## **Banking System:**

We need to model a banking system, which is a software application that manages financial transactions for a financial institution.

It manages customer account information; communicates with various channels, such as ATMs; and processes transactions that can be either a withdrawal, a deposit, or a transfer.

A bank can have different types of accounts. The system must maintain accurate and up-to-date information about each customer.

Finally, the banking system also manages employee information.

## **Hotel System**

We need to model a hotel system that is going to be used by hotels to manage their operations and provide services to their guests.

The system should be able to handle various types of room reservations, such as single room, double room, suite, and so on.

It should also be able to handle guest check-ins and check-outs. This involves collecting guest information, assigning rooms, and processing payments.

Restaurant management is another important aspect of the hotel domain. It involves managing restaurant reservations, tracking table availability, and processing food and beverage orders.

Additionally, the software should be able to schedule housekeeping tasks, track the status of cleaning and maintenance tasks, and manage housekeeping staff assignments.

Finally, this system should be able to handle various types of staff tasks.

## Library management system

We need to model a library system that is going to be used to manage various operations and provide library services to library users. It maintains accurate and up-to-date information about each item in the library collection.

Library materials, including books, magazines, DVDs, and other media should be stored and managed by the software. The system must be able to track the library items, including checkouts, renewals, and returns.

The system should be capable of scheduling appointments for users, managing the availability of library staff and resources. It also manages library billing and membership information.

## Online shopping system

We need to model an online shopping system for a software application that is going to be used to manage various operations and provide e-commerce services to customers. Product catalogs, including descriptions, images, pricing, and availability should be stored and managed by the software. The system must be able to process online orders, including tracking shipments, managing returns, and processing payments securely.

The system should be capable of scheduling deliveries for orders, managing the availability of products and resources, and providing customer support services.