# NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI-15



# DEPARTMENT OF COMPUTER APPLICATIONS

# **SOFTWARE REQUIREMENT SPECIFICATION**

<u>On</u>

# **CANTEEN MANAGEMENT SYSTEM**

**Submitted To:** Dr.B.Janet Joshua

Submitted By:
Deepak Kumar Choudhary
205112033
MCA 3<sup>rd</sup> Sem

# **Canteen Management System**

This project is for all private canteens in the campus. This app will provide the list of different canteens and their various items menu list.

A customer can select any item from any canteen and can order for it few hours before to the respective canteen.

And according to order canteen people will make foods and deliver to the respective customers.

And customer can pay amount from their account directly.

# **Advantages:**

Customer will not have to wait in the queue.

There will not be rush in canteens.

They can order one day before so food will be made according to order.

# Canteen Management System

Report on Configuration DefaultConfig

# **PACKAGES**

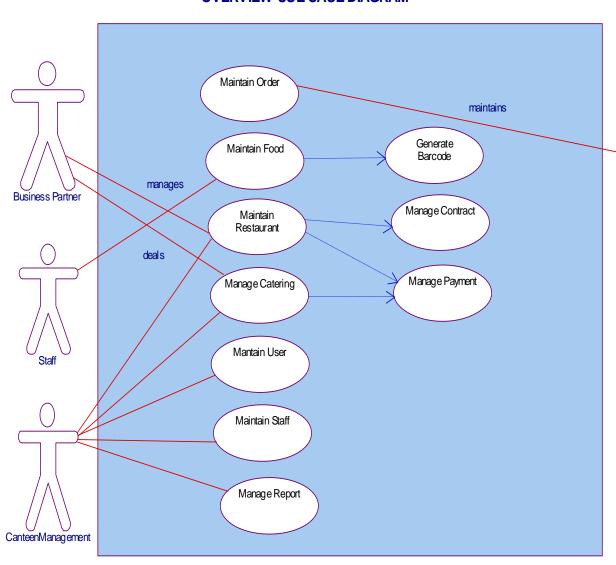
# AnalysisPkg

Language: C++

# **USE CASE DIAGRAMS:**

# CanteenManagementSystem

### **OVERVIEW USE CASE DIAGRAM**



# **Overridden Properties** Subjects: **Format** Metaclasses: Actor Properties: Line.LineWidth: 1 Font.FontColor: 0,0,128 Font.Font: Arial Fill.FillColor: 255,255,255 DefaultSize: 0,26,84,168 Font.Size: 10 Line.LineColor: 111,0,107 **FreeText** Properties: Font.Height: 13 Fill.Transparent\_Fill: 1 Multiline: True Line.Transparent: 1 Wordbreak: False VertAlign: 0 HorzAlign: 0 Font.Font: Arial Font.Size: 10 **UseCase** Properties: Line.LineWidth: 1 Font.FontColor: 0,0,0 Font.Font: Arial Fill.FillColor: 255,255,255 DefaultSize: 0,21,129,92 Font.Size: 10 Line.LineColor: 111,0,107 System\_Border Properties: Line.LineWidth: 1 Font.FontColor: 0,0,0 Font.Font: Arial Fill.FillColor: 255,255,255

DefaultSize: 0,0,228,240

Font.Size: 10

Line.LineColor: 111,0,107

### **Flow**

# **Properties:**

Line.LineWidth: 0

Font.FontColor: 0,0,128

Font.Font: Arial Line.LineStyle: 1 Font.Size: 10

Line.LineColor: 0,112,0

# Association

# **Properties:**

Line.LineWidth: 1

Font.FontColor: 0,0,128

Font.Font: Arial Font.Size: 10

Line.LineColor: 221,0,0

# **Depends**

# Properties:

Line.LineWidth: 0

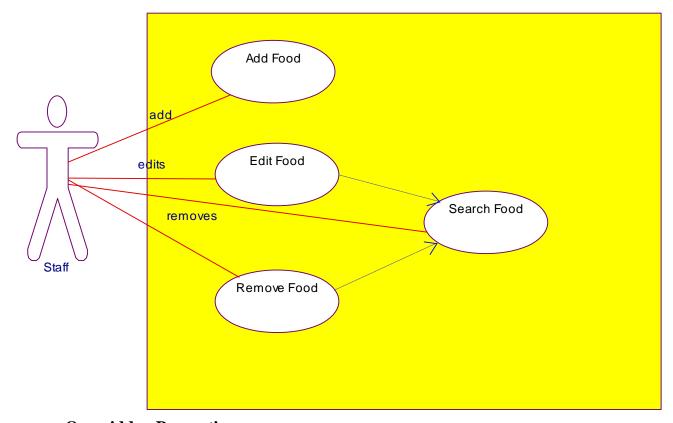
Font.FontColor: 0,0,128

Font.Font: Arial Line.LineStyle: 1 Font.Size: 10

Line.LineColor: 0,16,230

### **Staff**

### **USE CASE DIAGRAM FOR MAINTAIN FOOD**



# **Overridden Properties**

# Subjects:

### Format

# Metaclasses:

### Actor

### **Properties:**

Line.LineWidth: 1

Font.FontColor: 0,0,128

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,26,84,168

Font.Size: 10

Line.LineColor: 111,0,107

**FreeText** 

### Properties:

Font.Height: 13

Fill.Transparent\_Fill: 1

Multiline: True

Line.Transparent: 1 Wordbreak: False

VertAlign: 0 HorzAlign: 0 Font.Font: Arial Font.Size: 10

### **UseCase**

### Properties:

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,21,129,92

Font.Size: 10

Line.LineColor: 111,0,107

# System\_Border

### Properties:

Line.LineWidth: 1 Font.FontColor: 0.0.0 Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,228,240

Font.Size: 10

Line.LineColor: 111,0,107

### Association

### Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,128

Font.Font: Arial Font.Size: 10

Line.LineColor: 221,0,0

### **Depends**

### Properties:

Line.LineWidth: 0

Font.FontColor: 0,0,128

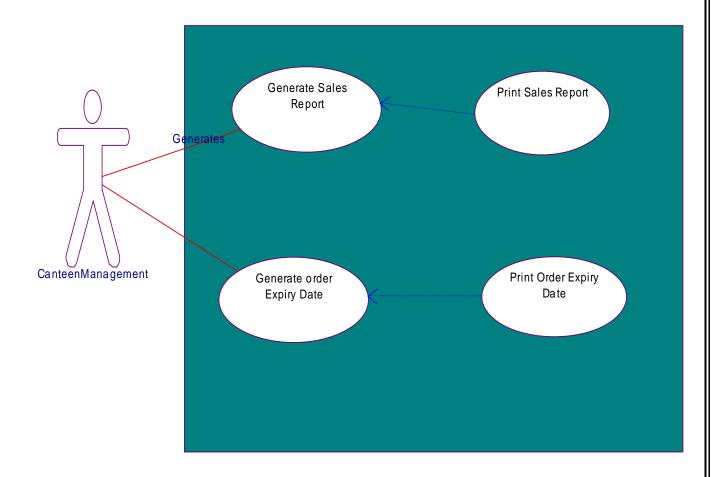
Font.Font: Arial Line.LineStyle: 1

Font.Size: 10

Line.LineColor: 0,16,230

### **Owner**

### **USE CASE DIAGRAM FOR MANAGE REPORT**



# **Overridden Properties**

Subjects:

Format

Metaclasses:

Actor

**Properties:** 

Line.LineWidth: 1

Font.FontColor: 0,0,128

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,26,84,168

Font.Size: 10

Line.LineColor: 111,0,107

### **FreeText**

### **Properties:**

Font.Height: 13

Fill.Transparent\_Fill: 1

Multiline: True

Line.Transparent: 1 Wordbreak: False

VertAlign: 0 HorzAlign: 0 Font.Font: Arial Font.Size: 10

### **UseCase**

### Properties:

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,21,129,92

Font.Size: 10

Line.LineColor: 111,0,107

# System\_Border

# Properties:

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,228,240

Font.Size: 10

Line.LineColor: 111,0,107

# Association

# Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,128

Font.Font: Arial Font.Size: 10

Line.LineColor: 221,0,0

# **Depends**

# **Properties:**

Line.LineWidth: 0

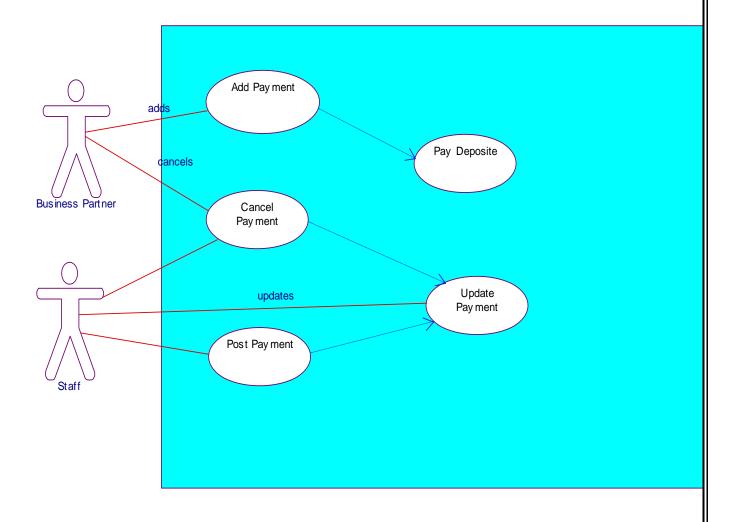
Font.FontColor: 0,0,128

Font.Font: Arial Line.LineStyle: 1 Font.Size: 10

Line.LineColor: 0,16,230

### **PAYMENT**

### **USE CASE DIAGRAM FOR MANAGE PAYMENT**



# **Overridden Properties**

### Subjects:

### **Format**

### Metaclasses:

### Actor

### **Properties:**

Line.LineWidth: 1

Font.FontColor: 0,0,128

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,26,84,168

Font.Size: 10

Line.LineColor: 111,0,107

### **FreeText**

### **Properties:**

Font.Height: 13

Fill.Transparent\_Fill: 1

Multiline: True

Line.Transparent: 1 Wordbreak: False

VertAlign: 0 HorzAlign: 0 Font.Font: Arial Font.Size: 10

### **UseCase**

# **Properties:**

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,21,129,92

Font.Size: 10

Line.LineColor: 111,0,107

# $System\_Border$

### Properties:

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,228,240

Font.Size: 10

Line.LineColor: 111,0,107

### Association

# **Properties:**

Line.LineWidth: 1

Font.FontColor: 0,0,128

Font.Font: Arial Font.Size: 10

Line.LineColor: 221,0,0

# **Depends**

### **Properties:**

Line.LineWidth: 0

Font.FontColor: 0,0,128

Font.Font: Arial Line.LineStyle: 1 Font.Size: 10

Line.LineColor: 0,16,230

### Comments:

### comment\_44

Different Functions perform by canteen management

# **EVENTS:**

accepts	
AgreeOnDetails	
cancel	
cancelledPayment	
completeOrder	
CustomerChangesOrder	
delivered	
DisagreeOnDetails	
discussingDetails	
display	
displyReport	
event_47	
Expiry	
generateReport	
mreturn	
ordercancel	
orderIsReady	
orders	
Paid	
ReadyToPay	
refund	
verificationFailed	
verificationPassed	
verifyOrder	

# FLOWS:

# **Maintain Food\_Generate Barcode**

From Maintain Food to Generate Barcode

### **Associations:**

### add

End1: itsAdd Food\_1, Multiplicity of 1 End2: itsStaff\_1, Multiplicity of 1

### adds

End1: itsAdd Payment, Multiplicity of 1 End2: itsBusiness Partner, Multiplicity of 1

### cancels

End1: itsCancel Payment, Multiplicity of 1 End2: itsBusiness Partner, Multiplicity of 1

### deals

End1: itsManage Catering, Multiplicity of 1 End2: itsBusiness Partner, Multiplicity of 1

### edits

End1: itsEdit Food\_1, Multiplicity of 1 End2: itsStaff\_1, Multiplicity of 1

### Generates

End1: itsGenerate Sales Report\_2, Multiplicity of 1 End2: itsCanteenManagement\_2, Multiplicity of 1

### **gENERATES**

End1: itsGenerate Sales Report\_1, Multiplicity of 1 End2: itsCanteenManagement\_1, Multiplicity of 1

### includes

End1: itsGenerate Barcode, Multiplicity of 1 End2: itsMaintain Food, Multiplicity of 1

### maintains

End1: itsMaintain Order, Multiplicity of 1 End2: itsStudent, Multiplicity of 1

### manages

End1: itsMaintain Restaurant, Multiplicity of 1 End2: itsBusiness Partner, Multiplicity of 1

### removes

End1: itsRemove Food\_1, Multiplicity of 1 End2: itsStaff\_1, Multiplicity of 1

### updates

End1: itsUpdate Payment, Multiplicity of 1 End2: itsStaff, Multiplicity of 1

# **GLOBALS:**

### Objects:

order

Object of Order, Multiplicity of 1

payment

### **CLASSES:**

### Α

### CanteenManagementSystem

### Ports:

### port\_10

Multiplicity of 1

Contract: <Implicit>

Provided Interfaces:

Required Interfaces:

### port\_11

Multiplicity of 1

Contract: <Implicit>

Provided Interfaces:

Required Interfaces:

### Operations:

### accepts

Reception

### AgreeOnDetails

Reception

### CalculateBill

Primitive-operation, Public, Return type is void

### cancelledPayment

Reception

### CustomerChangesOrder

Reception

### delivered

Reception

### **DeliverOrder**

Primitive-operation, Public, Return type is void

### DisagreeOnDetails

Reception

### discussingDetails

Reception

### **Expiry**

Reception

### GenerateBill

Primitive-operation, Public, Return type is void

### orderIsReady

Reception

### Paid

Reception

### ReadyToPay

Reception

### Takeorder

Primitive-operation, Public, Return type is void

### **UpdateRecord**

Primitive-operation, Public, Return type is void

### verificationFailed

Reception

### verificationPassed

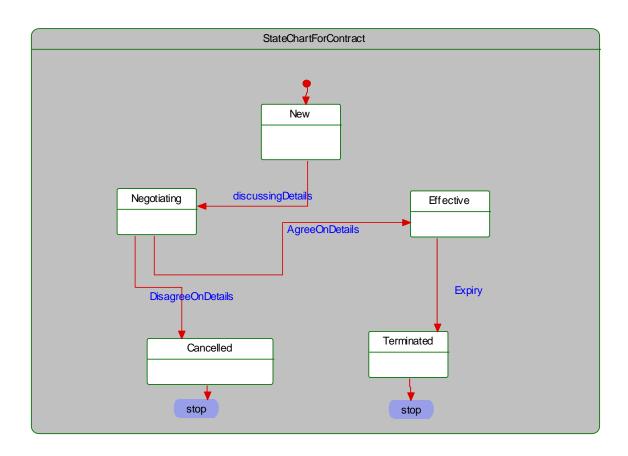
Reception

### verifyOrder Reception Attributes: bal Type of int, Public, Multiplicity of 1 Type of int, Public, Multiplicity of 1 payment Type of int, Public, Multiplicity of 1 QtyDeliverd Type of int, Public, Multiplicity of 1 total Type of int, Public, Multiplicity of 1

### **Behaviors:**

State Chart For Contract

### STATECHART FOR CONTRACT



# **Overridden Properties** Subjects: **Format**

Metaclasses:

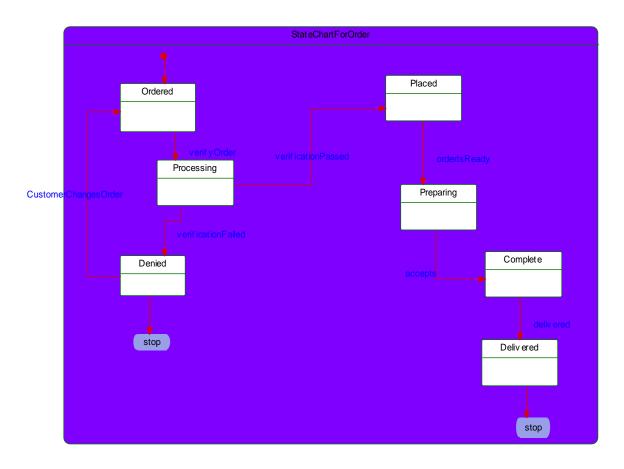
DiagramConnector

```
Properties:
             Line.LineWidth: 1
             Font.FontColor: 0,0,0
             Font.Font: Arial
             Fill.FillColor: 152,158,231
             DefaultSize: 0,0,55,24
             Font.Size: 10
             Line.LineColor: 0,0,0
       FreeText
          Properties:
             Font.Height: 13
             Fill.Transparent_Fill: 1
             Multiline: True
             Line.Transparent: 1
             Wordbreak: False
             VertAlign: 0
             HorzAlign: 0
             Font.Font: Arial
             Font.Size: 10
       DanglingTransition
          Properties:
             Line.LineWidth: 2
             Line.LineColor: 0,0,0
       State
          Properties:
             Line.LineWidth: 1
             Font.FontColor: 0,0,0
             Font.Font: Arial
             Fill.FillColor: 255,255,255
             Line.LineStyle: 0
             DefaultSize: 0,0,96,60
             Font.Size: 10
             Line.LineColor: 0,112,0
ROOT
  Or-state
  Substates:
     StateChartForContract
StateChartForContract
  Or-state
  Substates:
     Cancelled
     Effective
     Negotiating
```

```
New
     Terminated
  Default Transition
     Target:
       New
Cancelled
  Or-state
  Out Transition
     Target:
       stop
Effective
  Or-state
  Out Transition
     Expiry
     Target:
       Terminated
Negotiating
  Or-state
  Out Transition
     AgreeOnDetails
     Target:
       Effective
  Out Transition
     DisagreeOnDetails
     Target:
       Cancelled
New
  Or-state
  Out Transition
     discussingDetails
     Target:
       Negotiating
Terminated
  Or-state
  Out Transition
     Target:
       stop
stop
  Diagram Connector
  Diagram Connector
```

### StateChartForOrder

### STATECHART FOR ORDER



# **Overridden Properties**

# Subjects:

### Format

# Metaclasses:

# **DiagramConnector**

### **Properties:**

Line.LineWidth: 1
Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 152,158,231 DefaultSize: 0,0,55,24

Font.Size: 10

Line.LineColor: 0,0,0

### **FreeText**

### Properties:

Font.Height: 13

Fill.Transparent\_Fill: 1

Multiline: True

Line.Transparent: 1 Wordbreak: False

VertAlign: 0 HorzAlign: 0 Font.Font: Arial Font.Size: 10

### **DanglingTransition**

# **Properties:**

Line.LineWidth: 2 Line.LineColor: 0,0,0

### State

# **Properties:**

Line.LineWidth: 1
Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

Line.LineStyle: 0

DefaultSize: 0,0,96,60

Font.Size: 10

Line.LineColor: 0,112,0

### **ROOT**

Or-state

### Substates:

StateChartForOrder

### **StateChartForOrder**

Or-state

### Substates:

Complete

Delivered

Denied

Ordered

**Placed** 

Preparing
Processing
Default Transition
Target:
Ordered

# Complete

Or-state
Out Transition
delivered

Target:
Delivered

### **Delivered**

Or-state
Out Transition
Target:
stop

### **Denied**

Or-state
Out Transition
CustomerChangesOrder

Target:
Ordered
Out Transition
Target:
stop

### **Ordered**

Or-state
Out Transition
verifyOrder

Target: Processing

### **Placed**

Or-state
Out Transition
orderIsReady

# Target: Preparing

# **Preparing**

Or-state

Out Transition

accepts

# Target:

Complete

# **Processing**

Or-state

Out Transition

verificationFailed

### Target:

Denied

Out Transition

verificationPassed

### Target:

Placed

### stop

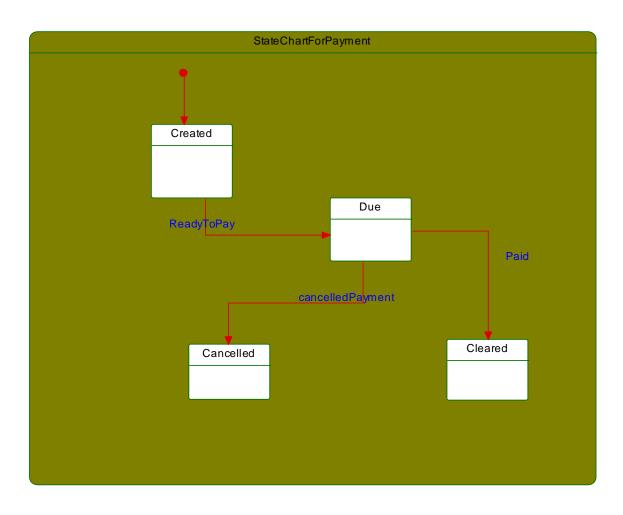
Diagram Connector

### stop

Diagram Connector

### StateChartForPayment

### STATECHART FOR PAYMENT



# **Overridden Properties**

# Subjects:

# Format

# Metaclasses:

### **FreeText**

### **Properties:**

Font.Height: 13

Fill.Transparent\_Fill: 1

Multiline: True

Line.Transparent: 1

Wordbreak: False

VertAlign: 0 HorzAlign: 0

Font.Font: Arial

```
Font.Size: 10
       DanglingTransition
          Properties:
             Line.LineWidth: 2
             Line.LineColor: 0,0,0
       State
          Properties:
             Line.LineWidth: 1
             Font.FontColor: 0,0,0
             Font.Font: Arial
             Fill.FillColor: 255,255,255
             Line.LineStyle: 0
             DefaultSize: 0,0,96,60
             Font.Size: 10
             Line.LineColor: 0,112,0
ROOT
  Or-state
  Substates:
     StateChartForPayment
StateChartForPayment
  Or-state
  Substates:
     Cancelled
     Cleared
     Created
     Due
  Default Transition
     Target:
       Created
Cancelled
  Or-state
Cleared
  Or-state
Created
  Or-state
  Out Transition
     ReadyToPay
     Target:
       Due
Due
  Or-state
  Out Transition
```

cancelledPayment

Target:

Cancelled

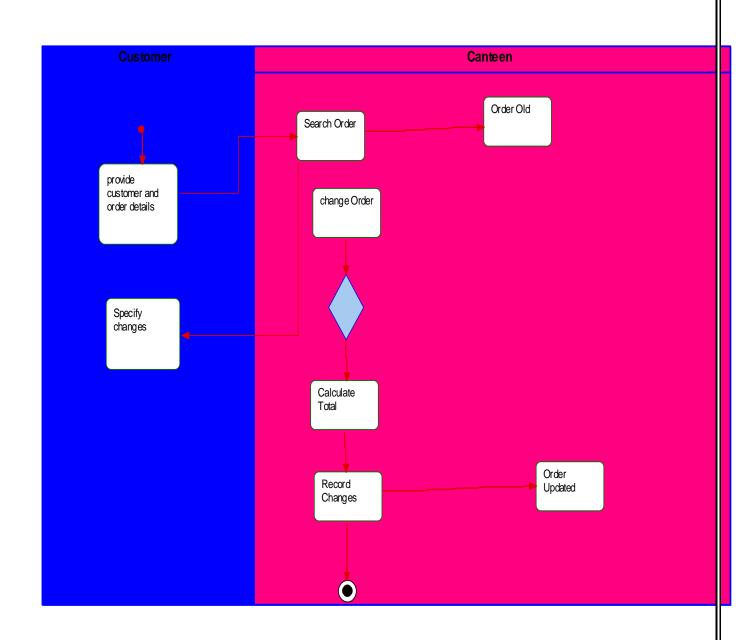
**Out Transition** 

Paid

Target:

Cleared

# **ACTIVITY DIAGRAM FOR CHANGE ORDER**



### **Overridden Properties**

### Subjects:

### **Format**

### Metaclasses:

### MergeNode

### Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 166,202,240 DefaultSize: 0,0,48,77

Font.Size: 10

Line.LineColor: 0,16,230

### **TerminationState**

### Properties:

Line.LineWidth: 1 DefaultSize: 0,0,25,26 Line.LineColor: 0,0,0

### AcceptTimeEvent

### **Properties:**

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,30,40

Font.Size: 10

Line.LineColor: 0,112,0

# ObjectNode

# **Properties:**

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,94,47

Font.Size: 10

Line.LineColor: 0,220,0

### Action

### Properties:

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

DefaultSize: 0,0,95,60

Font.Size: 10

Line.LineColor: 0,112,0

### Swimlane\_Frame

### **Properties:**

DefaultSize: 0,0,50,50 Line.LineColor: 0,0,255

### **FreeText**

### Properties:

Font.Height: 13

Fill.Transparent\_Fill: 1

Multiline: True

Line.Transparent: 1 Wordbreak: False

VertAlign: 0 HorzAlign: 0 Font.Font: Arial Font.Size: 10

### ActionBlock

### Properties:

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,228,180

Font.Size: 10

Line.LineColor: 0,112,0

### **SendAction**

# **Properties:**

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

Line.LineStyle: 0

DefaultSize: 0,0,100,40

Font.Size: 10

Line.LineColor: 0,112,0

### **DanglingTransition**

### Properties:

Line.LineWidth: 2 Line.LineColor: 0,0,0

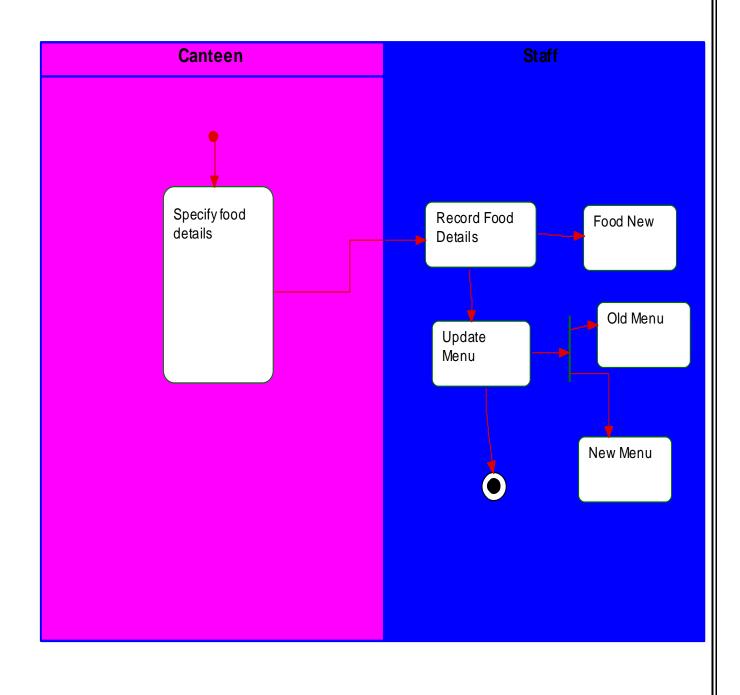
### State

```
Properties:
             Line.LineWidth: 1
             Font.FontColor: 0,0,0
             Font.Font: Arial
             Fill.FillColor: 255,255,255
             Line.LineStyle: 0
             DefaultSize: 0,0,96,60
             Font.Size: 10
             Line.LineColor: 0,112,0
ROOT
  Or-state
  Substates:
     action_11
     action_12
     action_13
     action_14
     action 17
     action_18
     action 6
     action 8
     activityfinal_16
  Default Transition
     Target:
       action_6
action_11
  Action State
  EntryAction
     Search Order
  Out Transition
  Stereotypes:
     ControlFlow
     Target:
       action 8
  Out Transition
  Stereotypes:
     ControlFlow
     Target:
       action_17
action_12
  Action State
  EntryAction
     change Order
```

```
Out Transition
  Stereotypes:
     ControlFlow
     Target:
          action 13
action 13
  Action State
  EntryAction
     Calculate Total
  Out Transition
  Stereotypes:
     ControlFlow
     Target:
       action_14
action 14
  Action State
  EntryAction
     Record Changes
  Out Transition
  Stereotypes:
     ControlFlow
     Target:
       activityfinal_16
  Out Transition
  Stereotypes:
     ControlFlow
     Target:
       action 18
action_17
  Action State
  EntryAction
     Order Old
action 18
  Action State
  EntryAction
     Order Updated
action 6
  Action State
  EntryAction
     provide customer and order details
```

```
Out Transition
     Stereotypes:
       ControlFlow
       Target:
          action_11
  action 8
     Action State
     EntryAction
       Specify changes
  activityfinal_16
     Local Termination State
     Stereotypes:
       ActivityFinal
Swimlanes:
  Canteen
     States:
       action_11
       action_12
       action_13
       action_14
       action_17
       action_18
  Customer
     States:
       action_6
       action_8
```

# **ACTIVITY DIAGRAM FOR FOOD INTRODUCTION**



### **Overridden Properties**

### Subjects:

### **Format**

### Metaclasses:

### **TerminationState**

### Properties:

Line.LineWidth: 1 DefaultSize: 0,0,25,26 Line.LineColor: 0,0,0

### **Action**

### Properties:

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,95,60

Font.Size: 10

Line.LineColor: 0,112,0

# AcceptEventAction

### Properties:

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

Line.LineStyle: 0

DefaultSize: 0,0,100,40

Font.Size: 10

Line.LineColor: 0,112,0

### Swimlane\_Frame

# Properties:

DefaultSize: 0,0,50,50 Line.LineColor: 0,0,255

### ForkConnector

# Properties:

Line.LineWidth: 2 Line.LineColor: 0,112,0

### **FreeText**

### Properties:

Font.Height: 13

Fill.Transparent\_Fill: 1

Multiline: True

Line.Transparent: 1 Wordbreak: False VertAlign: 0 HorzAlign: 0 Font.Font: Arial Font.Size: 10

### SendAction

### **Properties:**

Line.LineWidth: 1
Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

Line.LineStyle: 0

DefaultSize: 0,0,100,40

Font.Size: 10

Line.LineColor: 0,112,0

### **JoinConnector**

### Properties:

Line.LineWidth: 2 Line.LineColor: 0,112,0

# **DanglingTransition**

### Properties:

Line.LineWidth: 2 Line.LineColor: 0,0,0

# **Depends**

# **Properties:**

Line.LineWidth: 0

Font.FontColor: 0,0,128

Font.Font: Arial Line.LineStyle: 1 Font.Size: 10

Line.LineColor: 0,16,230

### State

# Properties:

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

Line.LineStyle: 0 DefaultSize: 0,0,96,60

Font.Size: 10

Line.LineColor: 0,112,0

### **ROOT**

Or-state

```
Substates:
     action_10
     action_11
     action_3
     action 4
     action 7
     action_9
     activityfinal_13
  Default Transition
     Target:
       action_3
action_10
  Action State
  EntryAction
     Old Menu
action 11
  Action State
  EntryAction
     New Menu
action_3
  Action State
  EntryAction
     Specify food details
  Out Transition
  Stereotypes:
     ControlFlow
     Target:
       action_4
action_4
  Action State
  EntryAction
     Record Food Details
  Out Transition
  Stereotypes:
     ControlFlow
     Target:
       action_9
  Out Transition
  Stereotypes:
     ControlFlow
```

```
Target:
          action 7
  action 7
     Action State
     EntryAction
        Update Menu
     Out Transition
     Stereotypes:
        ControlFlow
        Targets:
          action_10
          action 11
     Out Transition
     Stereotypes:
        ControlFlow
        Target:
          activityfinal_13
  action 9
     Action State
     EntryAction
        Food New
  activityfinal_13
     Local Termination State
     Stereotypes:
        ActivityFinal
Swimlanes:
  Canteen
     States:
        action_3
  Staff
     States:
        action_10
        action_11
        action_4
        action_7
        action_9
Display
  Operations:
     display
        Reception
     Display
        Primitive-operation, Public, Return type is void
```

```
DisplayReport
  Operations:
     displyReport
        Reception
EDitedOrder
  Operations:
     completeOrder
       Reception
     editOrder
       Primitive-operation, Public, Return type is void
     orders
        Reception
     reditorder
       Primitive-operation, Public, Return type is void
GenerateReport
  Operations:
     generateReport
       Reception
M
Order
  Operations:
     ordercancel
       Reception
     orders
        Reception
     reorder
        Primitive-operation, Public, Return type is void
Payment
  Operations:
     event_47
        Reception
     mreturn
       Reception
QtyOrdered
  Ports:
     port_0
       Multiplicity of 1
        Contract: <Implicit>
        Provided Interfaces:
       Required Interfaces:
```

### Operations:

cancel

Reception

### **DisplayStatus**

Primitive-operation, Public, Return type is void

### **Payment**

Primitive-operation, Public, Return type is void

### refund

Reception

### **Attributes:**

payBill

Type of int, Public, Multiplicity of 1

### **OtvOrdered**

Type of int, Public, Multiplicity of 1

## **ACTORS:**

### actor\_27

#### **Business Partner**

Association Ends:

itsAdd Payment

adds

Association with Add Payment, Multiplicity of 1, Bi-directional, Navigable

#### itsCancel Payment

cancels

Association with Cancel Payment, Multiplicity of 1, Bi-directional, Navigable

#### itsMaintain Restaurant

manages

Association with Maintain Restaurant, Multiplicity of 1, Bi-directional, Navigable

### itsManage Catering

deals

Association with Manage Catering, Multiplicity of 1, Bi-directional, Navigable

### CanteenManagement

### Association Ends:

#### itsGenerate order Expiry Date

Association with Generate order Expiry Date, Multiplicity of 1, Bi-directional, Navigable

#### itsGenerate Sales Report

Association with Generate Sales Report, Multiplicity of 1, Bi-directional, Navigable

#### itsGenerate Sales Report 1

*gENERATES* 

Association with Generate Sales Report, Multiplicity of 1, Bi-directional, Navigable

#### itsGenerate Sales Report 2

Generates

Association with Generate Sales Report, Multiplicity of 1, Bi-directional, Navigable

### itsMaintain Restaurant

Association with Maintain Restaurant, Multiplicity of 1, Bi-directional, Navigable

### itsMaintain Staff

Association with Maintain Staff, Multiplicity of 1, Bi-directional, Navigable

#### itsManage Catering

Association with Manage Catering, Multiplicity of 1, Bi-directional, Navigable

#### itsManage Report

Association with Manage Report, Multiplicity of 1, Bi-directional, Navigable

#### itsMantain User

Association with Mantain User, Multiplicity of 1, Bi-directional, Navigable

### Order Taking Staff

### **Staff**

#### Association Ends:

#### itsAdd Food

Association with Add Food, Multiplicity of 1, Bi-directional, Navigable

#### itsAdd Food 1

add

Association with Add Food, Multiplicity of 1, Bi-directional, Navigable

#### itsCancel Payment

Association with Cancel Payment, Multiplicity of 1, Bi-directional, Navigable

#### itsEdit Food

Association with Edit Food, Multiplicity of 1, Bi-directional, Navigable

#### itsEdit Food\_1

edits

Association with Edit Food, Multiplicity of 1, Bi-directional, Navigable

#### itsMaintain Food

Association with Maintain Food, Multiplicity of 1, Bi-directional, Navigable

#### itsPost Payment

Association with Post Payment, Multiplicity of 1, Bi-directional, Navigable

#### itsRemove Food

Association with Remove Food, Multiplicity of 1, Bi-directional, Navigable

#### itsRemove Food\_1

removes

Association with Remove Food, Multiplicity of 1, Bi-directional, Navigable

#### itsSearch Food

Association with Search Food, Multiplicity of 1, Bi-directional, Navigable

#### itsUpdate Payment

updates

Association with Update Payment, Multiplicity of 1, Bi-directional, Navigable

#### Student

#### Association Ends:

#### itsMaintain Order

maintains

Association with Maintain Order, Multiplicity of 1, Bi-directional, Navigable

## **USE CASES:**

#### Add Food

Association Ends:

itsStaff

itsStaff\_1

### **Add Payment**

### **Association Ends:**

itsBusiness Partner

### **Cancel Payment**

**Association Ends:** 

itsBusiness Partner

itsStaff

### **Edit Food**

**Association Ends:** 

itsStaff

itsStaff\_1

### **Generate Barcode**

Association Ends:

itsMaintain Food

### **Generate order Expiry Date**

Association Ends:

itsCanteenManagement

### **Generate Sales Report**

Association Ends:

**itsCanteenManagement** 

 $itsCanteenManagement\_1$ 

itsCanteenManagement\_2

### **Maintain Food**

Association Ends:

itsStaff

itsGenerate Barcode

### **Maintain Order**

**Association Ends:** 

itsStudent

### maintain order

### **Maintain Restaurant**

Association Ends:

itsBusiness Partner

**itsCanteenManagement** 

## **Maintain Staff**

Association Ends:

itsCanteenManagement

### **Manage Catering**

Association Ends:

itsBusiness Partner

itsCanteenManagement

itsManage Payment

### **Manage Contract**

### **Manage Payment**

Association Ends:

itsManage Catering

## **Manage Report**

**Association Ends:** 

its Canteen Management

### **Mantain User**

**Association Ends:** 

its Canteen Management

## **Pay Deposite**

## **Post Payment**

**Association Ends:** 

itsStaff

## **Print Order Expiry Date**

## **Print Sales Report**

### **Remove Food**

**Association Ends:** 

itsStaff

itsStaff 1

### **Search Food**

**Association Ends:** 

itsStaff

### **Update Payment**

**Association Ends:** 

itsStaff

usecase 22

usecase\_24

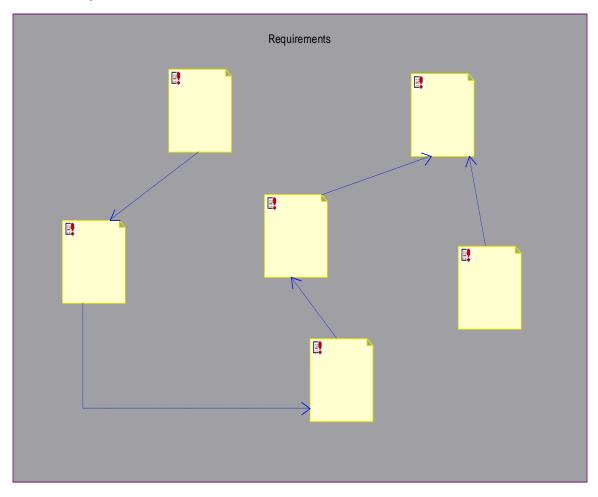
usecase\_35

# RequirementsPkg

Language: C++

## **USE CASE DIAGRAMS:**

## Requirement



## **Overridden Properties**

Subjects:

Format

Metaclasses:

Requirement

**Properties:** 

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,207 DefaultSize: 0,0,84,96

Font.Size: 10

Line.LineColor: 225,225,0

## $System\_Border$

## **Properties:**

Line.LineWidth: 1
Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,228,240

Font.Size: 10

Line.LineColor: 111,0,107

## **Depends**

## **Properties:**

Line.LineWidth: 0

Font.FontColor: 0,0,128

Font.Font: Arial Line.LineStyle: 1 Font.Size: 10

Line.LineColor: 0,16,230

## Requirements:

Req1.1

**Req1.2** 

Req3.1

**Req3.2** 

**Req4.1** 

**Req4.2** 

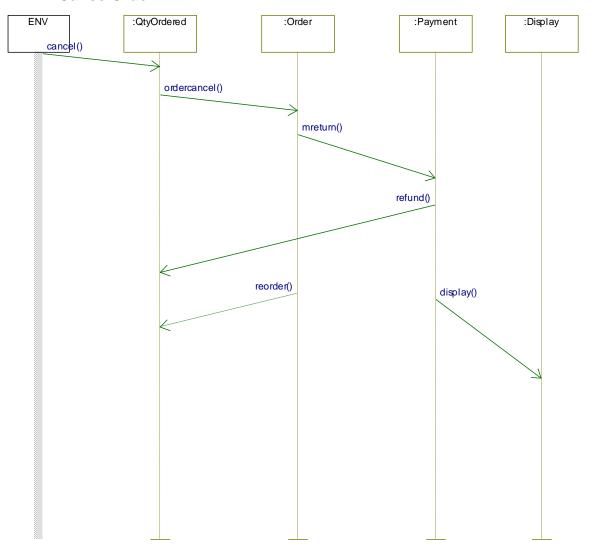
### **GLOBALS:**

## subsystemPkg

Language: C++

# **SEQUENCE DIAGRAMS:**

## CancelOrder



# **Overridden Properties**

## Subjects:

**Format** 

## Metaclasses:

ReplyMessage

## **Properties:**

Line.LineWidth: 0

Font.FontColor: 0,0,128

Font.Font: Arial Line.LineStyle: 1 Font.Size: 10 Line.LineColor: 0,112,0

## InstanceLine

## **Properties:**

Line.LineWidth: 0 Font.FontColor: 0,0,0 Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,96,437

Font.Size: 10

Line.LineColor: 121,122,0

### Message

## Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,128

Font.Font: Arial Font.Size: 10

Line.LineColor: 0,112,0

### **EnvironmentLine**

## **Properties:**

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,96,437

Font.Size: 10

Line.LineColor: 0,0,0

## SequenceDiagram

## Metaclasses:

## SequenceDiagram

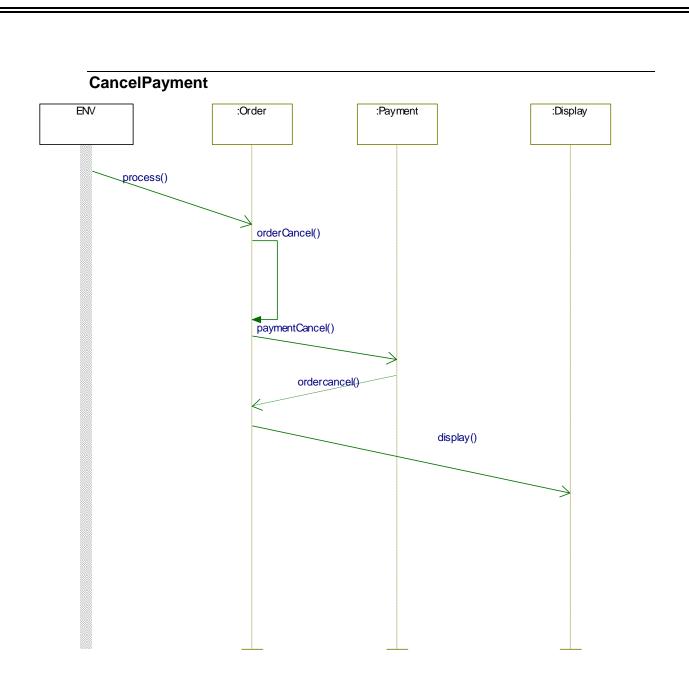
## Properties:

Fillcolor: 50,205,50

### General

## Properties:

ClassCentricMode: True RealizeMessages: True CleanupRealized: True



## Subjects:

### **Format**

## Metaclasses:

## ReplyMessage

## **Properties:**

Toperties.

Line.LineWidth: 0

Font.FontColor: 0,0,128

Font.Font: Arial

Line.LineStyle: 1

Font.Size: 10

Line.LineColor: 0,112,0

### InstanceLine

## **Properties:**

Line.LineWidth: 0 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,96,437

Font.Size: 10

Line.LineColor: 121,122,0

## Message

## **Properties:**

Line.LineWidth: 1

Font.FontColor: 0,0,128

Font.Font: Arial Font.Size: 10

Line.LineColor: 0,112,0

### **EnvironmentLine**

## **Properties:**

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,96,437

Font.Size: 10

Line.LineColor: 0,0,0

## SequenceDiagram

## Metaclasses:

## ${\bf Sequence Diagram}$

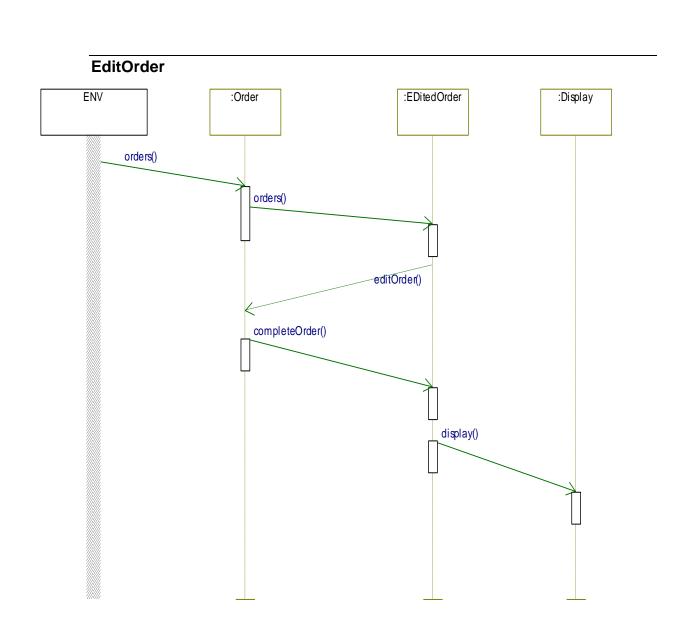
**Properties:** 

Fillcolor: 255,0,255

### General

## Properties:

ClassCentricMode: True RealizeMessages: True CleanupRealized: True



## Subjects:

Format

## Metaclasses:

execution\_occurrence

**Properties:** 

Line.LineWidth: 1
Font.FontColor: 0,0,0

Font.Font: Arial Font.Size: 10

Line.LineColor: 0,0,0

ReplyMessage

### Properties:

Line.LineWidth: 0

Font.FontColor: 0,0,128

Font.Font: Arial Line.LineStyle: 1 Font.Size: 10

Line.LineColor: 0,112,0

### InstanceLine

## Properties:

Line.LineWidth: 0 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,96,437

Font.Size: 10

Line.LineColor: 121,122,0

### Message

## **Properties:**

Line.LineWidth: 1

Font.FontColor: 0,0,128

Font.Font: Arial Font.Size: 10

Line.LineColor: 0,112,0

### **EnvironmentLine**

## **Properties:**

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,96,437

Font.Size: 10

Line.LineColor: 0,0,0

## SequenceDiagram

## Metaclasses:

## SequenceDiagram

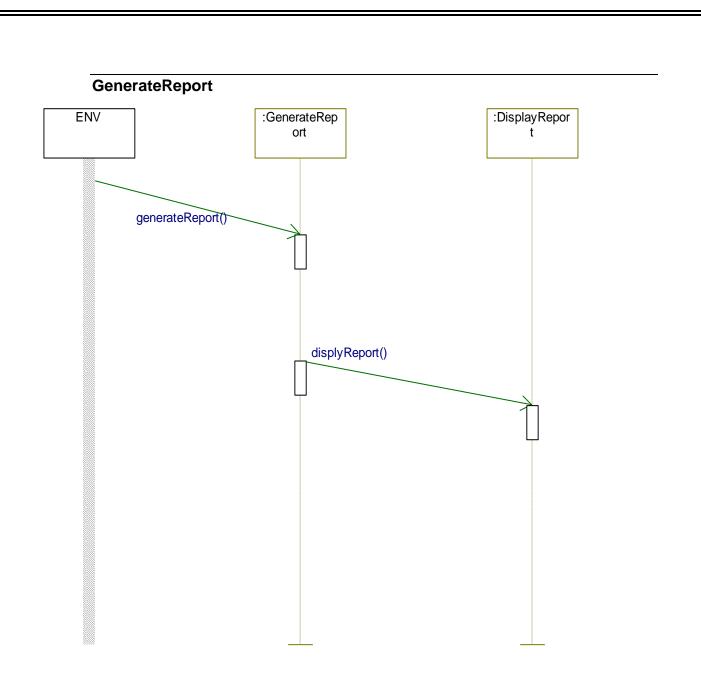
## **Properties:**

Fillcolor: 255,192,203

## General

## Properties:

ClassCentricMode: True RealizeMessages: True CleanupRealized: True



Subjects:

Format

Metaclasses:

 $execution\_occurrence$ 

**Properties:** 

Line.LineWidth: 1

Font.FontColor: 0,0,0

Font.Font: Arial Font.Size: 10

Line.LineColor: 0,0,0

InstanceLine

## Properties:

Line.LineWidth: 0 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,96,437

Font.Size: 10

Line.LineColor: 121,122,0

### Message

### Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,128

Font.Font: Arial Font.Size: 10

Line.LineColor: 0,112,0

### **EnvironmentLine**

## Properties:

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,96,437

Font.Size: 10

Line.LineColor: 0,0,0

# SequenceDiagram

## Metaclasses:

## SequenceDiagram

## Properties:

Fillcolor: 60,179,113

### General

## **Properties:**

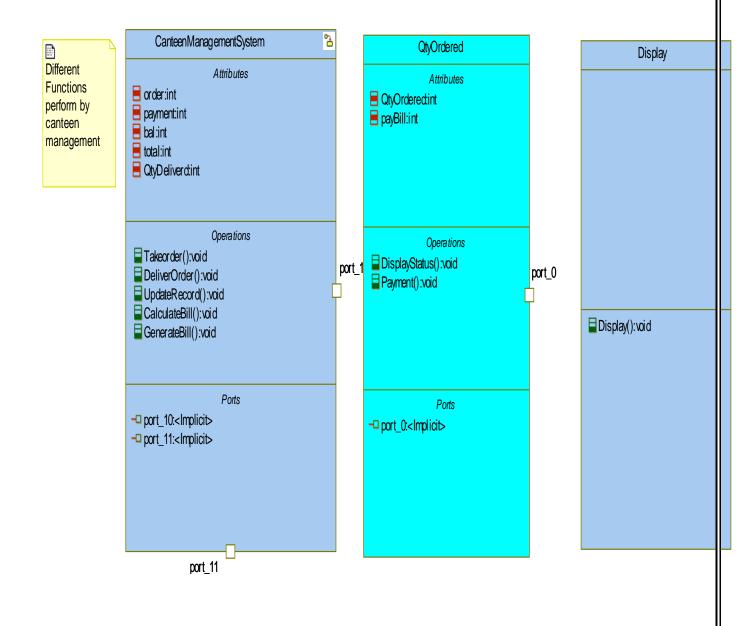
ClassCentricMode: True RealizeMessages: True CleanupRealized: True

## **GLOBALS:**

# **OBJECT MODEL DIAGRAMS**

## CanteenManagementSystem

## **OBJECT MODEL DIAGRAM FOR CANTEEN MANAGEMENT SYSTEM**



## Subjects:

### **Format**

### Metaclasses:

### Class

## **Properties:**

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

Line.LineStyle: 0

DefaultSize: 0,34,84,148

Font.Size: 10

Line.LineColor: 121,122,0

### **FreeText**

## **Properties:**

Font.Height: 13

Fill.Transparent\_Fill: 1

Multiline: True Line.Transparent: 1

Wordbreak: False

VertAlign: 0 HorzAlign: 0 Font.Font: Arial Font.Size: 10

### Comment

## Properties:

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,207 DefaultSize: 0,0,84,96

Font.Size: 10

Line.LineColor: 225,225,0

## **Object**

### Properties:

Font.Underline@Child.NameCompartment@Name: 1

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

Line.LineStyle: 0

DefaultSize: 0,34,84,148

Font.Size: 10

Line.LineColor: 121,122,0

## **Port**

## Properties:

Line.LineWidth: 1 Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255 DefaultSize: 0,0,68,73

Font.Size: 10

Line.LineColor: 121,122,0

## Model1

# COMPONENTS

# DefaultComponent

Language: C++

## **COMPONENT SETTINGS:**

Build type: Executable

## **CONFIGURATIONS:**

## **DefaultConfig**

Scope type: Explicit Instrumentation type: Animation Time-model type: Real-time Statechart generation type: Flat

