

<b>EX:NO:4</b>	<b>STOCK MAINTAINANCE SYSTEM</b>
<b>DATE:</b>	

**AIM:**

To draw the diagrams [ usecase, activity, sequence, collaboration, class, collaboration, deployment, state chart , package] for the Stock maintainence system.

**SOFTWARE REQUIREMENTS SPECIFICATION:**

<b>SL.NO</b>	<b>SOFTWARE REQUIREMENTS SPECIFICATION</b>
1.0	Hardware Requirements
1.1	Software Requirements
1.2	Problem Analysis and Project Plan
1.3	Project Description
1.4	Reference

**1.0 HARDWARE REQUIREMENTS:**

Intel Pentium Processor I3/I5

**1.1 SOFTWARE REQUIREMENTS:**

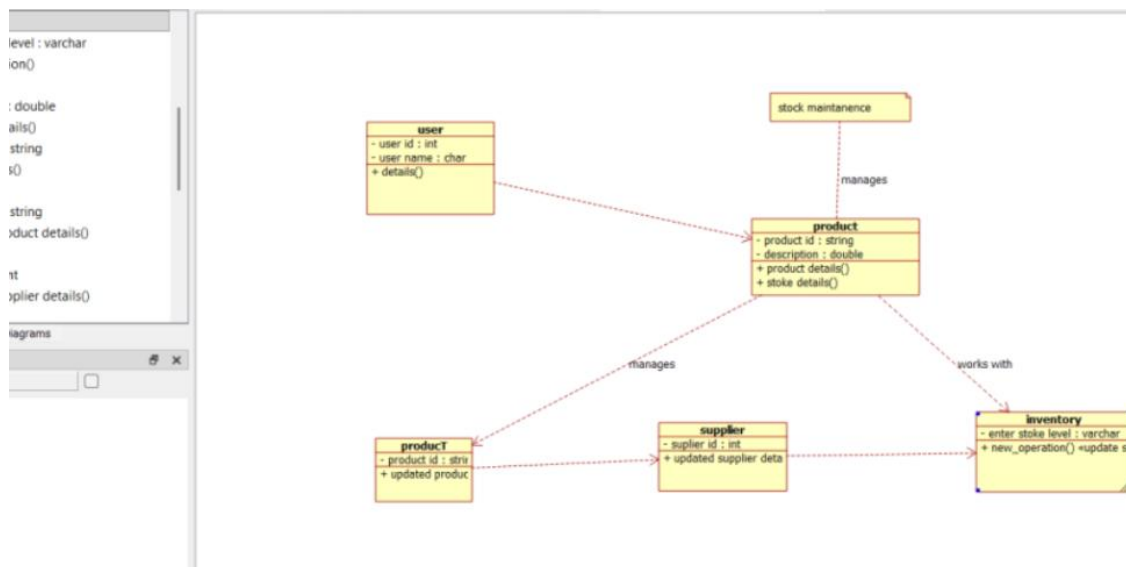
Rational rose / Argo UML

**1.2 PROBLEM ANALYSIS AND PROJECT PLANNING :**

The Stock Maintenance System, initial requirement to develop the project about the mechanism of the Stock Maintenance System is caught from the customer. The requirement are

CLASSES	ATTRIBUTES	OPERATIONS
Central stock system	Store stock details	Print bill()

Stock dealer	Take order	Deliver item()
Customer	Place order	Payment()

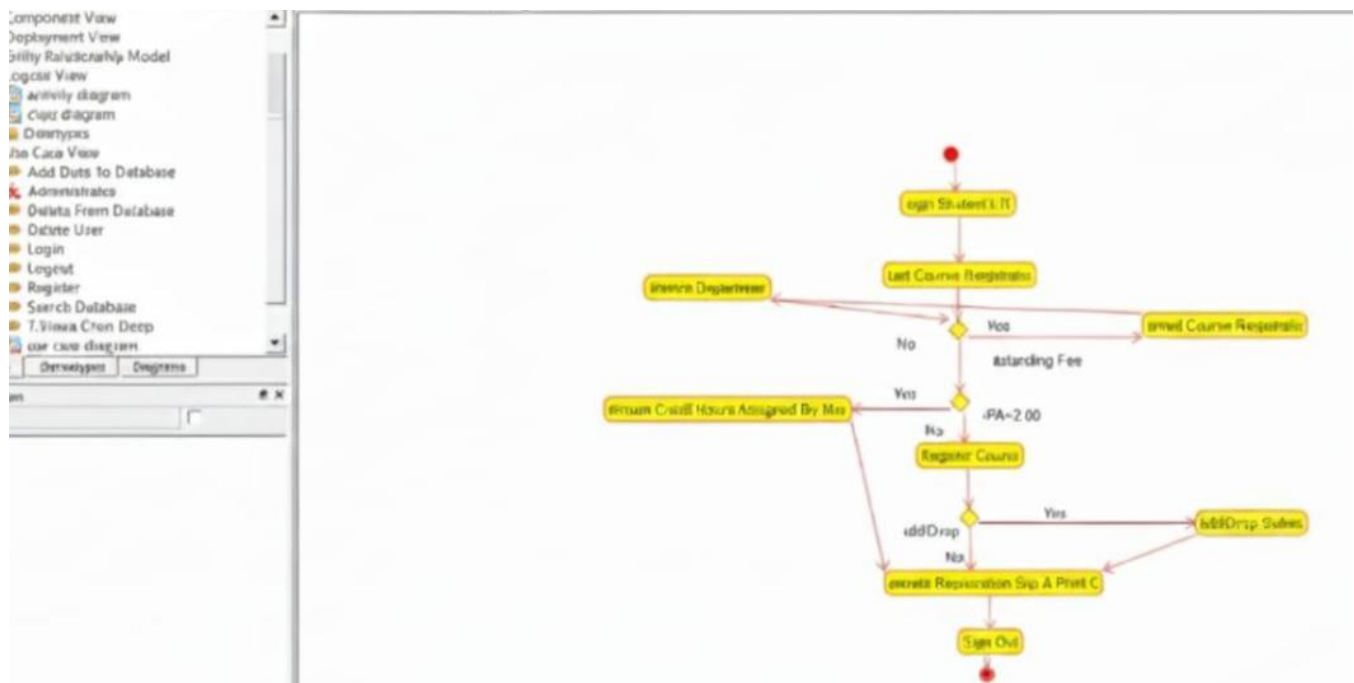


### ACTIVITY DIAGRAM:

This diagram will have the activities as Start point ,End point, Decision boxes as given below:

**Activities:** Purchase order, payment , delivery of items.

**Decision box:** Valid or not



### SEQUENCE DIAGRAM:

**Object:** Customer, Stock dealer, Central stock system

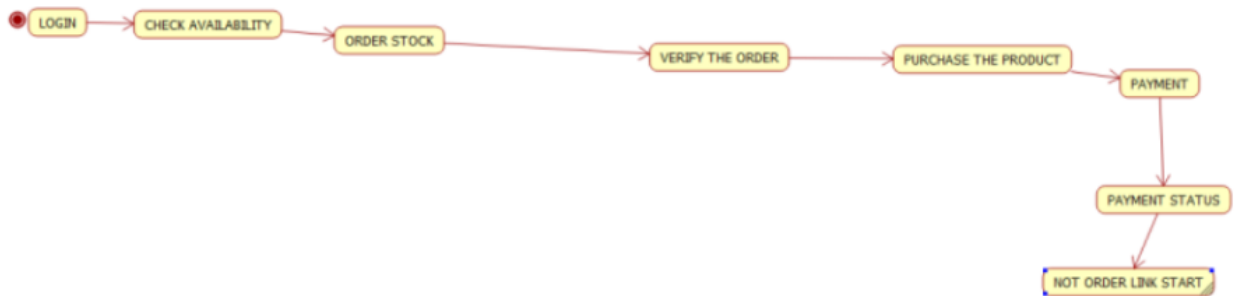
```

    usecaseDiagram
        actor Student
        usecase AddStudent as Add Student
        usecase ApproveRejectCourse as Approve/Reject Course
        usecase Course
        usecase Registrar
        usecase Exam

        Student --> AddStudent : 1: m1
        AddStudent --> Student : 2: m2
        AddStudent --> ApproveRejectCourse : 3: m3
        ApproveRejectCourse --> Student : 2: m2
        ApproveRejectCourse --> Registrar : 3: m3
        Course --> Student : 3: m3
        Course --> Registrar : 4: m4
        Registrar --> Student : 4: m4
        Registrar --> Exam : 5: m5
        Exam --> Registrar : 5: m5
    
```

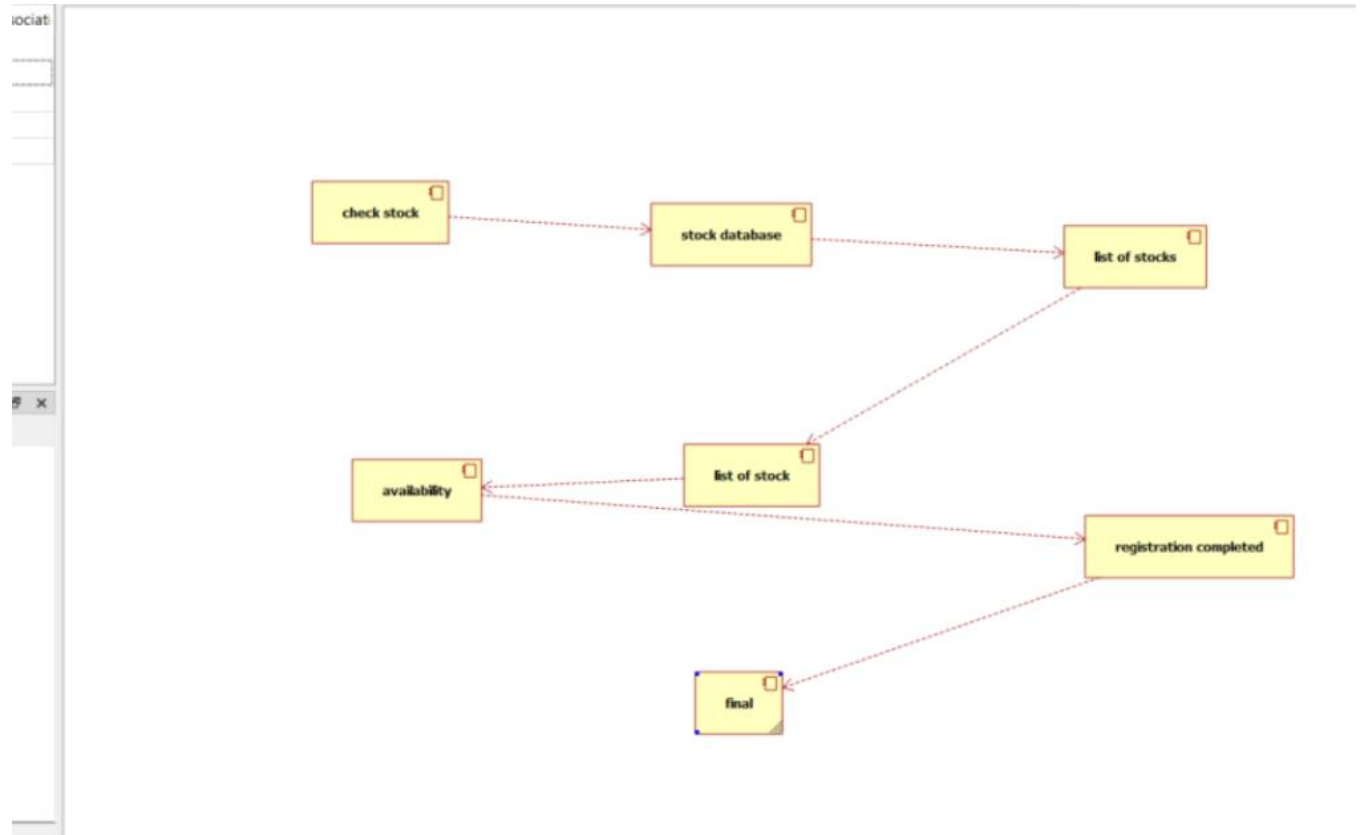
### **STATE CHART DIAGRAM:**

The purpose of state chart diagram is to understand the algorithm involved in performing a method. It is also called as state diagram. A state is represented as a round box, which may contain one or more compartments. An initial state is represented as small dot. A final state is represented as circle surrounding a small dot.



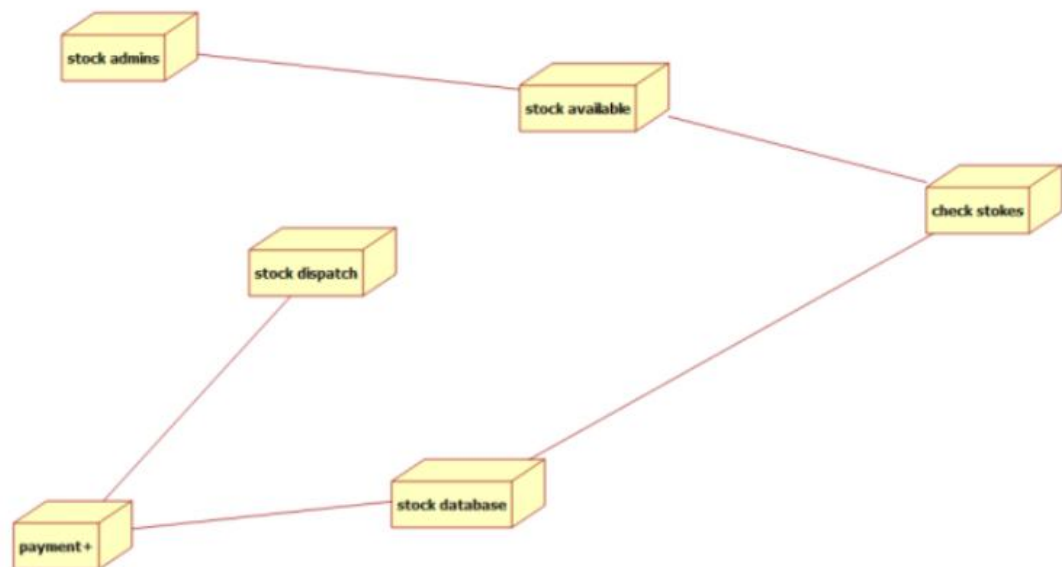
### **COMPONENT DIAGRAM:**

The component diagram's main purpose is to show the structural relationships between the components of a system. It is represented by boxed figure. Dependencies are represented by communication association



#### **DEPLOYMENT DIAGRAM:**

A deployment diagram in the unified modeling language serves to model the physical deployment of artifacts on deployment targets. Deployment diagrams show "the allocation of artifacts to nodes according to the Deployments defined between them. It is represented by 3- dimensional box. Dependencies are represented by communication association.

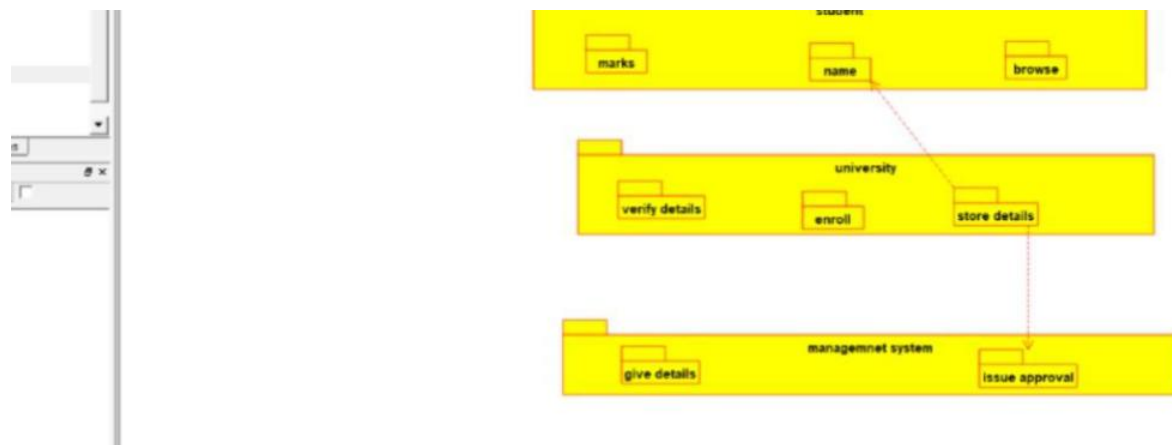


### **PACKAGE DIAGRAM:**

A package diagram in unified modeling language that depicts the dependencies between the packages that make up a model. A Package Diagram (PD) shows a grouping of elements in the OO model, and is a Cradle extension to UML. PDs can be used to show groups of classes in Class Diagrams (CDs), groups of components or processes in Component Diagrams (CPDs), or groups of processors in Deployment Diagrams (DPDs).

There are three types of layer. They are

- o User interface layer
- o Domain layer
- o Technical services layer



**PROGRAM CODING: CENTRAL STOCK SYSTEM:**

Public central stock system

{

Public integer store stock details; Public void print bill()

{

}

Public void deliver product()



```
{  
}  
}
```

#### **CUSTOMER:**

Public class customer

```
{  
Public integer place order; Public void payment()  
  
}  
}
```

#### **STOCK DEALER:**

Public class stock dealer

```
{  
Public integer take order; Pubic integer enter details; Public integer verify details; Public void deliver  
item()  
  
}  
}
```

#### **RESULT:**

Thus the diagrams [usecase, activity, sequence, collaboration, class, collaboration, deployment, compoent, statechart, package] for the Stock maintainence system.