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## **Introduction:**

Shop management system is very useful for a shop. That consists of a user friendly user interface and also some important features which are capable to manage the complete system of a shop. The shop management is a smart featured system which is designed and developed to deliver benefits to shop, sellers and customers.

## **Executive summary of the project:**

Super Shop Management System is the project that we chose to do and we have worked throughout the semester on this project. We started our work from the beginning of the semester and complete our work step by step. At first we gathered information related to our project who were using this type of software and interviewed different persons for having their opinion about the software that they are using. Also know their software advantage and lacking. After we completed our entity relationship diagram we started working on our software and have completed our project. Our shop management system is designed and developed to deliver benefits to customers and sellers. It also maintain product information, customer records, billings and so on. Over all the Whole Super shop management system is done by us which is very Simple fast and cost effective.

## **Project goals:**

The main goal of this software is to keep the data safe and also user friendly experience for selling. The main target of this software are giving below:

- To implement adequate management information systems to improve productivity.
- To make information instant, easy to access, easy to update.
- Keep all products information in database.
- Give a user friendly experience for an Employee and Admin of a shop.
- Make the latest modifications to the database available immediately.
- Protect the data from physical harm and unauthorized access.
- Easily search all information about products, orders, dealers, employees, customers etc.

## **Project feasibilities:**

### **a. Technical:**

“Shop Management System” is technically feasible because of the below mentioned feature. This project will be developed in Java which has a graphical user interface. We will use Netbeans 8.0.1 for our Java coding. It provides the high level of reliability, availability and compatibility. All these make java an appropriate language for this project. We will use Microsoft SQL Server for our database which is easily available for us.

### **b. Economical:**

It is economically feasible to develop our project. Cost of the programmer’s time. Cost of the System Study. Cost of requirements gathering. Cost of design. Cost of planning. It is a software based project.

### **c. Operational:** It will reduce the workload of employees. It will reduce paper work. The data will be more secure. The structure of the organization will be more systemized. No more new skills needed to run the system just the employees have to have some basic knowledge of computer.

## **Costs and benefits:**

### **Development costs:**

- The cost of programmer’s time.
- The cost of resources and equipment.
- The cost of requirements gathering.

### **Operating costs:**

- Cost of Internet.
- Cost of Transportation

### **Tangible benefits:**

- Increase of Resources.
- We can save time if we complete the project before the submission deadline

### **Intangible Benefits:**

- Increase of popularity if we complete the project properly.

### **Cost benefit analysis:**

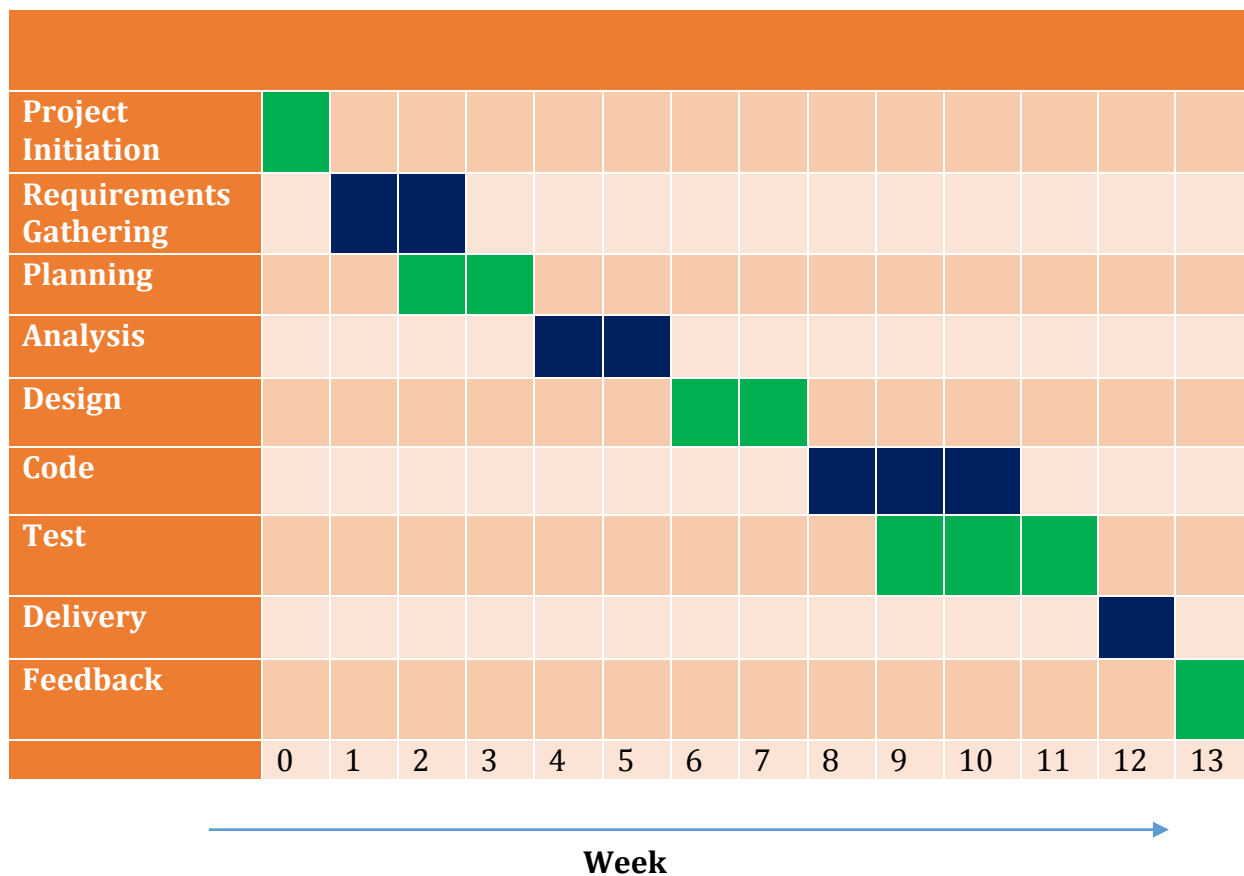
Present value =  $PV_n = 1 / (1 + i)^n$

So our present value = 9/13

### **Risk analysis :**

- We back up our data in case of unwanted system failure.
- We will try to remove unwanted hazard in our software.

### **Project scheduling [Gantt Chart]:**



### **Risk of the project:**

If we are not successful to implement the project in time or if we are unable to gain enough popularity or if we are failed to collect enough data then it will be risk for our project.

### **Selection the objectives of information gathering & interview:**

Before developing a software for a shop, at first we need to know what features we need to implement. This software will use in a super shop. So it is required to gather information about how an employee or computer operator conducts with customers and various types of products and how they manage it. We have decided to gather information by taking interview from two persons who is working in a super shop. Because an interview is a great process for collecting information by questioning the interviewee on the different aspects of the subject.

The objectives of our information gathering and interview are:

- ✓ To find information about software's features to implement
- ✓ To find information on software's design to make the layout simple
- ✓ To find out the basic problems of the current system

### **Questionnaires and interview pattern:**

We have used pyramid structure to take the interview. First we have started our interview with closed or bi-polar questions then we started to take opinions of the interviewee on our project with open ended questions.

### **Selection of interview and reason of choosing them:**

We have taken interview of two persons. One is Mr. Imran Haque who is a cashier of a super shop named SHWAPNO. And the another is Mr. Masud Parvez who stocks all the products of this super shop.

#### **Reason:**

Our project is Shop Management System. The cashier and the stock manager of a shop will be the user of this system. For this reason we have taken interview of them.

## **Interview & questionnaires pattern:**

Interview on Shop Management System			
<b>Author:</b>  Md. Toufique Hasan (12.02.04.069)  Ayoun Khan (12.02.04.077)  Rifatul Islam (12.02.04.082)  Masuk Sarker (12.02.04.083)	<b>Date:</b> 27-06-2015	<b>Time:</b> 04:30 pm	<b>Duration:</b> 40 min(approx.)
<b>Participant:</b>  <b>Mr. Imran Haque</b> Cashier Shwapno BD Gulshan-1, Dhaka  <b>Mr. Masud Parvez</b> Stock Manager Shwapno BD Gulshan-1, Dhaka		<b>Comments:</b>  From this interview we have got an idea which features we need to implement in our software. We have now a clear idea how to start our project and how the software design should be made. We have also prepared a list of activities for our project from this conversation.	

**Interviewee:**

**Time:** June 27, 2015. From 4:30PM to 4:50PM

**Place:** Shwapno BD. Gulshan-1, Dhaka

**Personnel: Mr. Imran Haque**  
Cashier

**Question 01:** Is it your first used software in shop management?

- a) Yes
- b) No

**Answer:** Yes

**Question 02:** What's your rating about your running software?

- a) Good
- b) Average
- c) Bad

**Answer:** Average

**Question 03:** In which format would you like to give a customer's memo, product cost, discount etc.?

- a) By hand written pages
- b) By printed copy from software

**Answer:** By printed copy from software

**Question 04:** Would you like to change your user id and password?

- a) Yes
- b) No

**Answer:** Yes

**Question 05:** Do you want search option in your system?

a) Yes

b) No

**Answer:** Yes

**Question 06:** What types of information you want in this software?

**Answer:** I would like to keep detail information of a product.

**Question 07:** What kind of information you will need from a customers?

**Answer:** Contact address and contact information.

**Question 08:** Do you want any other payment methods option?

**Answer:** Yes, such as B-cash, DBBL, Credit card, Debit card, Master card etc.

**Interviewee:**

**Time:** June 27, 2015. From 4:50PM to 5:10PM

**Place:** Shwapno BD. Gulshan-1, Dhaka

**Personnel:** Mr. Masud Parvez (Stock Manager)

**Question 01:** Have you previously used any software in shop management?

a) Yes

b) No

**Answer:** Yes



**Question 02:** Which is the major disadvantages of this process?

- a) It needs more man power to manage
- b) It needs more time to manage
- c) Its costly

**Answer:** Its costly

**Question 03:** Do you want a secured password protected login system in your software?

- a) Yes
- b) No

**Answer:** Yes

**Question 04:** How would you like to notify a customer about new products, costs etc.?

**Answer:** By automated [messaging](#) system.

**Question 05:** By whom you want to manage your billing system?

**Answer:** By cashier.

**Question 06:** Do you like to allow cashier to edit any information of your software?

**Answer:** No, he/she can show information only.

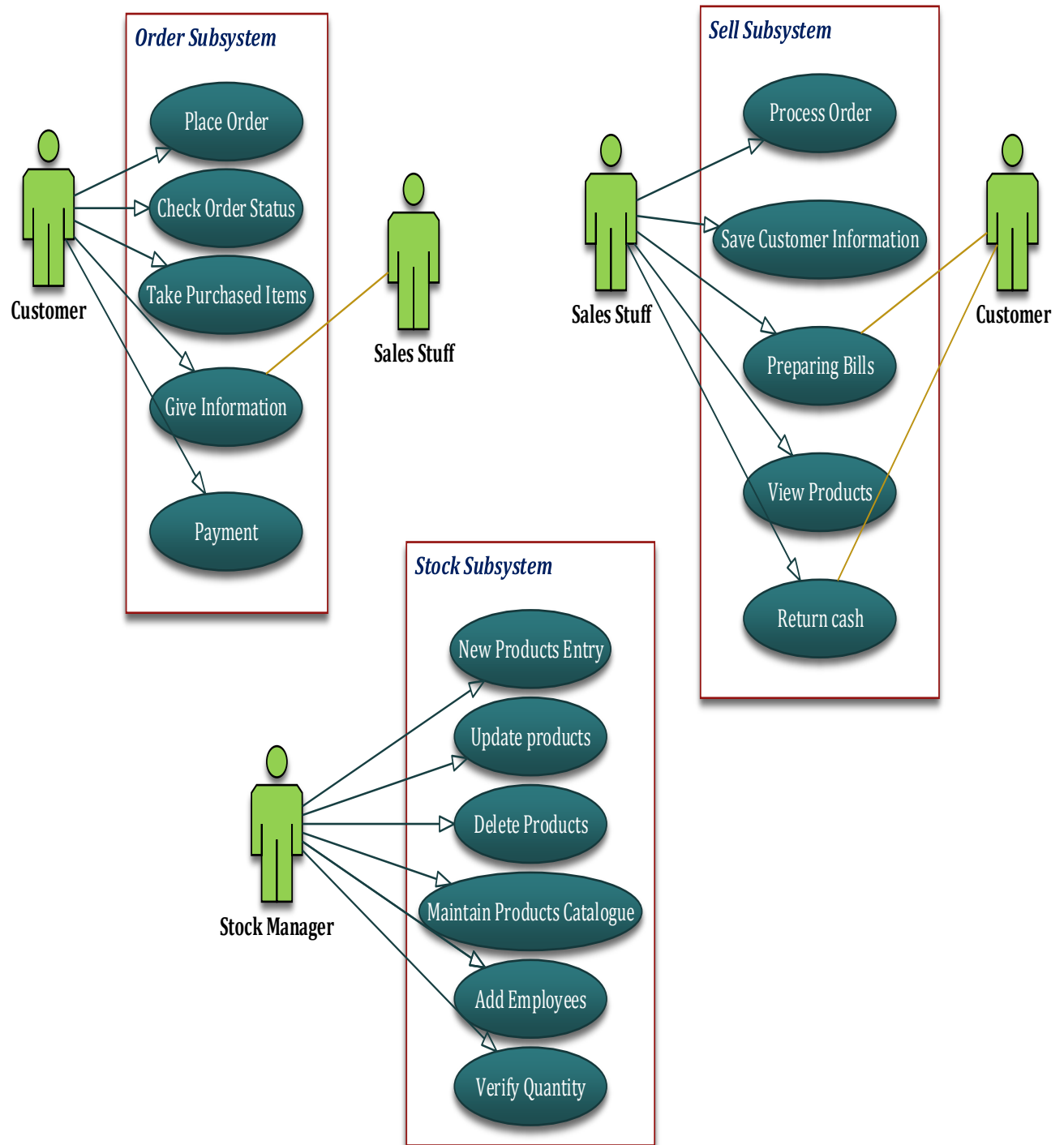
**Question 07:** Any extra feature would you like to see in the admin panel?

**Answer:** Yes, I want to view a message in my phone which notify my login.

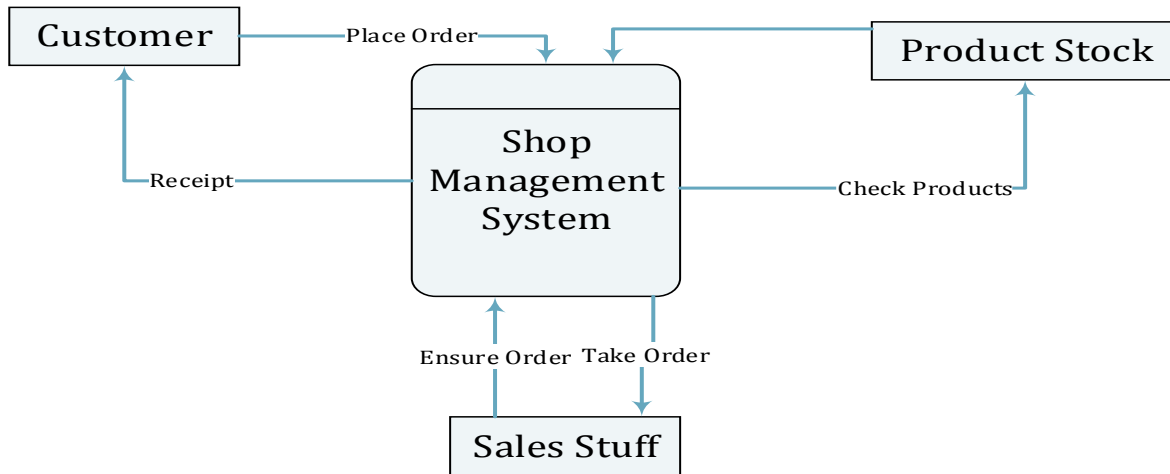
**Question 08:** What is your personal opinion about our project?

**Answer:** Of course it is a great initiative. I think it will be very helpful for a shop to maintain their business.

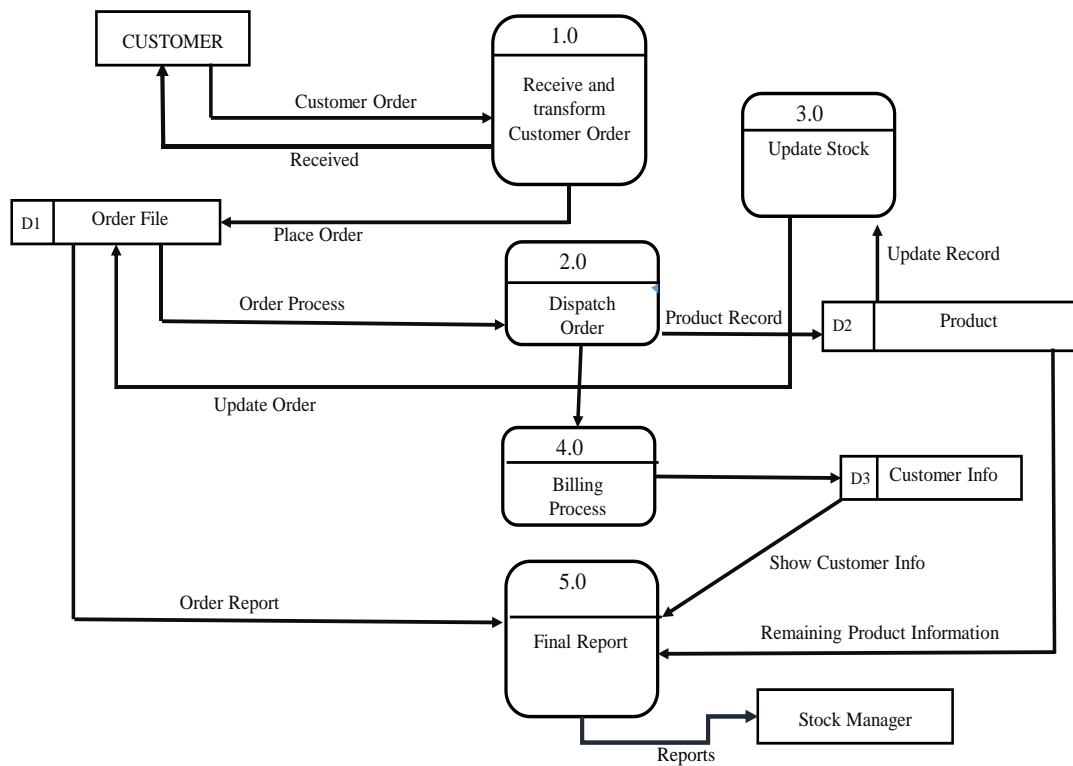
## Use Case Diagram



## Level 0 Context Diagram



## Level 1 Context Diagram



### **List of activities:**

- Designing the project according to the client requirements
- Only admin can add, delete, update products
- Cashier can calculate the bill of a customers & other account related information
- A secured login system
- Admin can see all information of a shop
- Restriction in employees work

In our Use Case Diagram, we have three subsystems. They are:

- Order Subsystem
- Sell Subsystem
- Stock Subsystem

### **Order Subsystem:**

- ✓ Place Order
- ✓ Check Order Status
- ✓ Take Purchased Items
- ✓ Give Information
- ✓ Payment

### **Sell Subsystem:**

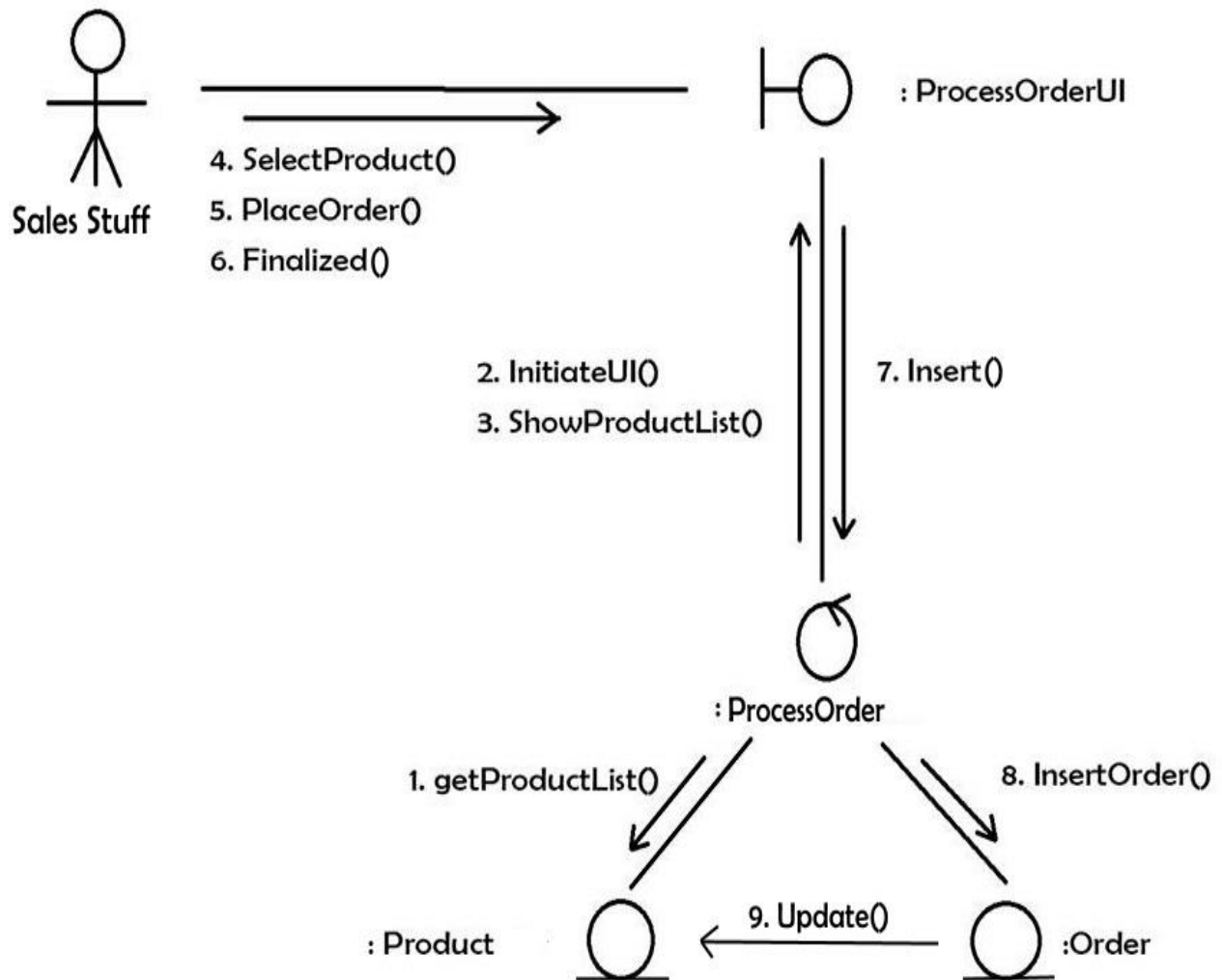
- ✓ Process Order
- ✓ Save Customer Information
- ✓ Preparing Bills
- ✓ View Products
- ✓ Return cash

### **Stock Subsystem:**

- ✓ New Products Entry
- ✓ Update products
- ✓ Delete Products
- ✓ Maintain Products Catalogue
- ✓ Add Employees
- ✓ Verify Quantity

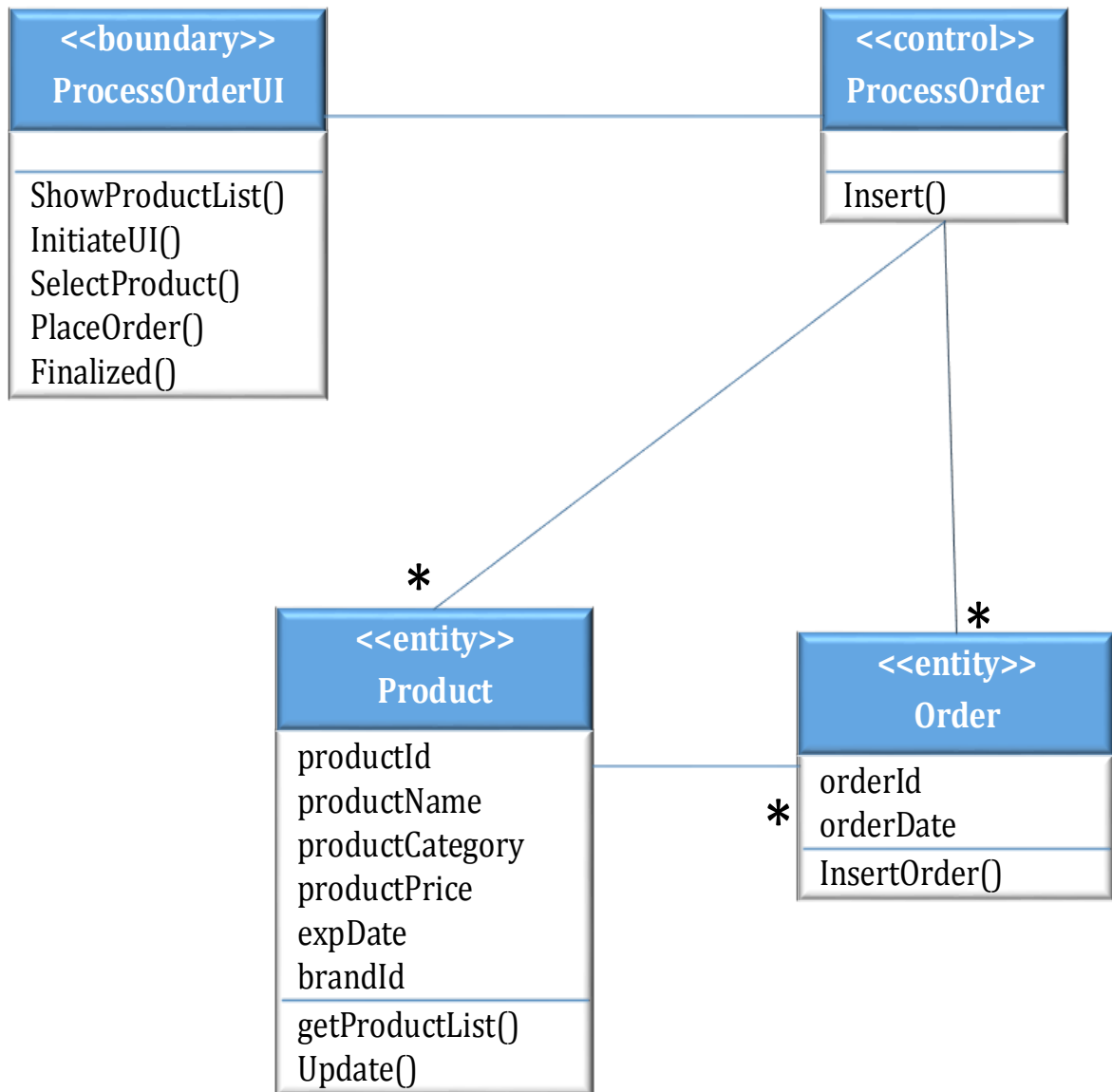
## Sell Subsystem

### Collaboration Diagram: Process Order



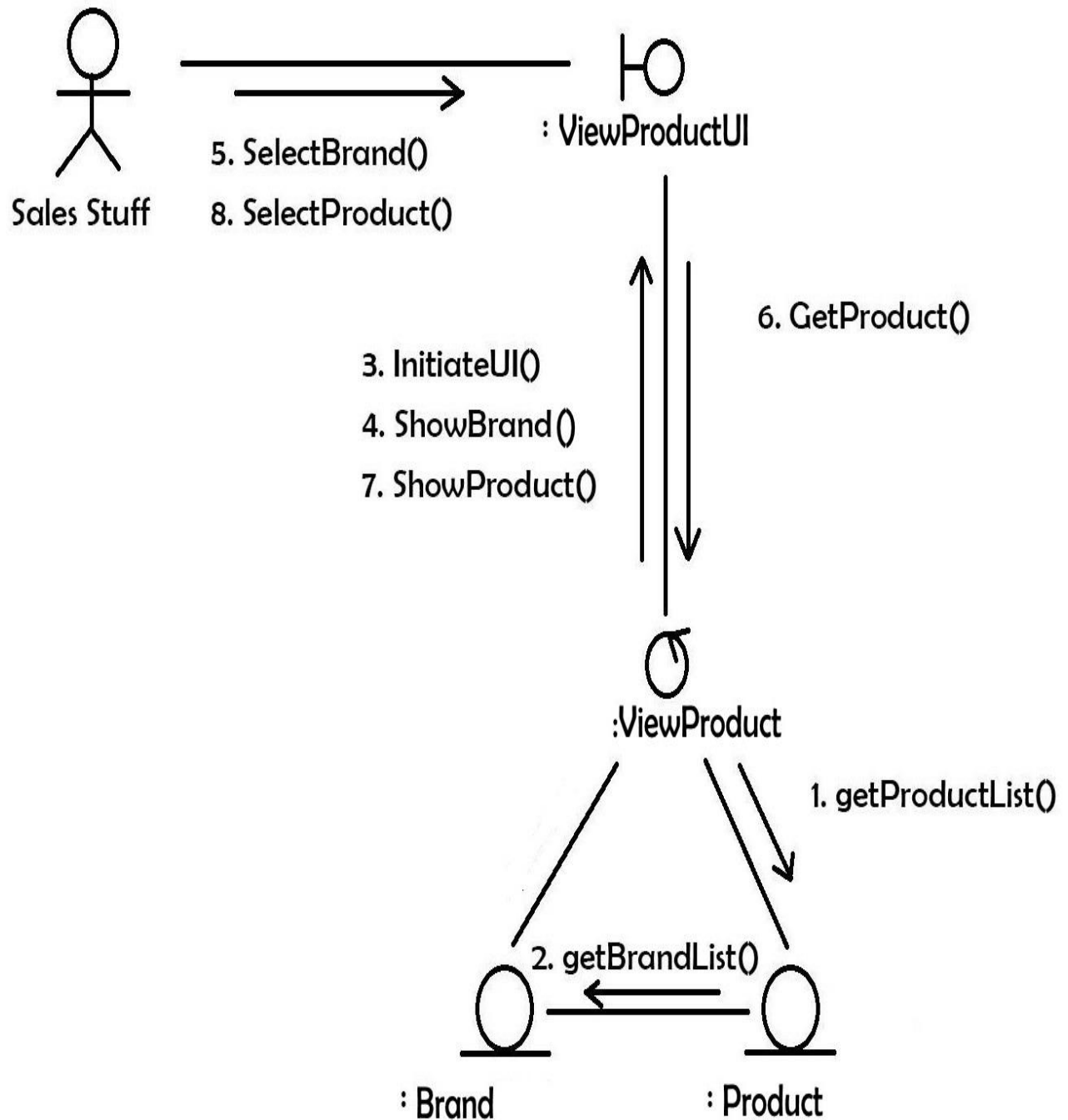
## Sell Subsystem

### Class Diagram: Process Order



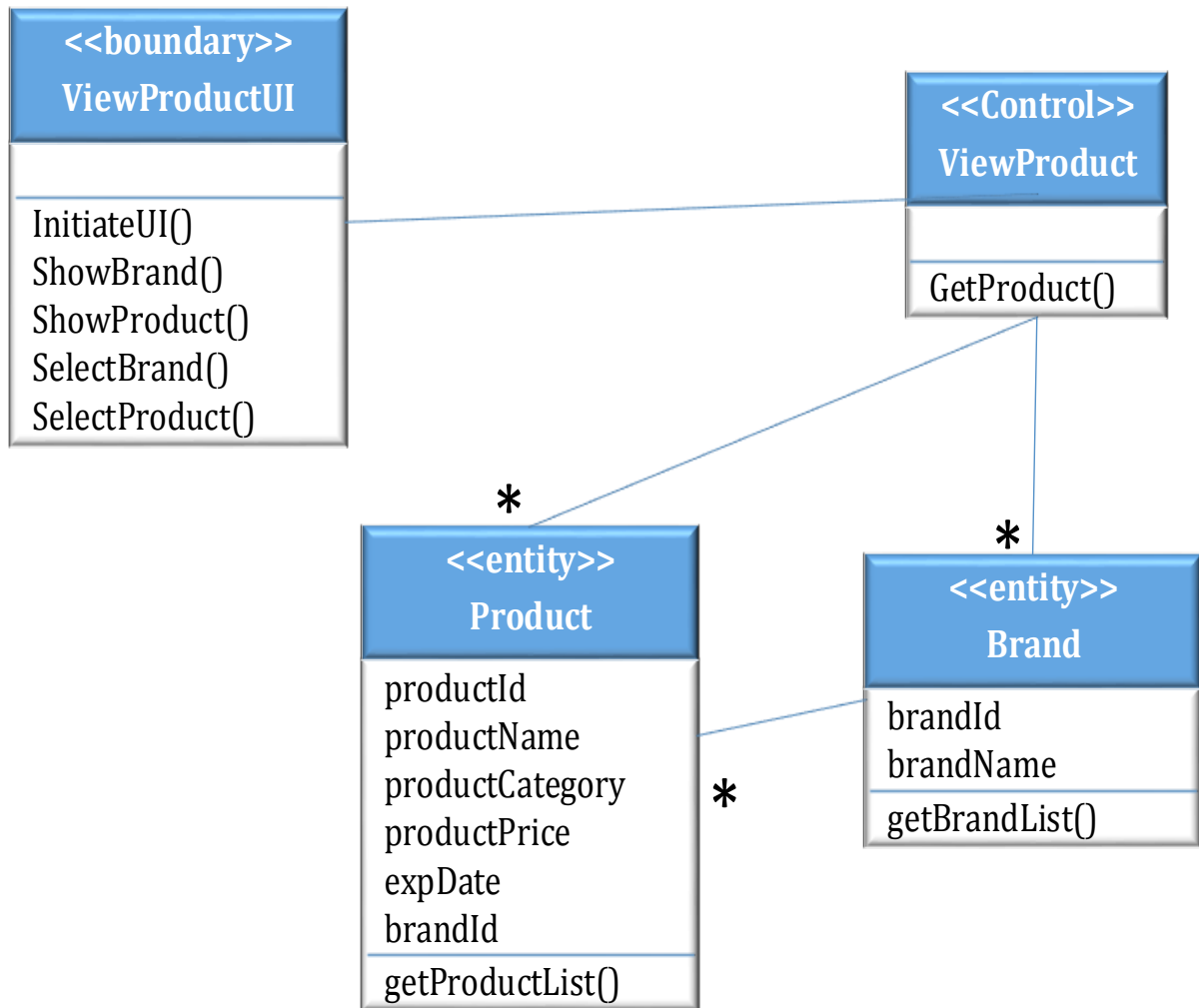
## Sell Subsystem

### Collaboration Diagram: View Products



## Sell Subsystem

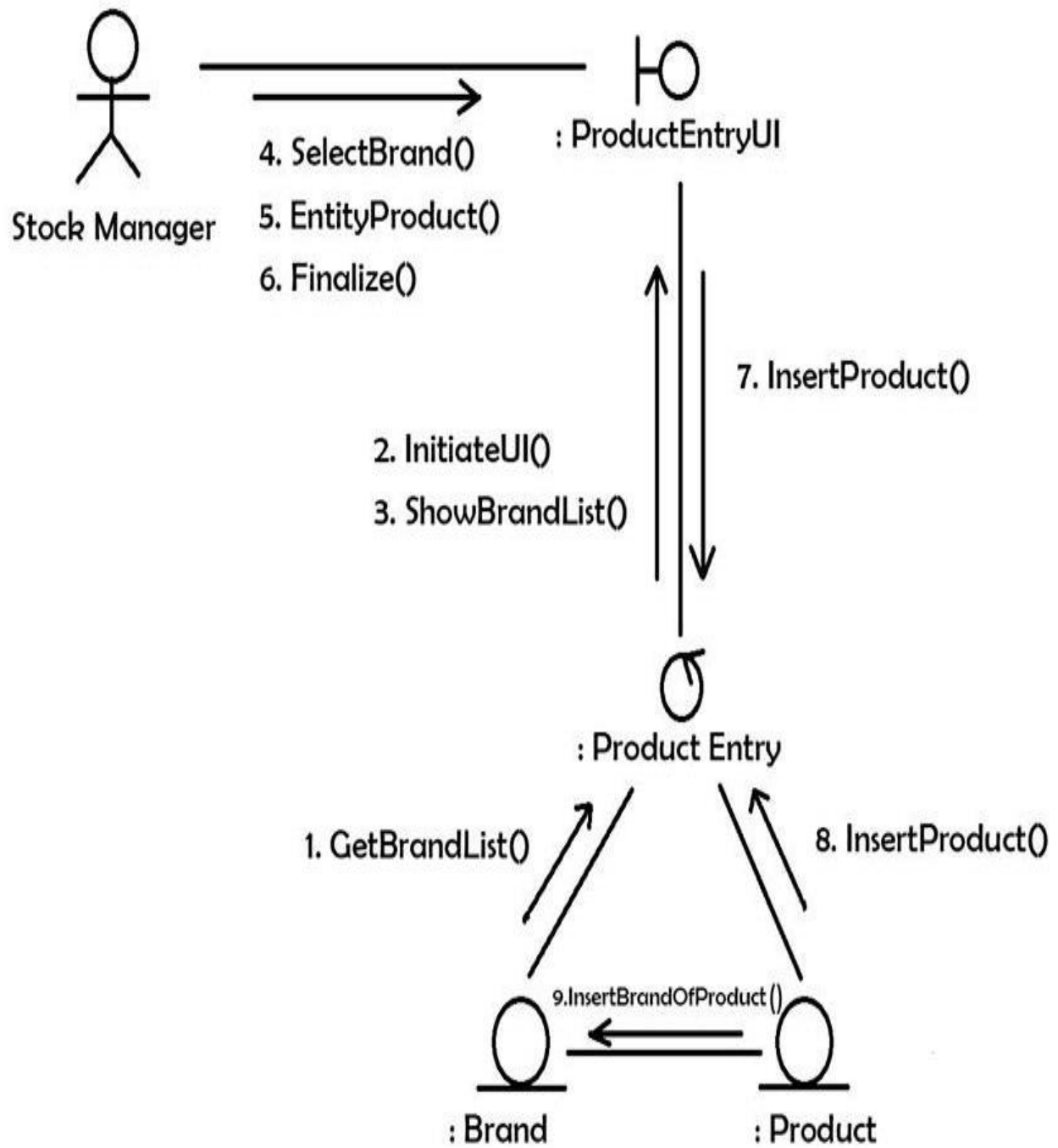
### Class Diagram: View Products



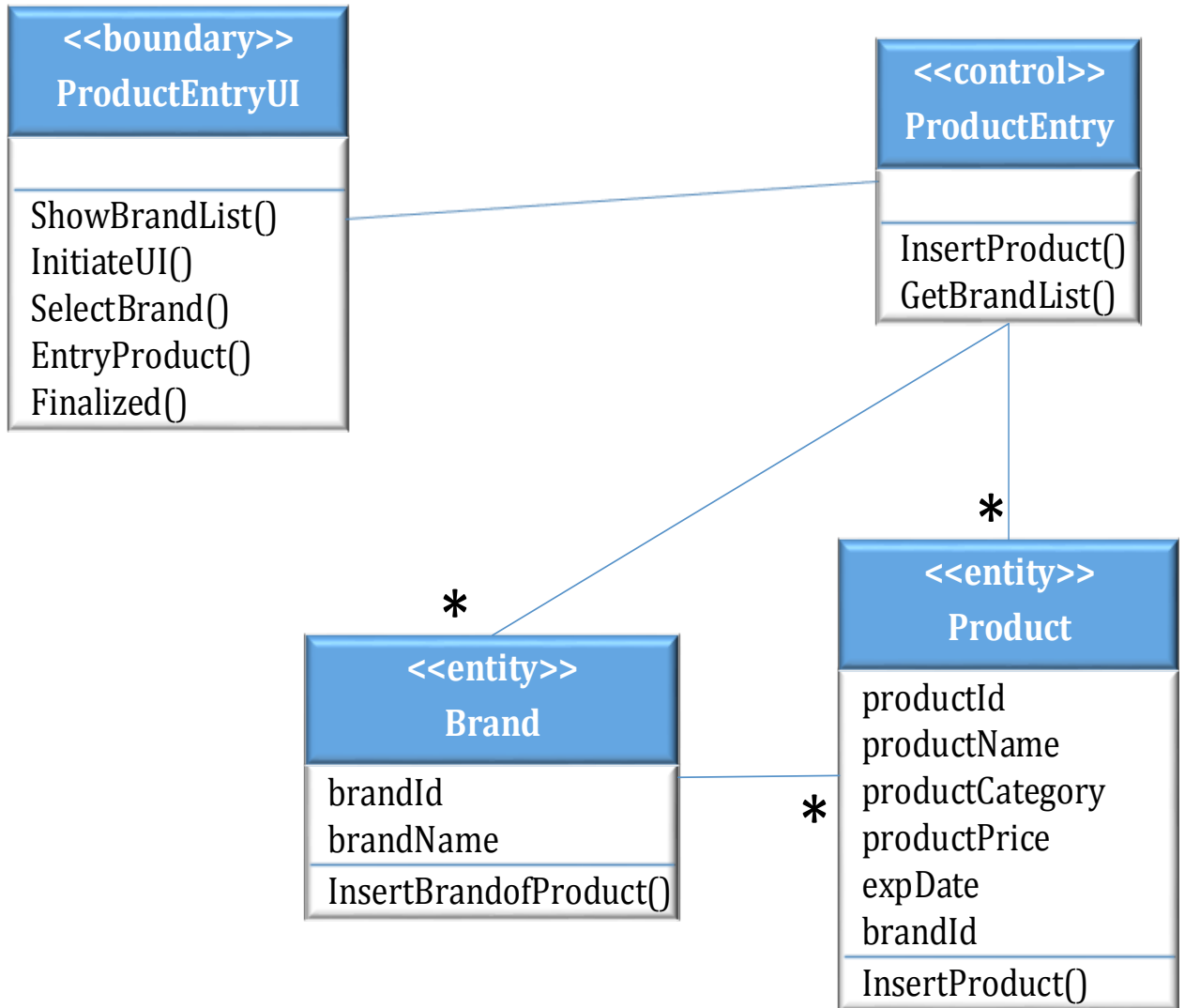


## Stock Subsystem

### Collaboration Diagram: New Products Entry

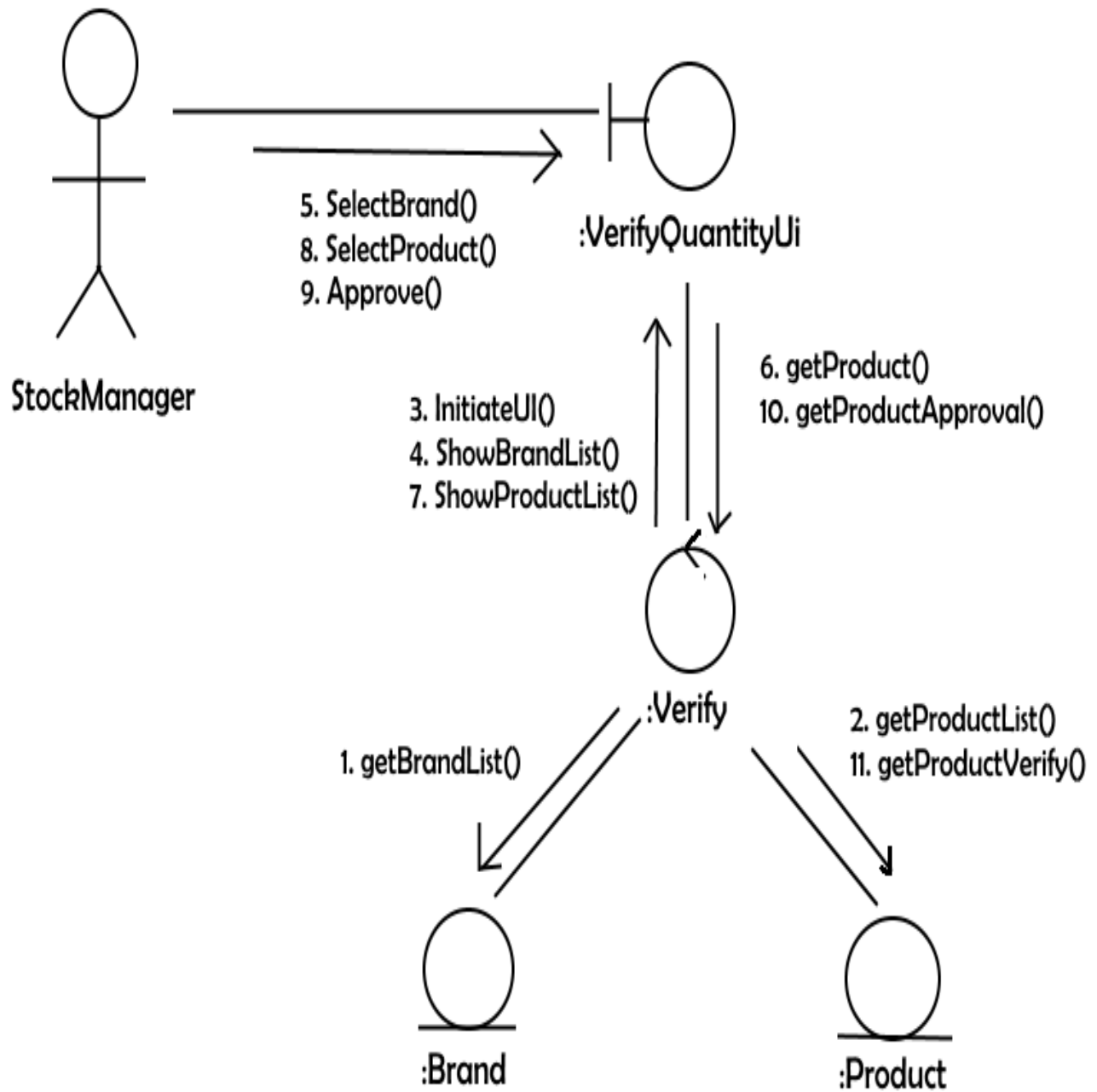


**Stock Subsystem**  
**Class Diagram: New Products Entry**

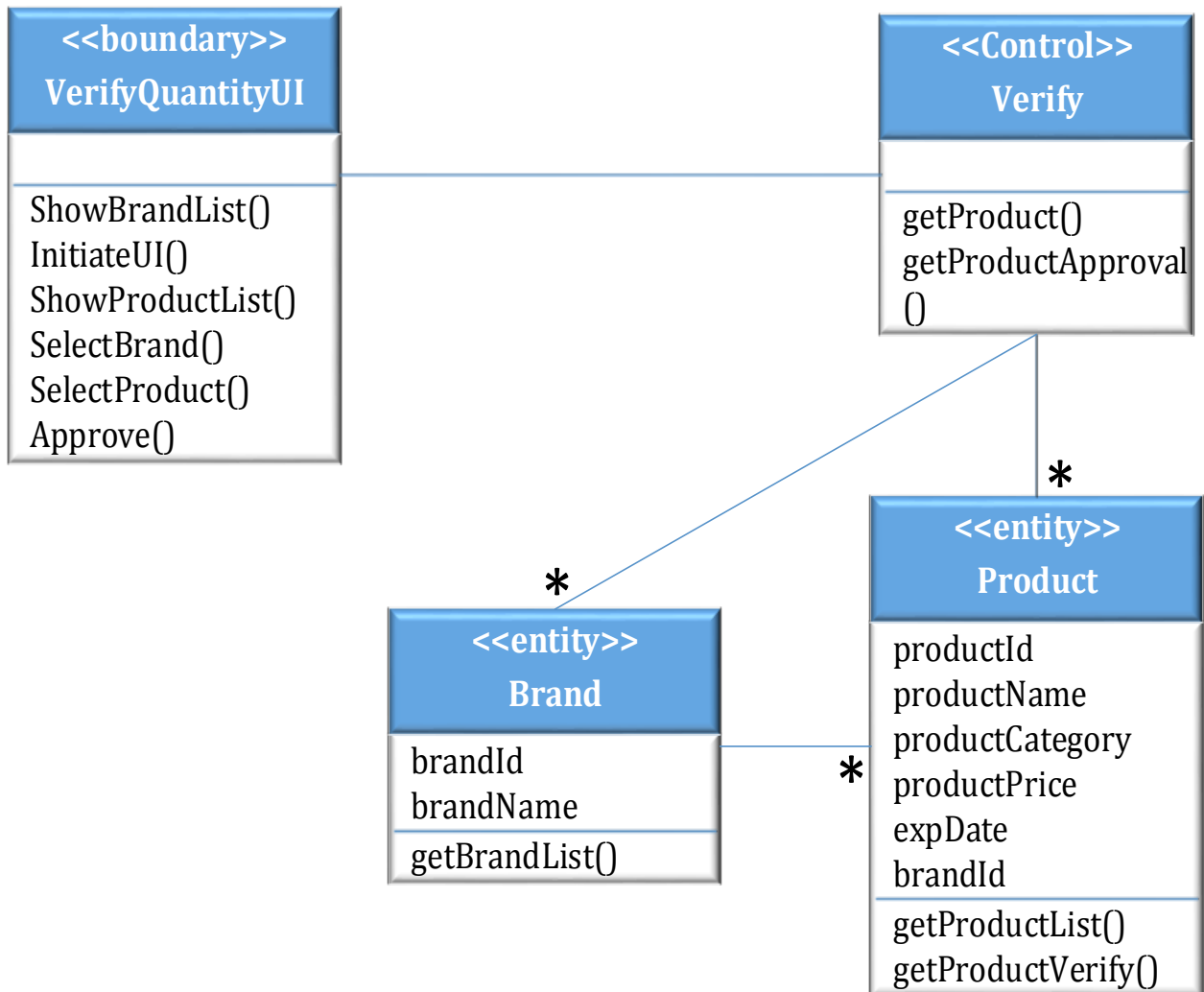


# Stock Subsystem

## Collaboration Diagram: Verify Quantity



**Stock Subsystem**  
**Class Diagram: Verify Quantity**



## **Testing:**

Software testing can be done in four ways these are:

- 1) Unit Testing
- 2) Regression Testing
- 3) Alpha Testing
- 4) Beta Testing

### **Unit Testing:**

Whether a loop, statement or function in a program is working properly or not than it is called unit testing. We don't face any problem in unit testing.

### **Regression Testing:**


Each new addition or change to baselined software may cause problems with functions that previously worked flawlessly. But at the end of the project we don't face any problem in regression testing.

### **Alpha Testing:**

It is always performed by the developers at the software development site.

Input	Expected Output	Output Found	Errors Discovered
107	107	107	No error
Nike	Nike	Nike	No error

New Brand Entry

 **Brand**

**Brand Id :**

**Brand Name :**

NEW


SAVE

UPDATE

DELETE

VIEW BRANDS

Record

 Successfully saved

OK

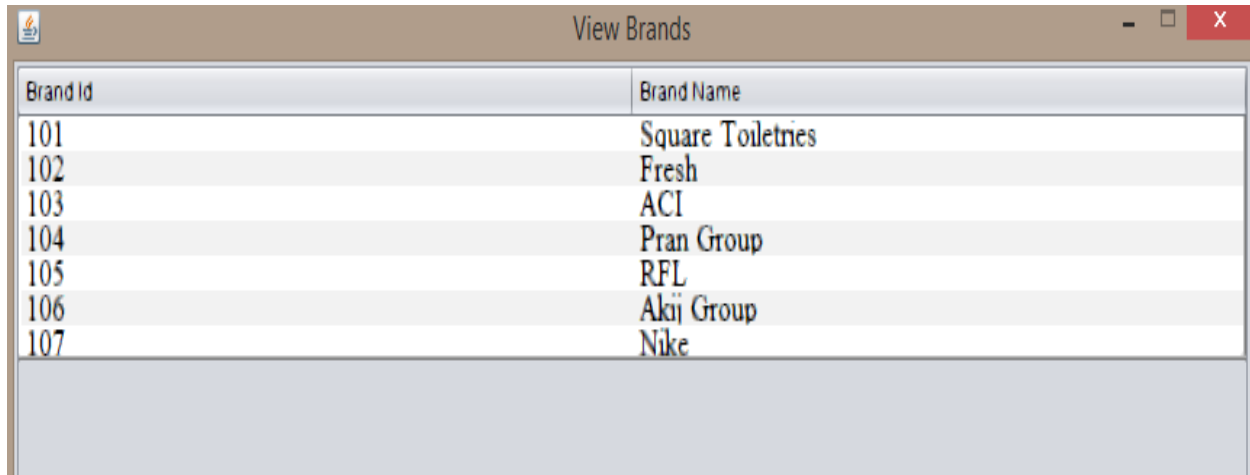
**BACK**

View Brands

Brand Id	Brand Name
101	Square Toiletries
102	Fresh
103	ACI
104	Pran Group
105	RFL
106	Akai Group
107	Nike

### **Beta Testing:**

It is always performed by the users at their own site.



The screenshot shows a window titled "View Brands" with a table containing two columns: "Brand Id" and "Brand Name". The table lists seven brands with their respective IDs. The window has a standard Windows-style title bar with minimize, maximize, and close buttons.

Brand Id	Brand Name
101	Square Toiletries
102	Fresh
103	ACI
104	Pran Group
105	RFL
106	Akij Group
107	Nike

### **Opportunities of Developments:**

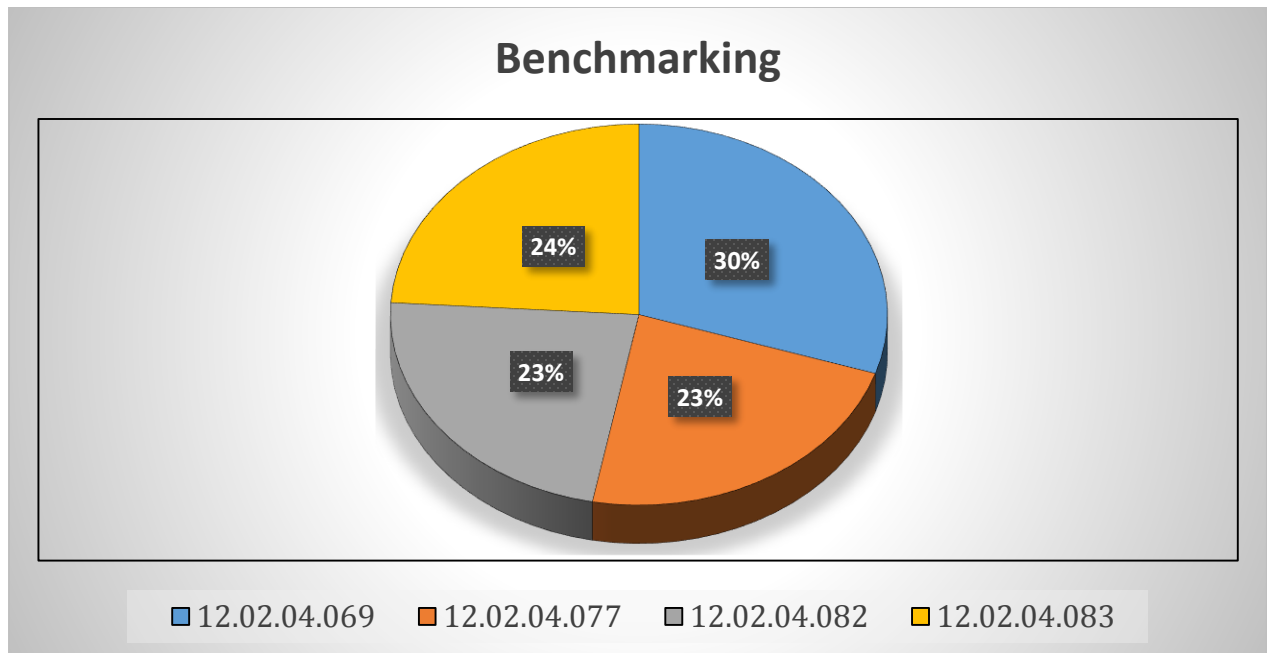
There are huge opportunities of developing our project. Now we will discuss about the possible developments of the project.

- We would make our project web based.
- We would make our project easy to access and easy to update.
- We would use more advanced database system to keep the information in a easy and secure way.

### **Benchmarking:**

Our project consists of 4 members. The group members are:

- Md. Toufique Hasan (12.02.04.069)
- Ayoun Khan (12.02.04.077)
- Rifat Ul Islam (12.02.04.082)
- Masuk Sarker (12.02.04.083)



Here, ID: 12.02.04.069 = 30%

ID: 12.02.04.077 = 23%

ID: 12.02.04.082 = 23%

ID: 12.02.04.083 = 24%

So, Total = (30%+23%+23%+24%) = 100%

### **Conclusion:**

At the end, we can say that we tried to fulfill all the tasks that we have mentioned in previous. We will try to develop more opportunity if our software gains enough popularity in future then we will be able to continue it in future.