Case 1

Business Information & Co is a consulting firm. The firm is developing a new information system, and the manager asked for your help. This information system stores data about employees, projects, and clients. Each employee is involved in several projects. A project may have one or two employees involved and has a beginning time, duration, and price. An employee has a name, function, and email. A project is related to only one client. The system has several users. An employee is a specific case of a user. A user has a login and a password. It is necessary to store every time a user login the system. The system must produce a log, including access date and time.

Case 2

Suppose that you want to implement a system. This system allows storing information about clients,
orders, and products. A client has a name, address, and code. Each client may have several orders.
Each order will include just one product. Each order has a date, code, and product quantity. A name
and dimension characterize each product.

1. Draw the Class Diagram corresponding to this text.

2. Suppose now that each order may include several products. Draw the new Class Diagram.

The company ABC hired you to create a new system. This system allows for sharing information about companies. The accounting systems of the companies send financial information. The operators enter the system all the other information (e.g. name of the owners and managers). The system must store information about companies, accounts and managers and owners of those companies. Companies have a name and address. Each company belongs to a specific industry. Each company has several accounts. Each account has a year, title, and value. An account may be of one of two types: balance sheet account and Profit and account. The owners and managers have a name and address. The owners have a share of the capital and the managers a wage.

1. Create the Use Case Diagram

2. Create the Class diagram