

A Project on
“SUPERMARKET
MANAGEMENT SYSTEM”

B.TECH-SEM-VI



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1.INTRODUCTION

- In the manual system, there are number of inefficiencies that a salesperson face. The information retrieval is one of the foremost problems.
- Due to large market, there are many types of customers and each types of customers have their own distinct requirements so it create large record book to store the data of each customers.
- Large record books have to be maintained where relevant and irrelevant information has to be stored which is very untidy and difficult process.
- This deals with all such problems and tries to remove them in the best suitable fashion. The new system will cater to the need of the salespersons of any supermarket so that they can manage the system efficiently.

2.OVERVIEW OF THE PROJECT

- The Project is a kind of automation of supermarket and help salespersons in managing the various types of records pertaining to his/her customer. The product will help the user to work in a highly effective and efficient environment.
- The salespersons have been recording the customer information in the past and even in the present through their personal manual efforts. There are many inherent problems that exist in any manual system.
- By keeping the record of each types of user with efficient manner, admin can easily take decision based on previous Records and manager easily modify the products and quality based on customers choice.
- Using automated system, no need to keep handwritten notes and bills for future reference, so it's time consuming and increase the overall efficiency of the market.
- We just need to update records which we keep in our database after each successful transactions so it will automatically arrange the records in particular type of the product.
- Usually, they lack of efficiency. Less efficiency has a great impact on the productivity of any human being keeping the data up-to-date.

3.SOFTWARE REQUIREMENTS SPECIFICATION

3.1 Types User

- Cashier
- Manager
- Admin

3.2 System Functional Requirements

R.1:Sales Transaction

R.1.1:Manage Shopping Bag

R.1.1.1:Add Product

INPUT: Scan Bar Code

OUTPUT: Product added into bag

R.1.1.2: Remove Product

INPUT: Select Product

OUTPUT: product removed from bag

R.1.2: Payment

INPUT: get cash or debit card

OUTPUT: payment done

R.1.3 Print Bill

INPUT: Print Button Click

OUTPUT: Bill Print

R.2: Manage Inventory

R.2.1: Manage Category

R.2.1.1: Add Category

INPUT: Category name

OUTPUT: Category added to inventory

R.2.1.2: Delete Category

INPUT: Category id and name

OUTPUT: Confirmation message

R.2.2: Manage Product

R.2.2.1: Add Product

INPUT: Product Name ,Price and Category

OUTPUT: Product added to inventory

R.2.2.2: Update product's quantity

INPUT: Product id and name

OUTPUT: update product

R.2.2.3: Delete product

INPUT: Product id and name

OUTPUT: Confirmation message

R.3: Updating Price

INPUT: product id and name and new price

OUTPUT: price updated

R.4: Manage Staff

R.4.1: Add Staff members

INPUT: Member information

OUTPUT: Member added

R.4.2: Remove Staff Members

INPUT: Member Information

OUTPUT: Member removed

R.5: View Sales Statistics

R.5.1: Statistics by Date

INPUT: Enter Date

OUTPUT: Statistics

R.5.2: Statistics by Product

INPUT: Enter Product ID

OUTPUT: Statistics

3.3 Other Non-functional Requirements

1. Performance

The system must be interactive and the delays involved must be less. So in every action-response of the system, there are no immediate delays. In case of opening App components, of popping error messages and saving the settings or sessions there is delay much below 3 seconds.

2. Safety

User details should be securely stored to the server. The main security concern is for user account hence proper login mechanism should be used to avoid hacking.

3. Reliability

As the system provides the right tools for discussion, problem solving it must be made sure that the system is reliable in its operations and for securing the sensitive details.

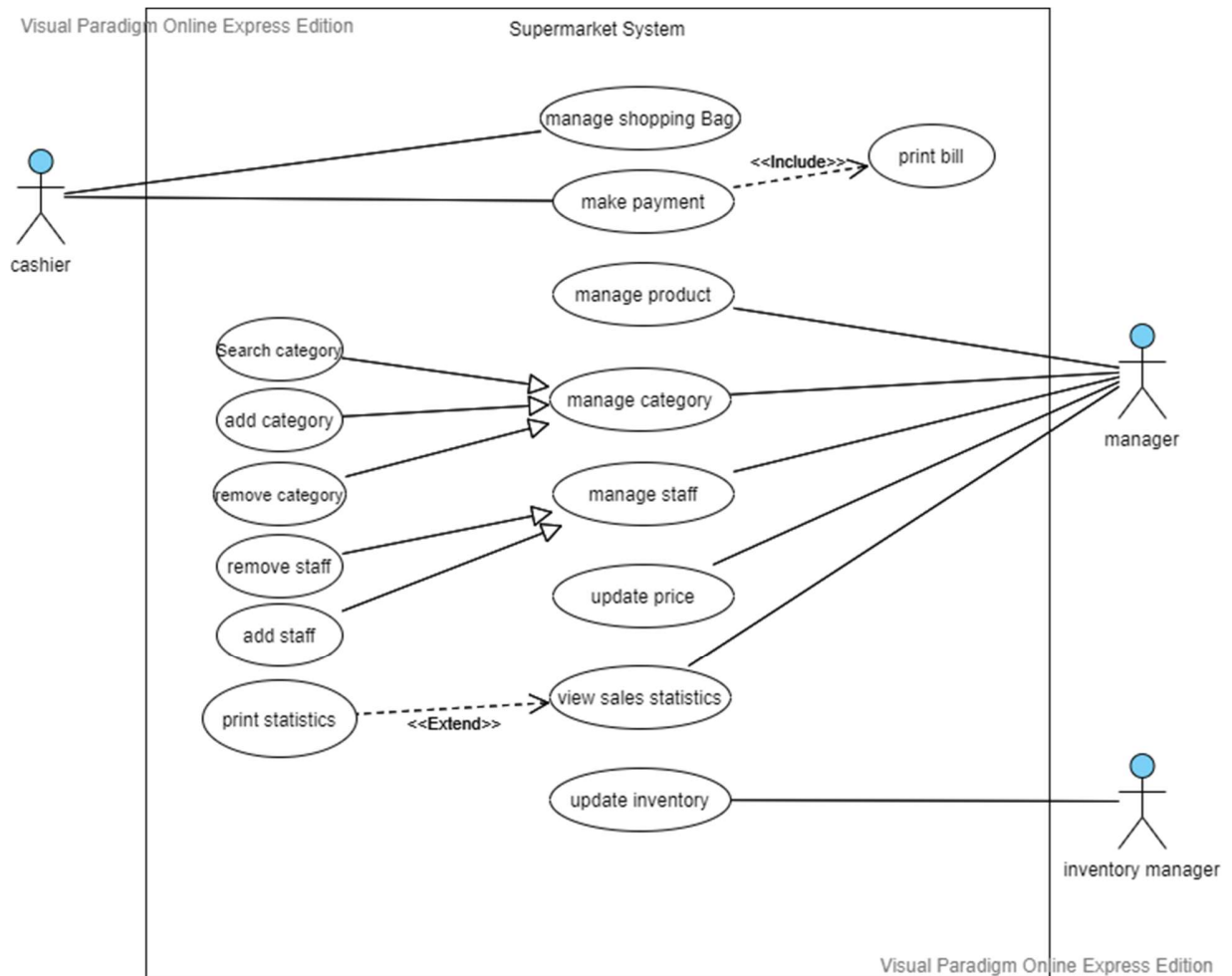
4. Database

System requires to access user's data fast to maintain the performance.

4.UML DESIGN

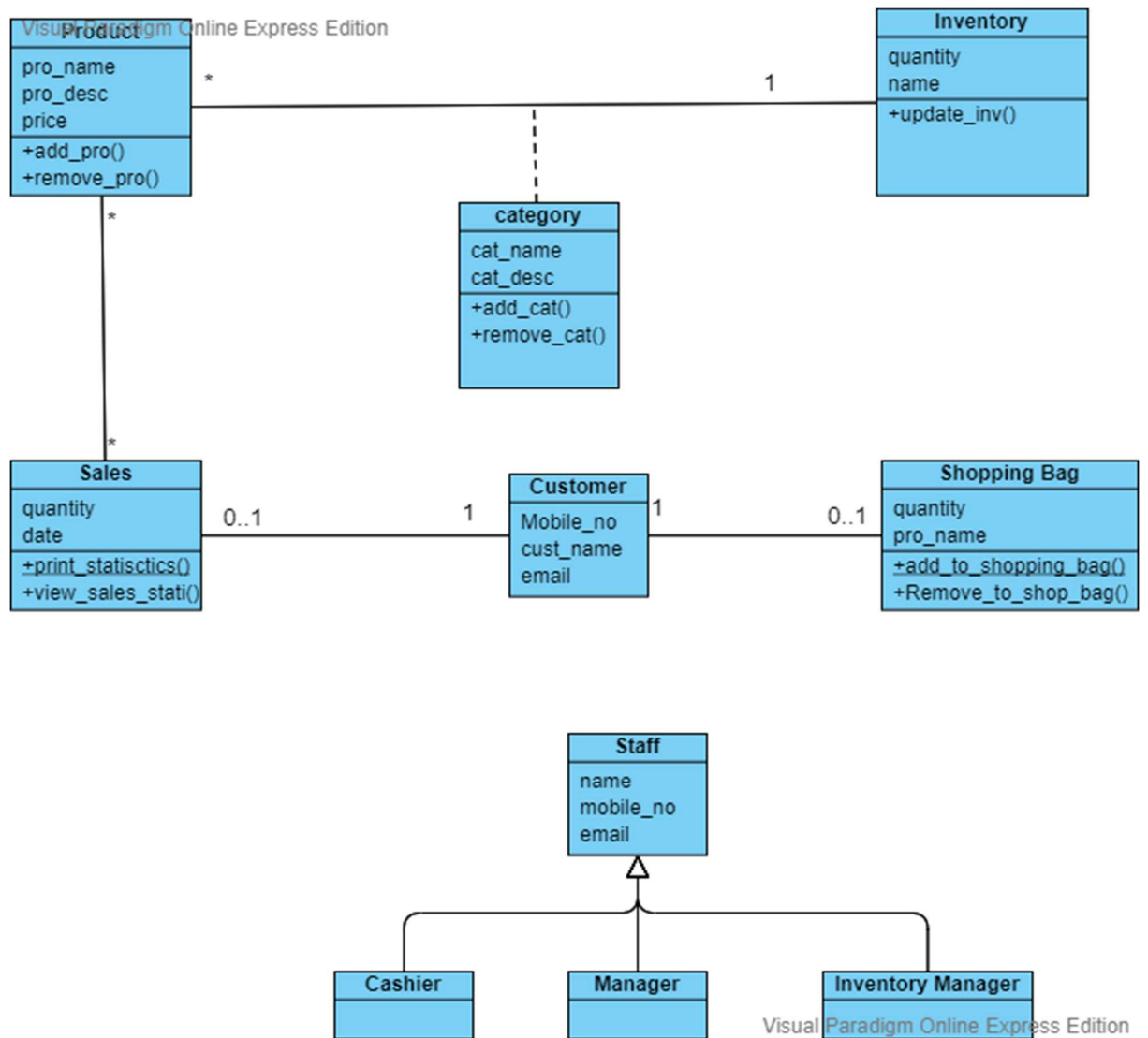
1) Use-Case Diagram

Tools : Visual paradigm

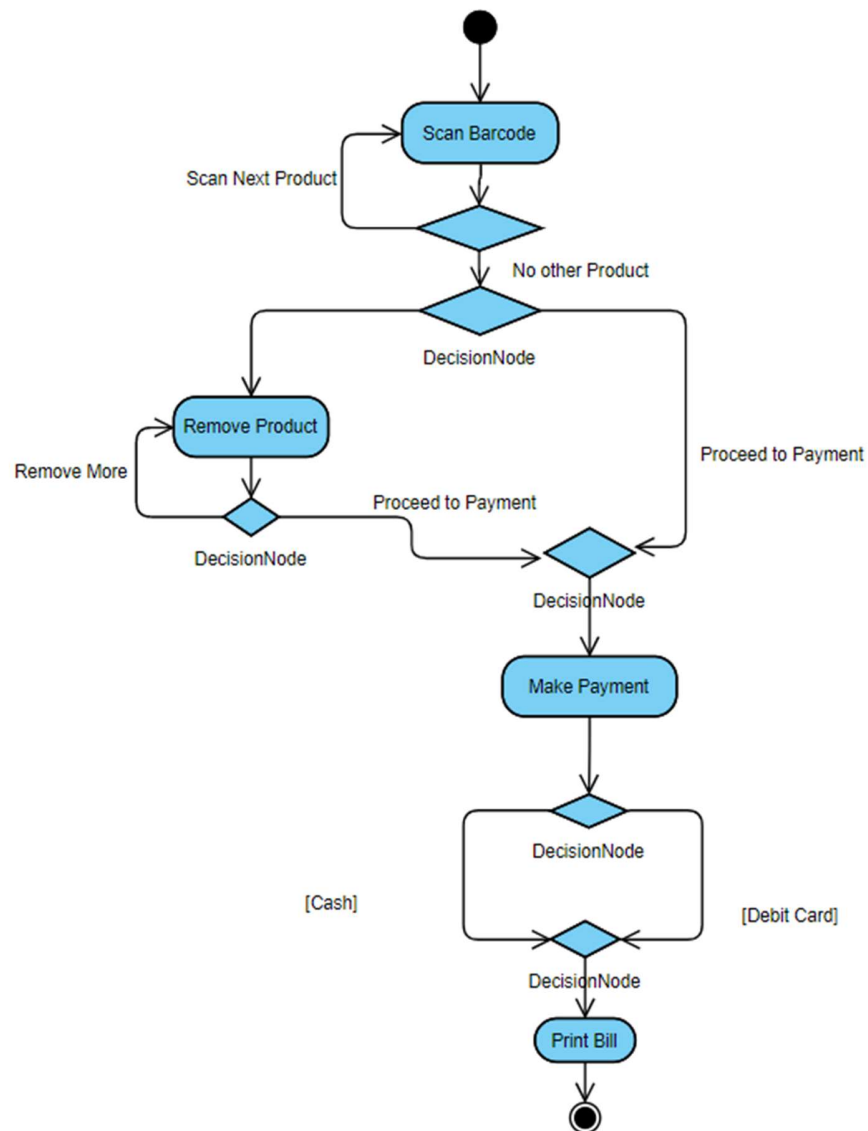


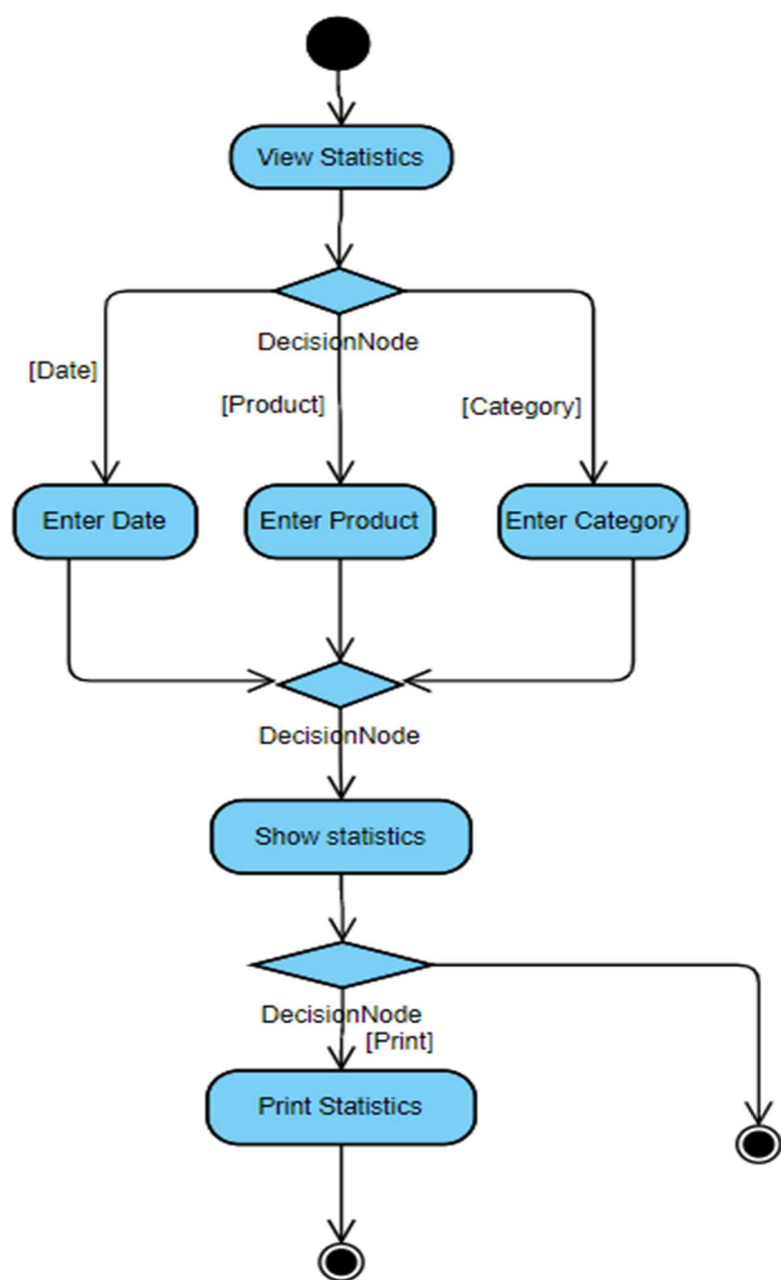
2) Class Diagram

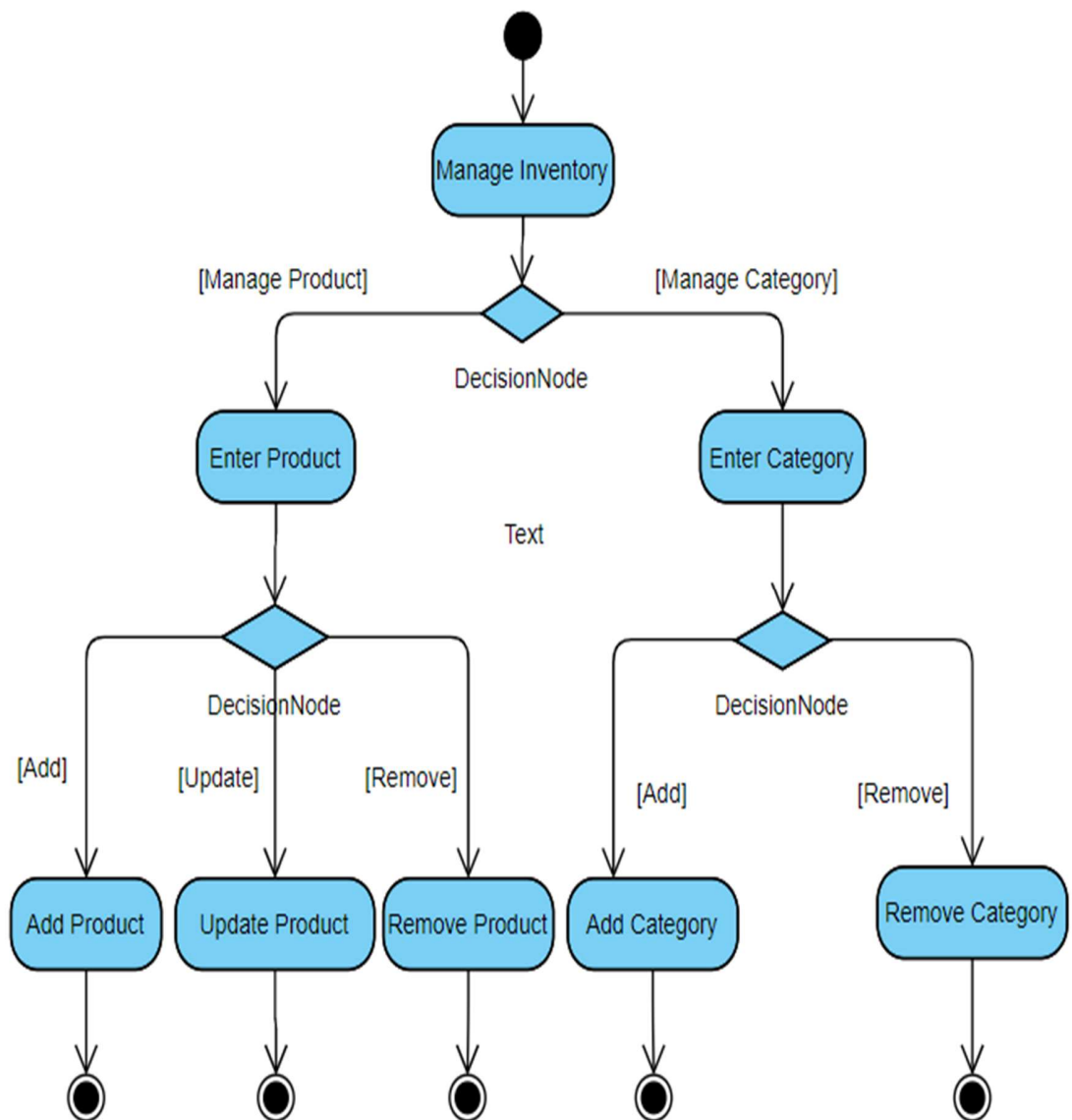
Tools : Visual paradigm



3) Activity Diagram
Tools : Visual-Paradigm



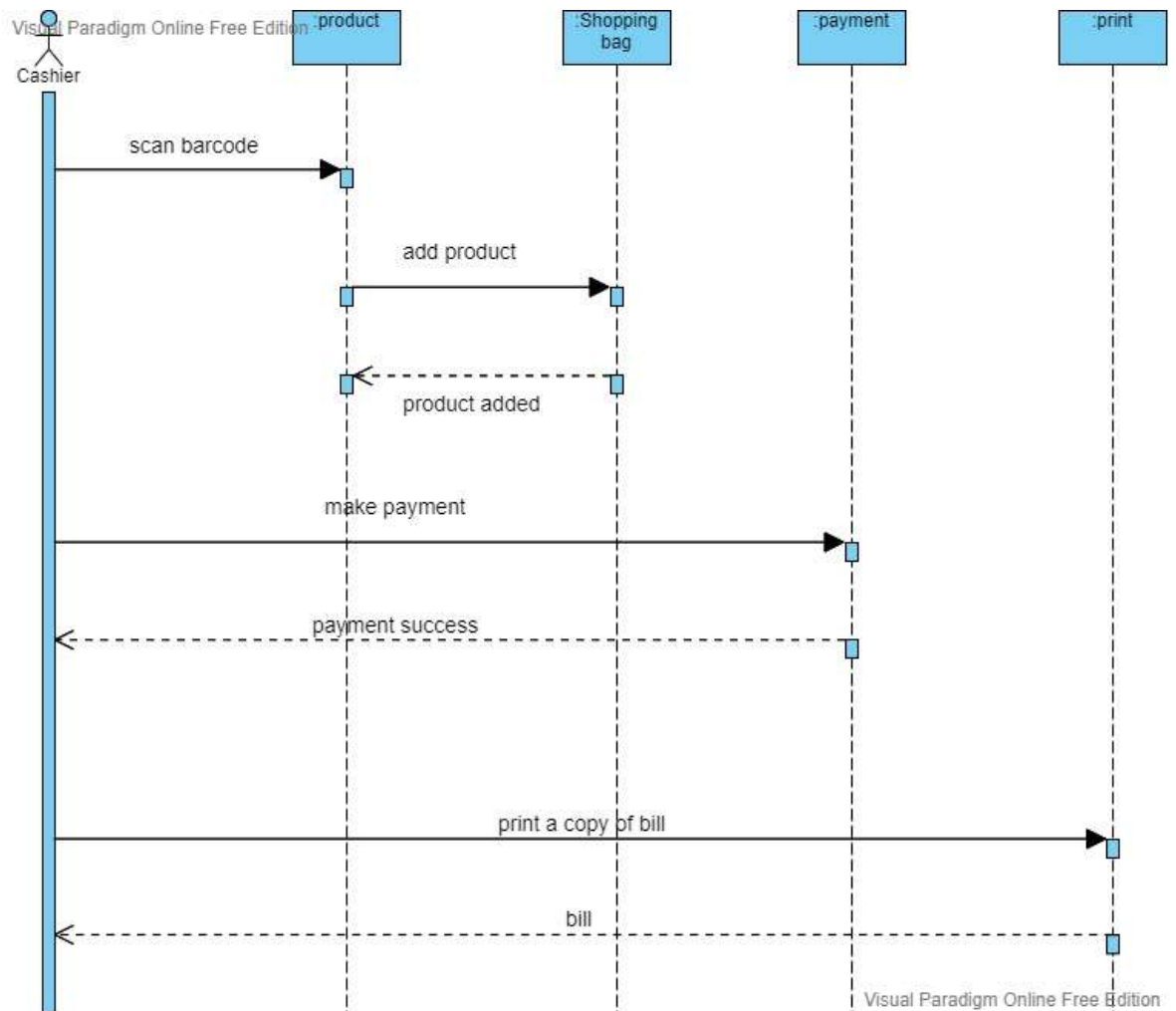




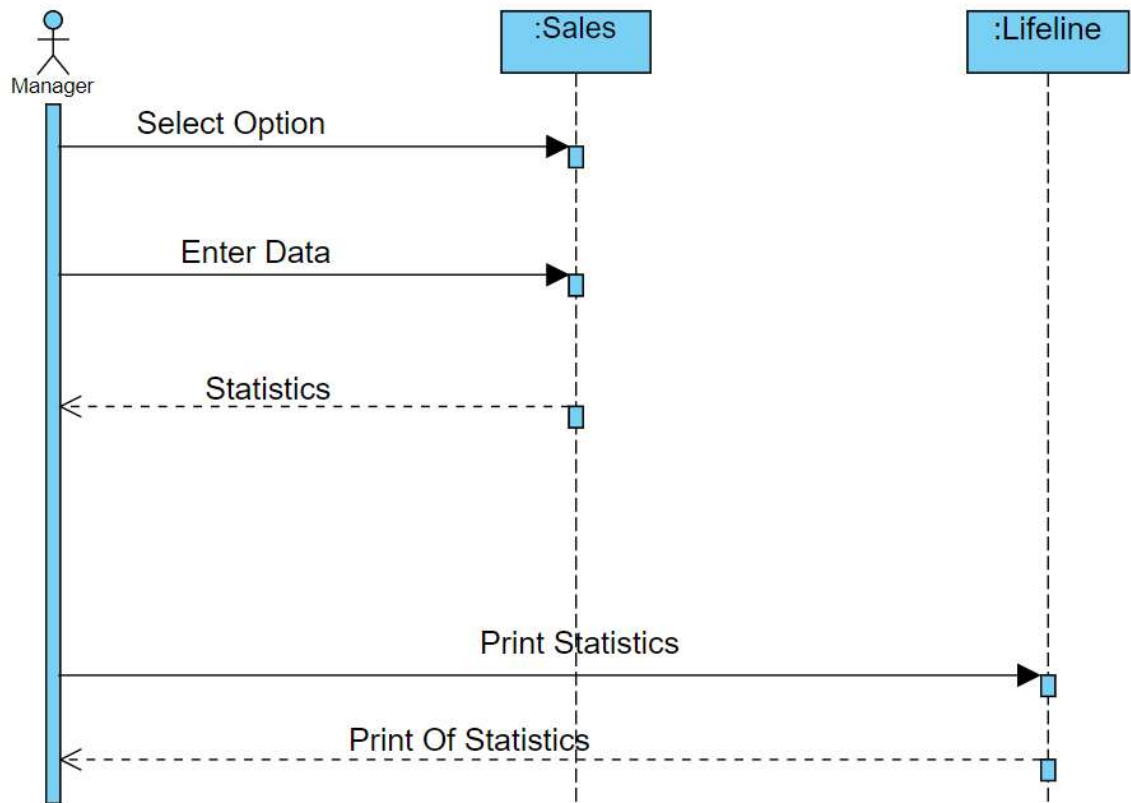
4) Sequence Diagram

Tools : Visual-Paradigm

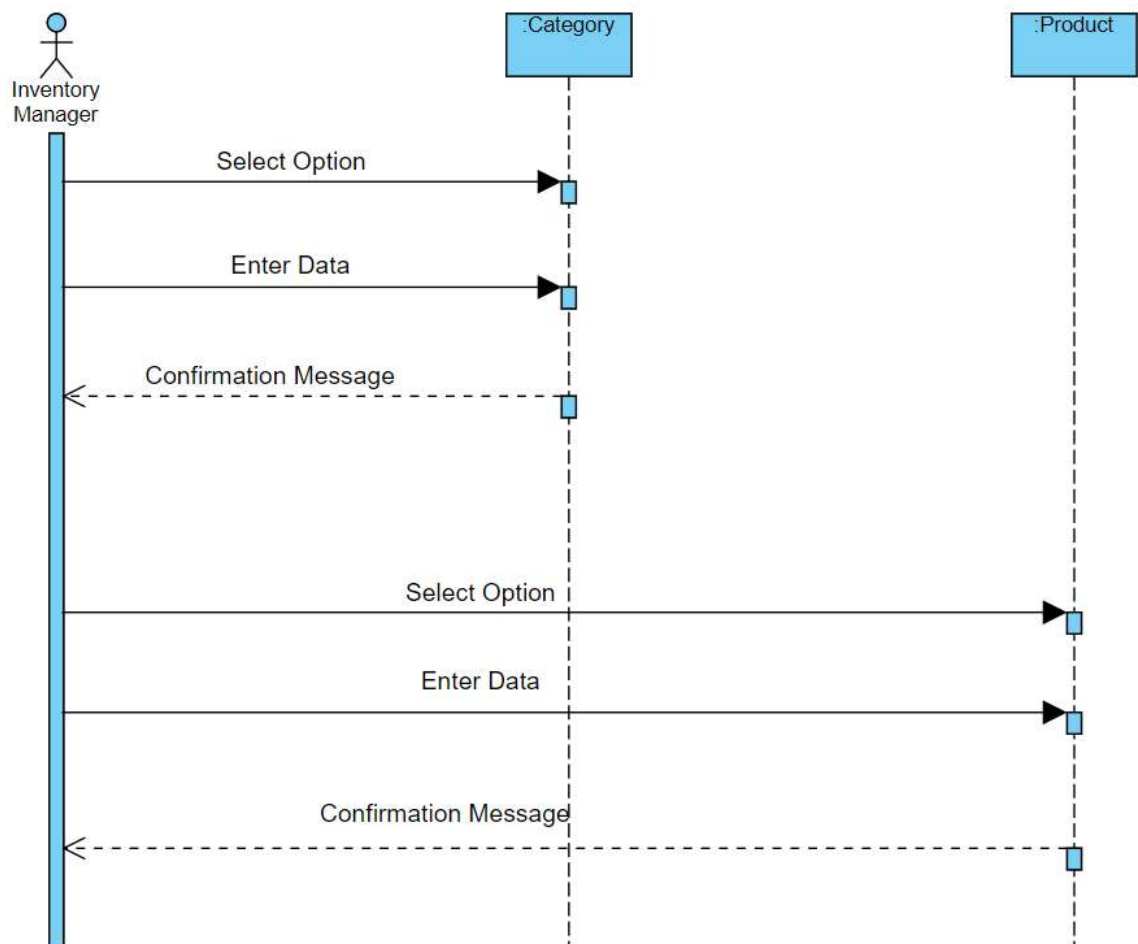
- Cashier:



- Manager:



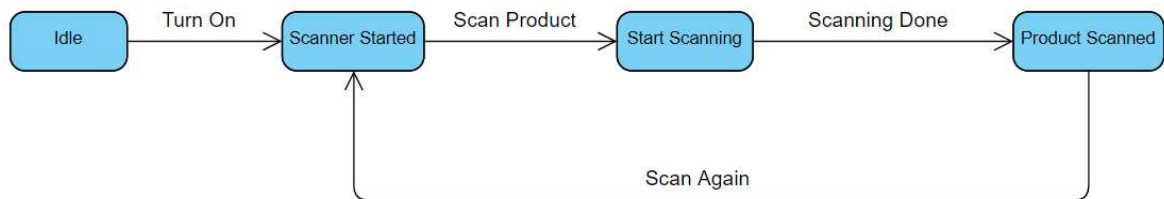
- Inventory Manager:



5) State Diagram

Tools : Visual-Paradigm

Scanner:



6) Deployment Diagram

Tools : Visual-Paradigm

Visual Paradigm Online Free Edition

