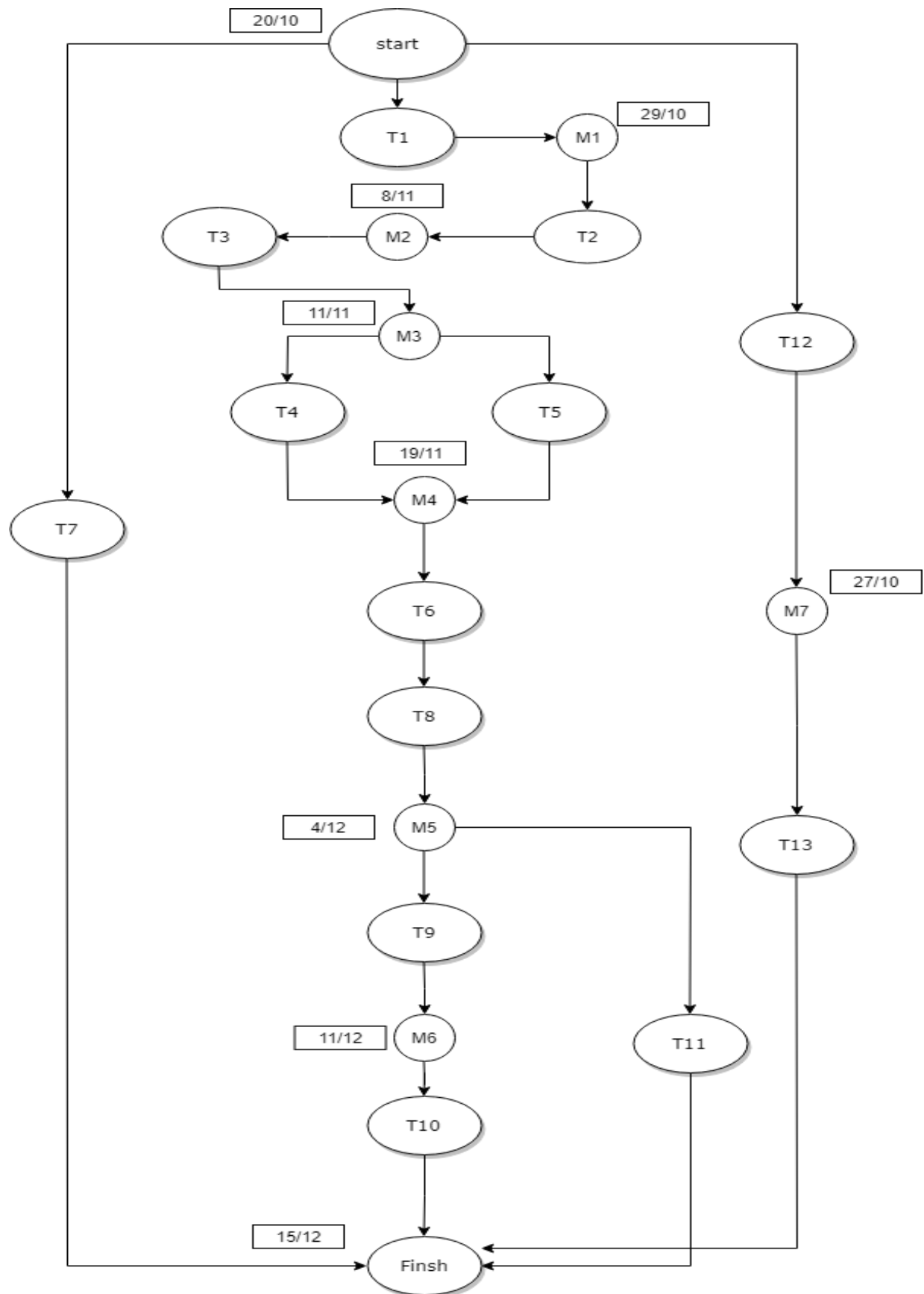
2. Time plan with mile-stones

Task No	Task Name	Duration	Depend
Task 1	Database	8 Days	
Task 2	Design (GUI)	8 Days	T1 (M1)
Task 3	Login function	3 Days	T2 (M2)
Task 4	Add employee / project function	6 Days	T3 (M3)
Task 5	Edit employee / project function	5 Days	T3 (M3)
Task 6	Assign employee to task function	4 Days	T4,T5(M4)
Task 7	Calculate salary function	5 Days	
Task 8	View assigned project / tasks function	6 Days	T6
Task 9	Forward task to specific employee	5 Days	T8 (M5)
Task 10	Employee accept forward task	4 Days	T9 (M6)
Task 11	Add comment on tasks function	5 Days	T8 (M5)
Task 12	View project / tasks history and status	6 Days	
Task 13	Priority order for tasks / project	5 Days	T12 (M7)

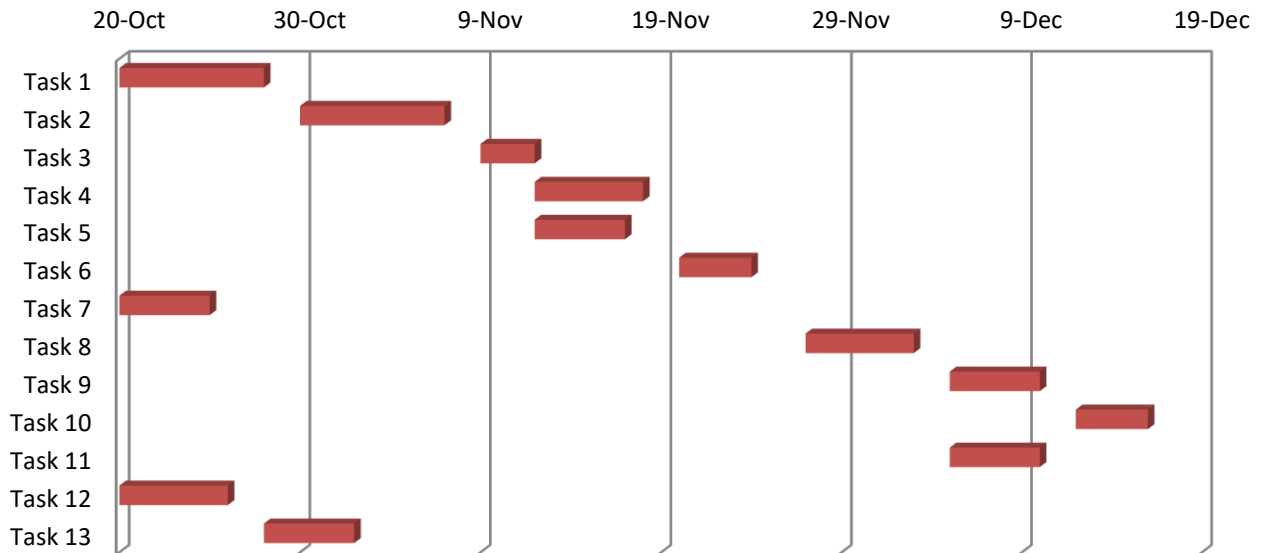
1. Activity-Network without mile-stones



2. Activity-Network with mile-stones



Gantt Chart



	Task 13	Task 12	Task 11	Task 10	Task 9	Task 8	Task 7	Task 6	Task 5	Task 4	Task 3	Task 2	Task 1
Start Date	28-Oct	20-Oct	5-Dec	12-Dec	5-Dec	27-Nov	20-Oct	20-Nov	12-Nov	12-Nov	9-Nov	30-Oct	20-Oct
Duration	5	6	5	4	5	6	5	4	5	6	3	8	8

System Scenario

When the system starts running it automatically restores all its data and shows the user to choose whether the administrator or employee has closed the system.

1. If you choose to be a manager, you will go to the registration interface. You have to enter your name and password. If one of them is wrong, you will remain on the same page and a message will appear indicating a name or password error. If both are correct, you will go to the next page and the system will automatically store your login time.

You will see the manager's home page, which contains the manager's choices and the current tasks and projects.

The system provides several choices for the manager including:

- 1.1. It displays its tasks and projects on the calendar.
- 1.2. It allows adding a new employee by clicking the button on the selection and go to the next page and enter the new employee data then press OK button, data

will be stored and system information will be updated then return to the home page of the manager.

- 1.3. It allows adding a new project by clicking the button on the selection and go to the next page and enter the new project data, dividing it into tasks, assigning it to employees, then press OK button, information will be stored, and system information will be updated then return to the home page of the manager.
- 1.4. You can also edit the information of any employee by choosing the following option, go to the employee search page and search by id or name, select and edit the information then press the OK button; the system will update the information and return to the main page of the manager.
- 1.5. The same is true for modifying the data of a project or changing its status to completion.
- 1.6. There is also a choice to assign a specific employee to a specific task by moving to the next page and fill in the required data and press OK and the system will update it is data automatically and return to the previous page.
- 1.7. It can display and search for previous projects.
2. If you choose you are an employee, you will go to the registration interface. You have to enter your name and password if one of them is wrong you will remain on the same page and you a message will appear indicating a name or password error. If both are correct, you will go to the next page and the system will automatically store your login time.
You will see the employee's home page, which contains the employee's choices and the current tasks and projects.
The system provides several choices for the employee including:
 - 2.1. It displays it is tasks and projects on the calendar.
 - 2.2. It's possible to add a comment on the tasks by searching for the task and adding the comment.
 - 2.3. There is also a choice to change the status of the task that was accomplished.
 - 2.4. You can also transfer a task to another employee by selecting the task and the employee and wait for it to be accepted by the other employee.
 - 2.5. It can display and search for previous tasks.
 - 2.6. The system automatically calculates the number of working hours per employee, calculating their salaries and storing them.
3. The third and last choice in the home page of the program is the system shutdown.