



Faculty of computers and information

System Analysis & Design

The Problem:

Any financial transactions in most companies are difficult to be paper-based, especially large companies, with the internal and external financial transactions they contain. For this reason, one of them is that the human factor results in an error rate. It is difficult to calculate the percentage of 100. Secondly, if it depends on the human factor, it will be more expensive because I will need the number of workers More and more efficient, and thirdly, I will not be able to specify the company. You will gain or lose through transactions.

The solution :

Most companies, in order to avoid this problem, rely on software that manages all financial transactions, whether inside or outside the company, and provides graphs showing the state of the company, showing whether it is a gain, no loss, or equal percentages, and it knows payments belonging to any of its clients.

Idea :

ERP System

Request Form

Date: 28 /10 / 2021

Department : decorations

Submitted By : Ahmed Mohamed

Location: Cairo

Title : Engineer

E-mail : Ahmed12@gmail.com

Reason For Request :

☐ Correction of system issue

☐ System enhancement

☒ **New system**

Description Of Request :

A system that manages the internal and external financial transactions and has a part to follow up the stages of completing the requirements of the client in addition to the management part of the company.

For IT Dept. :

☒ **Approved**

☐ Modified

☐ Rejected

Date : 30 / 10 / 2021

Feasibility Study

➤ Operational Feasibility:

- **Does management support the project?**

Yes, as the project will provide a lot of features that will improve the service, organize the management, reduce time and cost and provide daily overview for the whole company matters

- **Do users support project?**

Yes, after showing the users the features of the project they are going to support it as it will save time for them and everything will be organized

Users don't have to go and check the progress as they can check through the system

- **Will the new system result in workforce reduction?**

No, it won't affect the workforce it will more likely organize everything, as we will need workforce to control and manage the system

It will make their job easier

- **Will the new system require training?**

Yes, it will require simple training for workforce not for users as it will be very simple to use the part of users.

- **Will be any risk to the company's image?**

No, there will be no risk as there will be technical support for the system

- **Does the development schedule conflict with other company priorities?**

No it doesn't

- **Do legal issues need to be considered?**

No

Summary:

Management and users support the project, it will not result in workforce reduction, the new system will require training for workforce, there will be no risk to the company's image, and the development schedule doesn't conflict with other company priorities.

➤ **Technical Feasibility:**

*** Does the company have the necessary hardware, software, and network resources? If not, can those resources be acquired without difficulty?**

Yes, Company will need resources of hardware, software and network as computer and Caples and strong internet connection for system to work efficiently

*** Does the company have the needed technical expertise? If not, can it be acquired?**

Yes, it will need part time IT technical.

*** Does the proposed platform have sufficient capacity for future needs? If not, can it be expanded?**

Yes, proposed platform has sufficient capacity for future needs

*** Will a prototype be required?**

Yes, a growth up prototype will be needed, as if there is any error in prototype model it will be easy to recover it. Will the hardware and software environment be reliable?

*** Will it integrate with other company information systems, both now and in the future? Will it interface properly with external systems operated by customers and suppliers?**

Yes, Hardware and software will integrate with company information system and interface with external systems operated by customers and suppliers.

*** Do clear expectations and performance specifications exist? Will the system be able to handle future transaction volume and company growth?**

Yes, System will carry out all company transactions which will be able to handle future transaction volume and company growth.

Summary:

Company will need resources of hardware, software and network as computer and Caples and strong internet connection for system to work efficiently , it will need part time IT technical , Proposed platform has sufficient capacity for future needs , A growth up prototype will be needed, as if there is any error in prototype model it will be easy to recover it , Hardware and software will integrate with company information system and interface with external systems operated by customers and suppliers , System will carry out all company transactions which will be able to handle future transaction volume and company growth.

➤ Economic Feasibility:

	IT	HARDWARE And Equipment	SOFTWARE In-house Development, Purchases from vendors	TRANING	
	Staff	4 pc / 8.000 POUND	Staff	Informal Training	
TOTAL	10.000 POUND	32.000 POUND	30.000 POUND	0.0 POUND	72.000 POUND

➤ **Schedule Feasibility:**

- **Can the company or its team control the factors that affect schedule feasibility?**

Yes, everything is under control.

- **Has management established a firm timetable for the project?**

No, the company accepted the timetable suggested from the software company.

- **What conditions must be satisfied during the development of system?**

- 1) Follow the time plan for each stage
- 2) The client will be notified of the end date of each phase of project
- 3) there will be a training period for the staff before launching the system

- **Will project management techniques be available to coordinate and control project?**

Yes, through the project management, a project manager will be appointed to check phases of project development and if it fits the time plan or not

- **Will accelerated schedule pose any risks?**

Yes, accelerated schedule may lead to increase the cost, which may not be suitable for the client to approve

- **Will a project manager be appointed?**

Yes

Phase	From	To
Requirements	1/11/2021	10/11/2021
Analysis	13/11/2021	31/11/2021
Design	26/11/2021	11/12/2021
Implementation	14/12/2021	14/1/2022
Testing	17/1/2022	22/1/2022
Maintenance (release)	25/1/2022	5/2/2022

Summary:

the company or its team will control the factors that affect schedule feasibility, the company accepted the timetable suggested from the software company, the conditions must be satisfied during the development of the system are Adhere to the time plan for each stage and The client will be notified of the end date of each phase of project and there will be a training period for the staff before launching the system, through the project management, a project manager will be appointed to check phases of project development and if it fits the time plan or not

Interview Questions

1- What is the main problem facing the company that needs to be solved by the software?

2- What category of customers does the company deal with?

3- How many phases does every apartment pass by?

4- Who is responsible for choosing materials and the cost? Client or the company?

5- Is the cost calculated by the end of every phase or by the end of the whole phases as total? How will this cost be collected?

6-What about time management? Is there an estimated deadline appointed to the end of each phase?

7- How is the cost of each phase calculated?

8-What are the most common conflicts that occur between the company and the customers? How could these issues be handled?

Report :

We made an interview with the main users of the system to get the most effective information to satisfy the user's needs.

- we started by asking about the main reason for taking the decision of making the system and the manager of the place replied that the main problem is that A system that manages the internal and external financial transactions and has a part to follow up the stages of completing the requirements of the client in addition to the management part of the company
- then we wanted to know what category of customers does the company deal with and he said that their company deal with all kinds of apartments with all sizes and locations
- then we talked about the number of phases that any apartment pass by and he said that any apartment pass by 9 phases and the phases of laying electrical wires and plumbing works could be done in parallel way
- then we talked about the responsibility of choosing materials and the cost ,Client or the company ? and he told me that their engineers helps the client to be aware of all cost ranges of materials, but the client makes the final decision
- when asking if the cost calculated by the end of every phase or by the end of the whole phases as total, How will this cost be purchased ? and he said "Yes, we specify the cost of each phase and notify the client with it and collect its cost after confirmation"
- By Asking about time management, he told us that they set a limited time for each phase and notify the client with estimated time for each one in case of delay beyond the specified time
- by asking about the cost calculation, the manager said that some special equations will be provided according to each case of customers
- finally we talked about the most common conflicts that occur between the company and the customers and How could these issues be handled, he said that he will provide us with the frequent questions and the answers of it like Sometimes after completion of some phases, the client has some modifications opinions, but our employees implement his requests, and inform him if these modifications will increase the cost or not

Questionnaire

ERP Model

ERP is an application that automates business processes, and provides insights and internal controls, drawing on a central database that collects inputs from departments including accounting, manufacturing, supply chain, sales, marketing and human resources (HR)



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تعديل الحساب

?Which department are you in the company

Accountant ☐

Customer service ☐

Workers ☐

Engineer ☐

?What is the most problem you have at work

إجابتك

?Does dealing with other departments affect your work

Yes ☐

No ☐

?If Yes, How can the system improve that

إجابتك

?Do you agree to the transfer to system

Yes ☐

No ☐

?If No, Why

إجابتك

What problems do you encounter in the current way and are expected to be resolved in the system

إجابتك

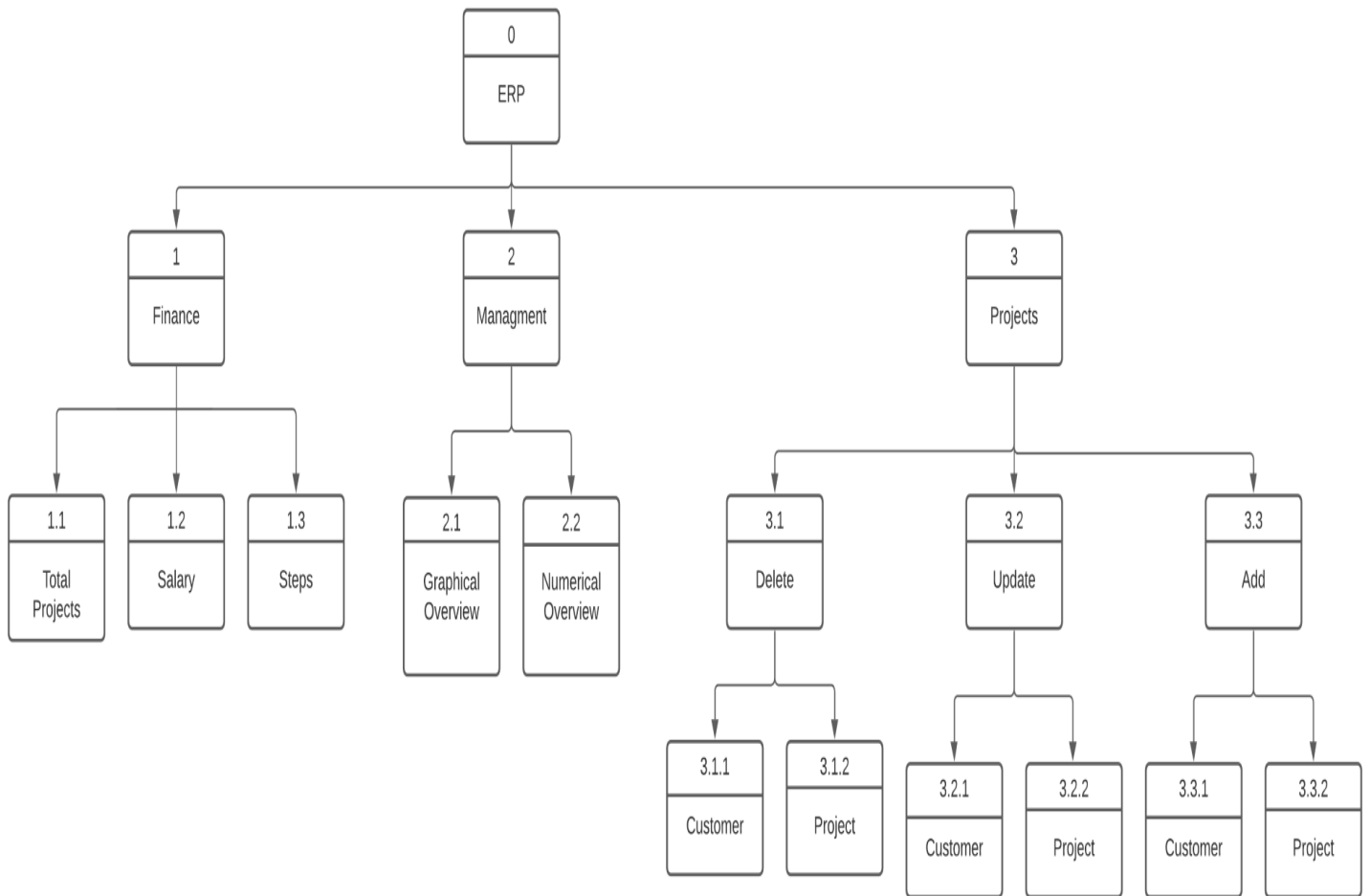
?Which additions would you like to add to the system

إجابتك

محرر النموذج

إرسال

FDD



Context level

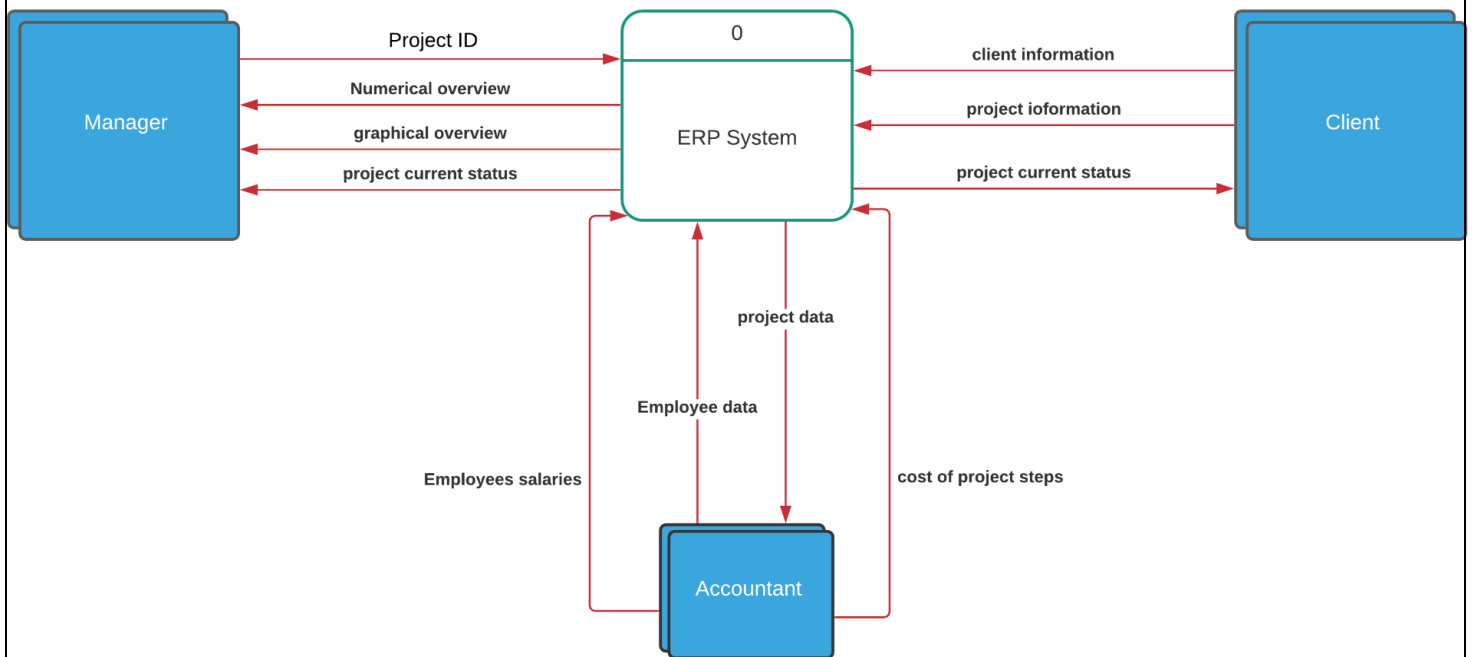
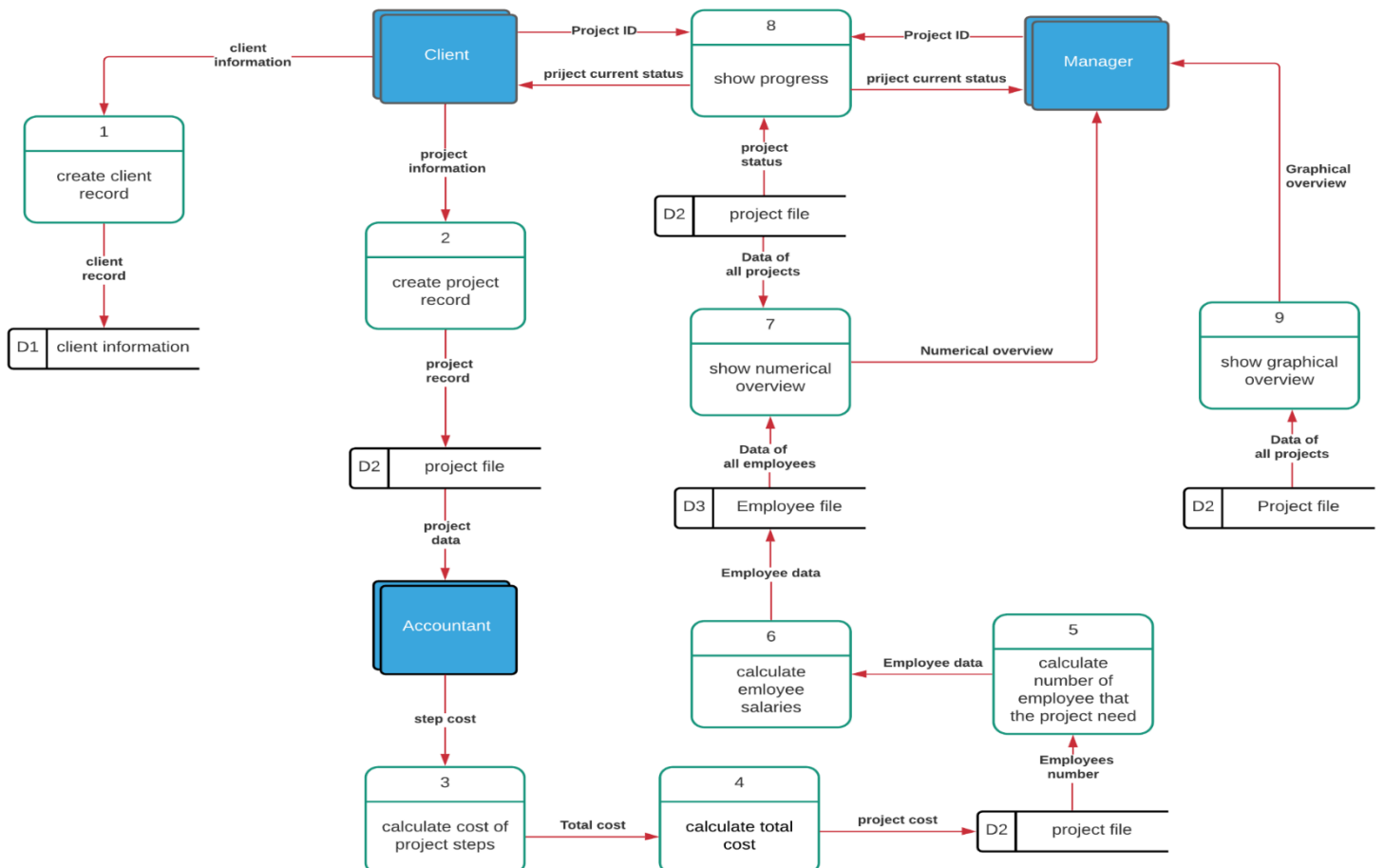


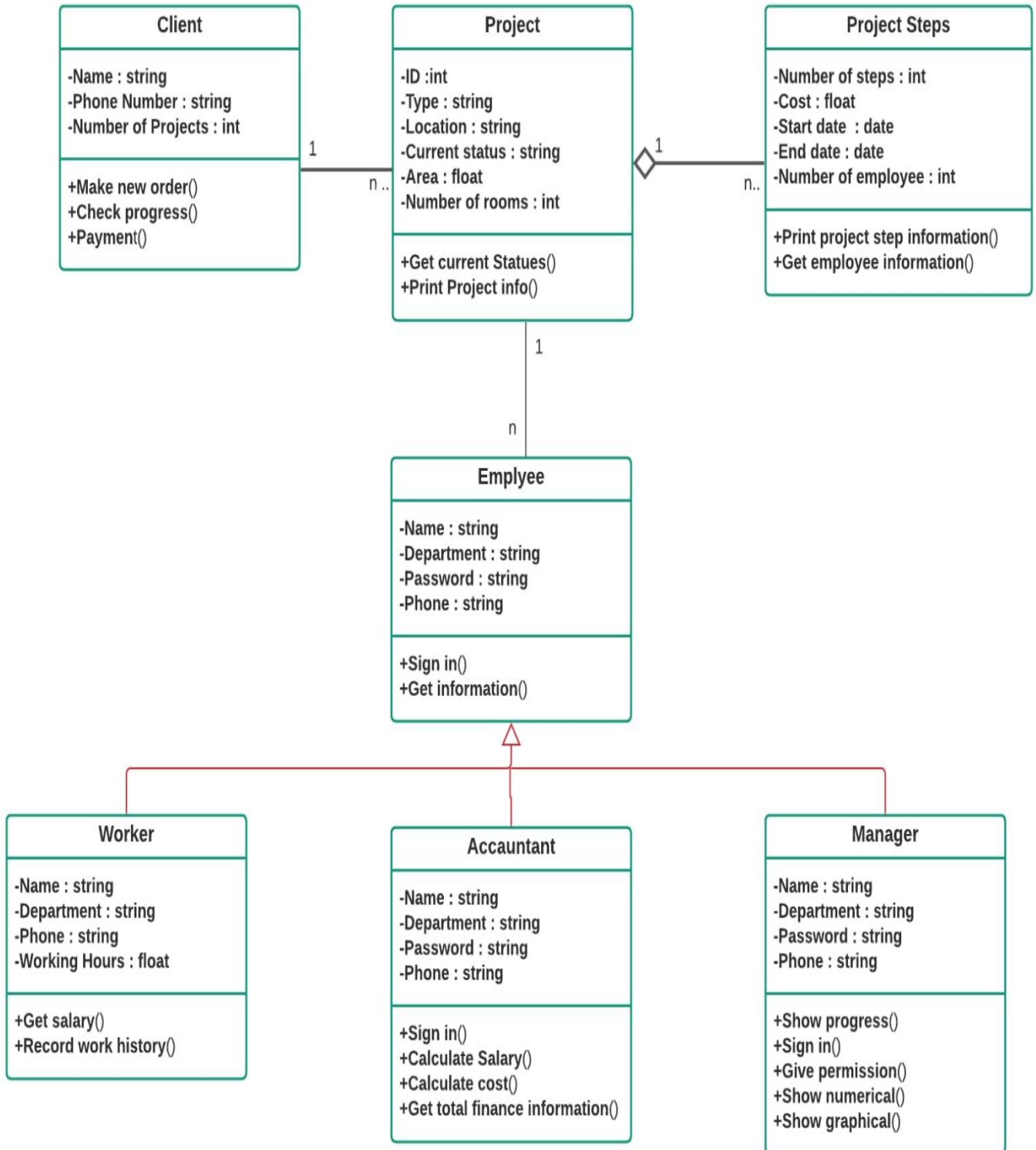
Diagram 0



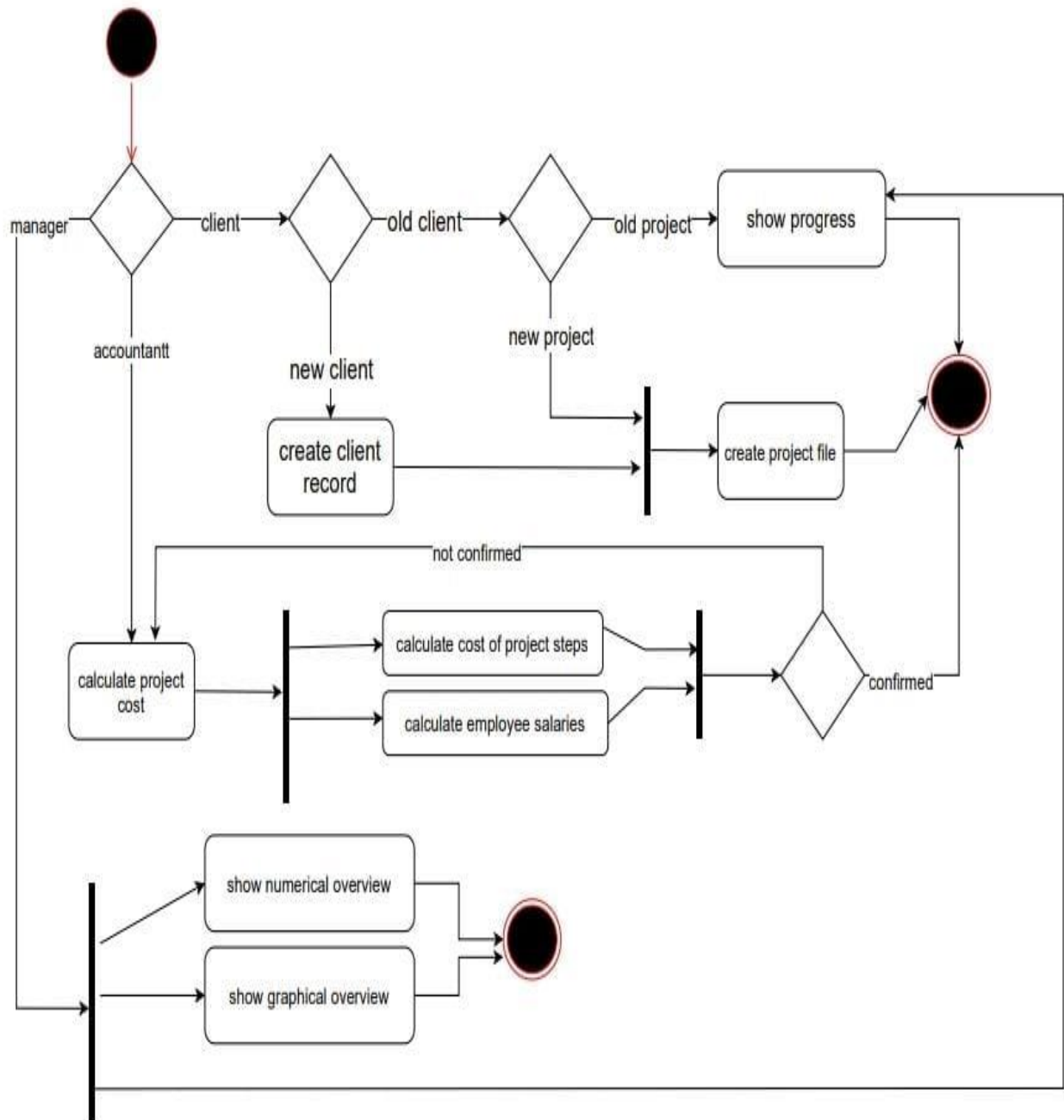
Use Case Diagram



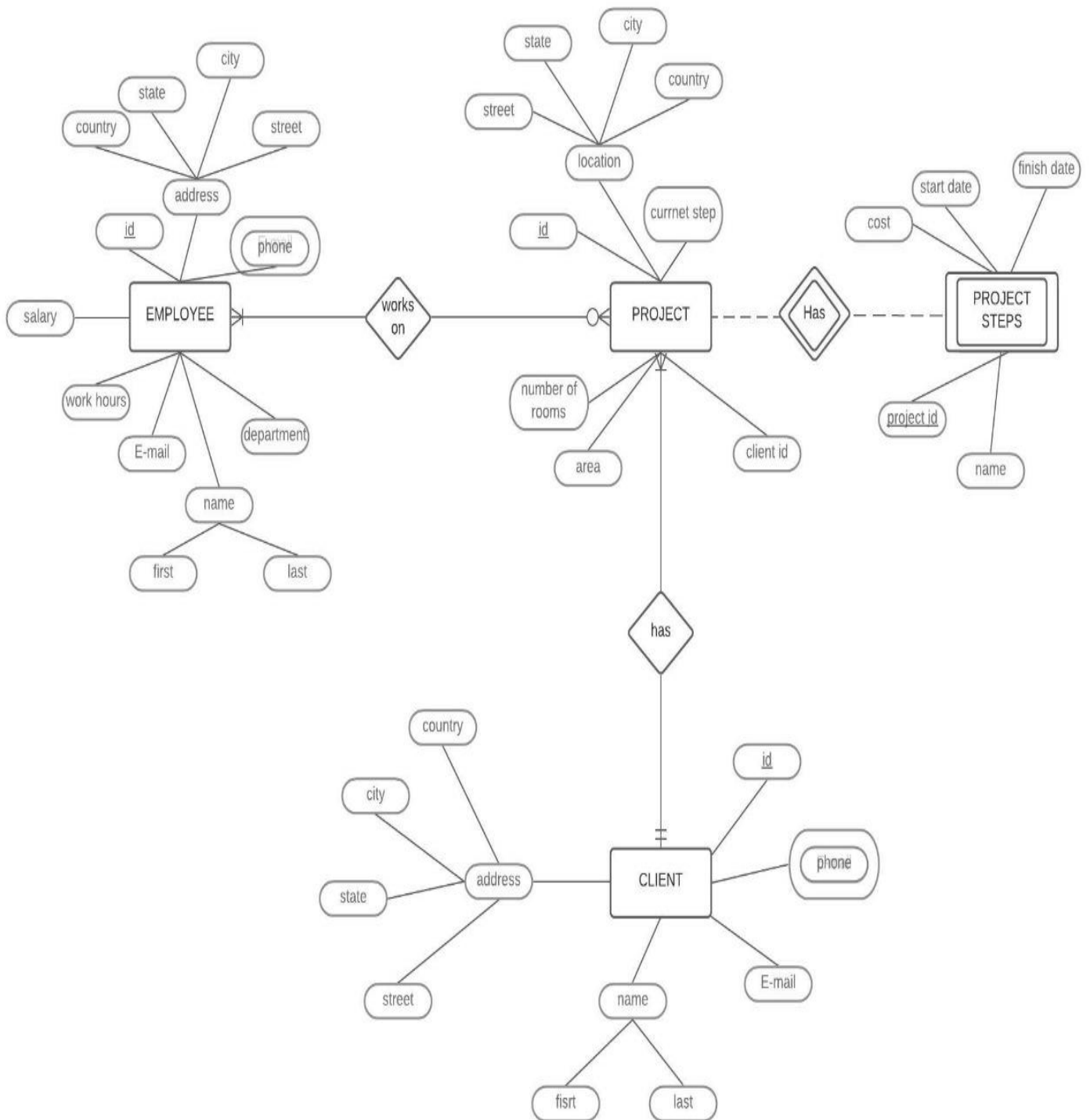
Class Diagram



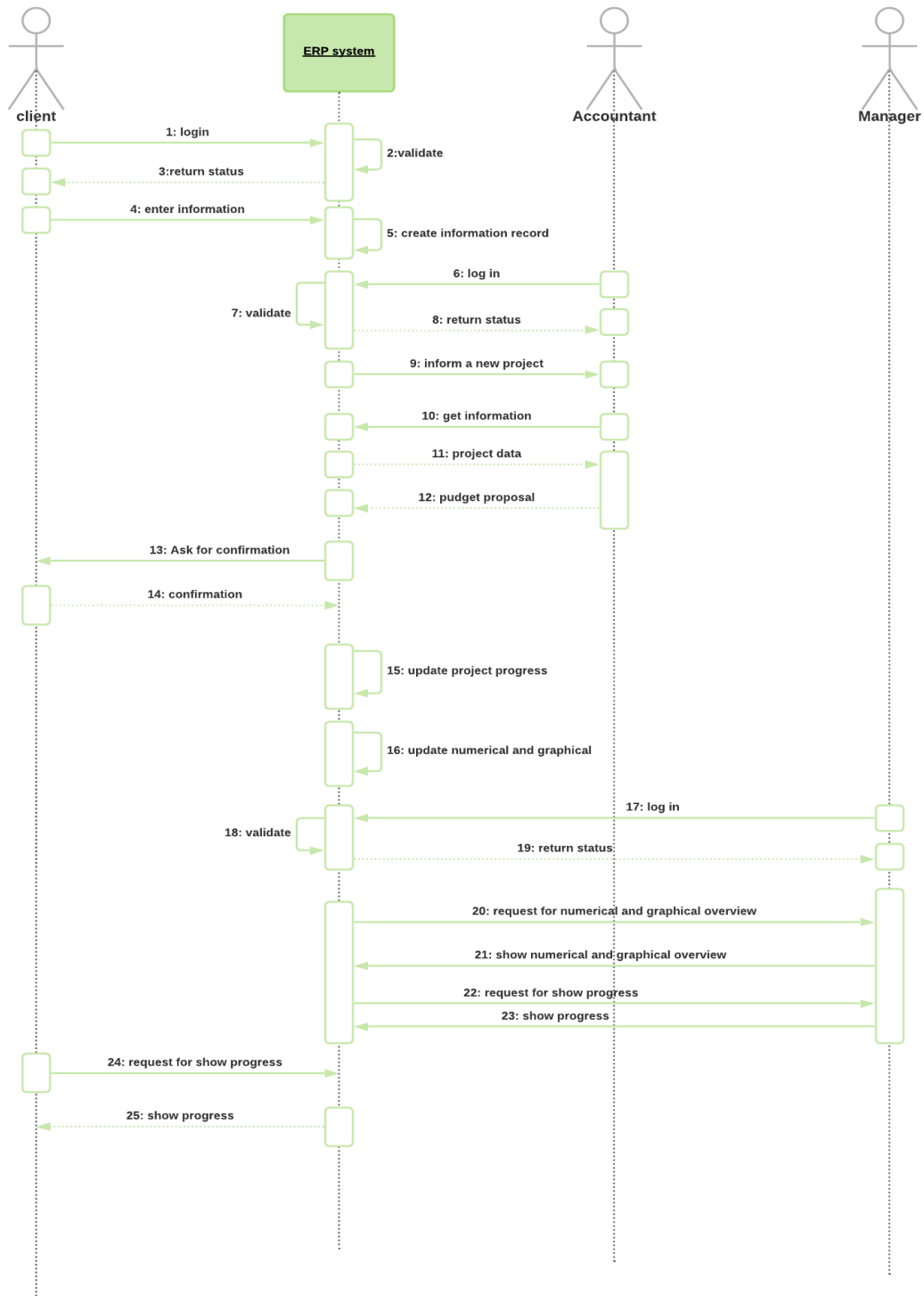
Activity diagram



Entity Relation Diagram (ERD)



Sequence Diagram



Team Members:

- Abd El-hameed Montasr Zyada
- Abd El-rahman Sameh Ebrahim
- Ahmed Mahmoud Yahia
- Ammar Mohammed Amin
- Shorouk Elsayed Eldeep
- Ghada Osama Awad
- Dina Abd El-salam Alkholy
- Maram Hasan Abd El-wahab
- Alaa Elsayed Abo Farrag