**Shipping Store UML Design**

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**Use Cases**

(Use Case Free-Text)

**Use Case 1: “Employee Managing Packages in Shipping Store Inventory”**

1. Employee Log in **include** (Authenticate Employee)
2. System displays menu options
3. Employee searches system for package via tracking **include** (Identify Package)
4. Employee enters current location of package **include** (Update Package Information)
5. System removes delivered packages from inventory **include** (Identify Delivery Status)
6. System displays all remaining packages in inventory **extend** (Display Manage Inventory Menu Options)

**Use Case 2: “Handling Customer Transaction”**

**Basic Flow:**

1. User records package details **include** (Identify User)
2. System validates package details given by user **include** (Return Invalid Fields)
3. System determines cost of shipping
4. System determines date of shipping transaction
5. System determines date of delivery
6. System determines package deliverer
7. System updates transaction status
8. System displays package details
9. System saves package order to inventory **include** (Identify Delivery Status)
10. User prints shipping label **extend** (Display Transaction Menu Options)

**Alternative Flows:**

[Invalid Order Entry]

After step 1, when system determines package details are invalid,

Repeat steps 1 to 2 until system determines details are valid.

Resume at step 3, to determine cost of shipping

[Multiple Packages to Same Location]

At step 3, System calculates shipping cost based on each individual of items’, volume, and weight

[Order Created by User On Website]

At step 1, when Actor is recording packages details,

if Actor recording details is a Customer,

1. System defaults package status to ‘Pending’ until package is dropped off
2. System defaults cost of shipping, employee id, and date of delivery to ‘Null’ until package is dropped off

Resume at step 2 when package is dropped off

[Drop off Order]

At step 1, if order exists in the inventory already, update relevant fields,

if package is for drop off,

1. Update order transaction status
2. Record employee who collected the package

Resume at step 3

**Use Case 3: “Administrator Managing Shipping Store Accounts”**

1. Administrator logs in **include** (Authenticate Employee)
2. System displays menu options
3. System displays net income from completed shipping transaction sales **include** (Calculate Total Shipping Transaction Sales)
4. System displays all expenses accrued from employee salaries and space rental **include** (Calculate Total Expenses, Identify Expenses Paid)
5. System displays statements of cash flow and invoices and balance sheets **include** (Identify Expenses Paid, Identify Total Shipping Transaction Sales, Net Profit)
6. Administrator prints financial documents available **extend** (Display Menu Options)

**Use Case 4: “Employee Using User Management System”**

1. Employee logs in **include** (Authenticate Employee)
2. System determines user-access-privileges based on employee level **include** (Identify Employee Authorization Level)
3. System displays menu options **include** (Identify Menu Options Per Employee Authorization Level)
4. System displays list of existing users **include** (Identify Employee Authorization Level)
5. Employee searches for user via user id **include** (Identify Employee Authorization Level)
6. Employee creates new user account **include** (Identify User Type)
7. Employee updates user account information (Identify Employee Authorization Level)
8. System saves changes to user account information **extend** (Display Menu Options)

**Alternative Flow:**

[Collecting User Specific Information]

When new user is being created, Employee specify the type of user the account is being created for, if the new user is a Customer,

1. In addition to recording basic information, Employee records address

if the new user is an Employee,

1. In addition to recording basic information, Employee records SSN, Monthly Salary, Bank Account Number, Member Status, and PIN Number
2. Administrator sets basic employee system access rights i.e. create-shipping-transactions-access-rights, manage-inventory-system-access-rights, create-update-customer-access-rights, reply-to-customers-messages-access-rights

if the new user is an Administrator,

1. In addition to recording basic user information and employee information, Administrator sets additional system access rights. i.e. employee-management-system-access-rights, accounting-management-system-access-rights

**Use Case 5: “Customer Using Shipping Store Website”**

1. Non-Existing customer create new account

Existing customer logs in with established credentials **include** (Identify User)

1. System displays customer menu options
2. Customer creates new shipping transactions **include** (Handle Customer’s Transactions
3. System saves package order in ‘Incomplete Shipping Transactions’
4. System displays package details **include** (Identify Delivery Status)
5. Customer prints receipt/shipping label
6. Customer sends message to shipping store via web form
7. System saves customer message to pool of unanswered questions **include** (Handle Customer’s Inquiry)
8. Return to Main Portal

(Use Case Diagrams)

CRC Cards

(Classes Responsibilities and Collaborators)

**Class User**

The basic responsibility of a User object is to maintain basic information about a single individual.

*Responsibilities Collaborators*

Create a new object, given an individual’s user id, name, phone, and email

Furnish the individual’s user id

Furnish the individual’s first name

Furnish the individual’s last name

Furnish the individual’s phone number

Furnish the individual’s email

Update the stored information (except user id) about the individual

**Class Customer**

The basic responsibilityofa Customer object is to maintain information about a single customer.

*Responsibilities Collaborators*

Create a new object, given an individual’s user id, name, phone, email, and address User

Furnish the individual’s user id User

Furnish the individual’s first name User

Furnish the individual’s last name User

Furnish the individual’s phone number

Furnish the individual’s email

Furnish the individual’s address

Update the stored information (except the user id) User

**Class Employee**

The basic responsibility of an Employee object is to maintain information about a single employee

*Responsibilities Collaborators*

Create a new object, given an individual’s name, phone, email, ssn, monthly salary, bank account number, employment status, system access rights, and pin number

Furnish the individual’s user id User

Furnish the individual’s first name User

Furnish the individual’s last name User

Furnish the individual’s phone number User

Furnish the individual’s email User

Furnish the individual’s ssn

Furnish the individual’s monthly salary

Furnish the individual’s bank account number

Furnish the individual’s employment status

Furnish the individual’s system access rights

Furnish the individual’s pin number