Use Case Diagram & Description of Business Dilemma

Preface:

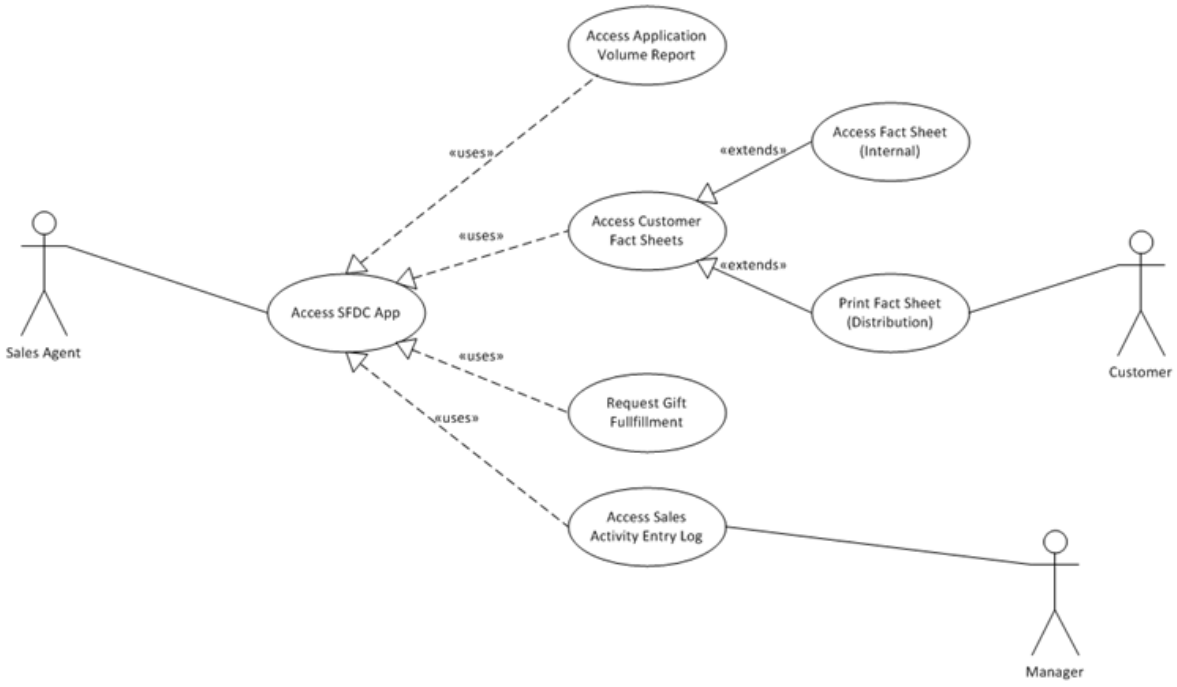
MGIC – Mortgage Guaranty Insurance Corporation

- Currently using Salesforce site (desktop version) on mobile platforms.
    - Clunky, complex, unintuitive (leads to poor productivity)

Create the design for a lighter application, which trades breadth of functionality in favor of simplified accessibility to ensure that Agents complete their work promptly and effectively.

Main Features

- Access Volume Report
- Request Gift Fulfillment
- Access Sales Entry Log
- Access Customer Factsheets
    - Internal Version
    - Distribution Version



Use Case 1: ACCESS SFDC APP

CHARACTERISTIC INFORMATION

Goal in Context: Sales employee wants to access App

Preconditions: Sales professional has need for app, Sales employee has device, app is on device

Success End Condition: Sales employee successfully logs in and accesses the app

Primary Actor: Sales Employee, any employee with app

Trigger: Sales employee wants to access company/client information

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MAIN SUCCESS SCENARIO

1. Sales employee wants to access company/client information
2. Sales employee wakes up device
3. Device asks for authentication - TouchID
4. Sales employee locates app
5. App responds by opening and shows information

EXTENSIONS

3a. Credentials Fails

    3a1. Try again

SUB-VARIATIONS

1. Sales member may use
    a. iPhone
    b. iPad
    c. Android tablet

RELATED INFORMATION

Priority: Top

Subordinate Use Cases:

Access Application Volume Report (Use Case 2)

Access Customer Fact Sheet (Internal Sales) (Use Case 3)

Print Customer Fact Sheet (Distribution) (Use Case 4)

Request Gift Fulfillment (Use Case 5)

Access Sales Activity Entry Log (Use Case 6)

Use Case 2: ACCESS APPLICATION VOLUME REPORT

Goal In Context: Agent accesses Application Volume report to display sales information for priority use in field.

Preconditions: Agent has logon verification, and knows client pertinent information.

Success End Condition: Agent has successfully accessed Client Application Volume Report

Primary Actor: Sales Agent

Trigger: Agent pushes Application Volume Report

MAIN SUCCESS SCENARIO

1. Agent pushes Application Volume Report icon.
2. App brings up screen for initializing Application Volume Report data.
3. App directs Agent to select Client select menu.
4. Agent is presented with a scrollable list of clients.
5. Agent selects client from scrollable list of clients.
6. App shows list of data fact sheets for particular client.
7. Agent selects Application Volume Report.
8. App displays Application Volume Report for particular client.

EXTENSION

4. Agent chose wrong customer.
    4a1. App asks whether or not the client selected is correct.
6. Agent decides to access different fact sheet other than Application Volume Report.
    6a1. Agent pushes Customer Fact Sheet (Internal Sales) -- Use Case 3
    6a2. Agent pushes Customer Fact Sheet (Distribution) -- Use Case 4
7. Agent wants to go back to list of options.
    7a1. App prompts Agent on his decision to view Application Volume Report for particular client.

RELATED INFO

Priority: Moderate

Performance Target: <1 Minute to access information

Frequency: Several times daily

Superordinate Use Case: Access SFDC App (Use Case 1)

Use Case 3: ACCESS CUSTOMER FACT SHEET (Internal Version)

CHARACTERISTIC INFORMATION:

Goal In Context: User issues request for data about a single customer, data is shown

Preconditions: Logged on to salesforce app and has pressed customer fact sheet reports, knows name of client to query

Success End Condition: User accesses information for said customer

Failed End condition: User is not able to access information

Primary actor: Sales team member

Trigger: Internal customer fact sheet Icon is pressed

MAIN SUCCESS SCENARIO:

1. Internal customer Fact Sheet icon is pressed
2. App prompts user to select customer from client list
3. User selects customer
4. App asks user if selected customer is correct
5. User selects “yes”
6. App Displays information about said customer

EXTENSIONS

2a. Client is not on client list

    2a1. User selects back to main screen

4a. User selects “No”

    4a1. User redirected back to client select screen

RELATED INFORMATION

Priority: Top

Performance Target: < 1 minute

Frequency: 20/day

Superordinate Use Case: Access SFDC App (Use Case 1)

Use Case 4: Obtain Customer Fact Sheet (Distribution Version)

CHARACTERISTIC INFORMATION:

Goal In Context: User requests a print out of information pertinent to customer

Preconditions: Logged on to salesforce app and has pressed customer fact sheet reports, knows name of customer

Success End Condition: Device prints out information that is requested by user

Failed End condition: User is not able to access information

Primary actor: Sales team member

Trigger: Distribution customer fact sheet Icon is pressed

Main Success Scenario:

1. Distribution customer fact sheet Icon is pressed
2. App prompts user to select customer from client list
3. User selects customer
4. App asks user if selected customer is correct
5. User selects “yes”
6. App displays distribution version of customer information
7. User selects print Icon
8. App prompts format options for printing
9. User selects format to print in
10. App prompts list of printing devices
11. User selects device to print from
12. Apps asks user to confirm printing device
13. User confirms printing device
14. App sends information to device for printing
15. Device prints out information that is requested by user

Extensions

2a. Client is not on client list

2a1. User selects back to main screen

4a. User selects “No”

4a1. User redirected back to client select screen

10a. Format does not work with selected device

10a1. User is redirected to format selection screen

13a. User does not confirm printing device

13a1. User is redirected to list of printing devices

Sub-Variations

2. Printing devices

Wireless desktop printer

Related Information

Priority: Top

Performance Target: Less than 1 minute

Frequency: 20/day

Superordinate Use Case: Access SFDC App (Use Case 1)

Use Case 5: Request Gift Fulfillment

CHARACTERISTIC INFORMATION

Goal In Context: Agent requests a gift to be sent to customer, gift is sent to customer.

Precondition: Agent is logged into Salesforce application, has correct ship address for customer.

Success End Condition: Application recognizes fulfillment request, item is queued for delivery.

Failed End Condition: Application does not process request, gift request is not fulfilled.

Primary Actor: Sales Agent

Trigger: Agent pushes “Send Gift” Icon.

MAIN SUCCESS SCENARIO

1. Agent pushes “Send Gift” icon.
2. App redirects to contact list to specify recipient.
3. Agent selects contact from list of clients.
4. App asks the agent to ensure that proper client has been selected.
5. Agent clicks “Yes”, verifying proper contact.
6. App redirects to store page of “Popular Gifts”
7. Agent selects from displayed gifts.
8. App asks to verify gift selection.
9. Agent verifies gift selection.
10. App asks agent to verify shipping address.
11. Agent verifies shipping address.
12. App sends order request to external site.
13. App successfully places order.
14. App sends invoice to company.
15. App asks if the agent would like to “Send Another Gift”.
16. Agent selects “No”

EXTENSIONS

5a. Agent clicks “No” when asked to verify contact.
    5a1. App prompts agent to choose different contact.

7a. Agent selects “Quick Search” button instead of selecting from “Popular Gifts”.
    7a1. Voice dictation is activated to search the site for a specific item.

9a. Agent refutes gift selection.
    9a1. App prompts agent to select a new gift.

11a. Agent refutes shipping address.
    11a1. Voice dictation is activated to add new address.

12a. App deems address invalid.
    12a1. Gift is deemed undeliverable, app asks user to input new address

13a. External store has insufficient stock of ordered item
    13a1. Order is cancelled and agent is notified

16a. Agent selects “Yes” in regards to sending another gift.
    16a1. Repeat (use case 5)

RELATED INFORMATION

Priority: Moderate

Performance Target: 2 minutes for order, 2-3 business days for delivery.

Superordinate Use Case: Access SFDC App (Use Case 1)

Use Case 6: Access Sales Activity Entry Log

Characteristic Information:

Goal in Context: Gather customer input for tracking and analysis.

Precondition: Agent logged into system with client's information.

Success End Condition: Information is all entered, tracked and analysis could be done.

Failed End Condition: Information is not entered.

Primary Actor: Agent

Trigger: Client interacts with agent.

Main Success Scenario:

1. Client interacts with Agent.
2. Agent creates interaction record ID for tracking.
3. Agent ask client for account plan information.
4. Client provides agent account plan information.
5. Agent enters account plan information into interaction record.
6. Agent asks client for input.
7. Client provides input.
8. Agent records input into interaction record.
9. Agent routes interaction record to supporting department for review and analysis.

Extensions:

3a. Agent enters new client's name.

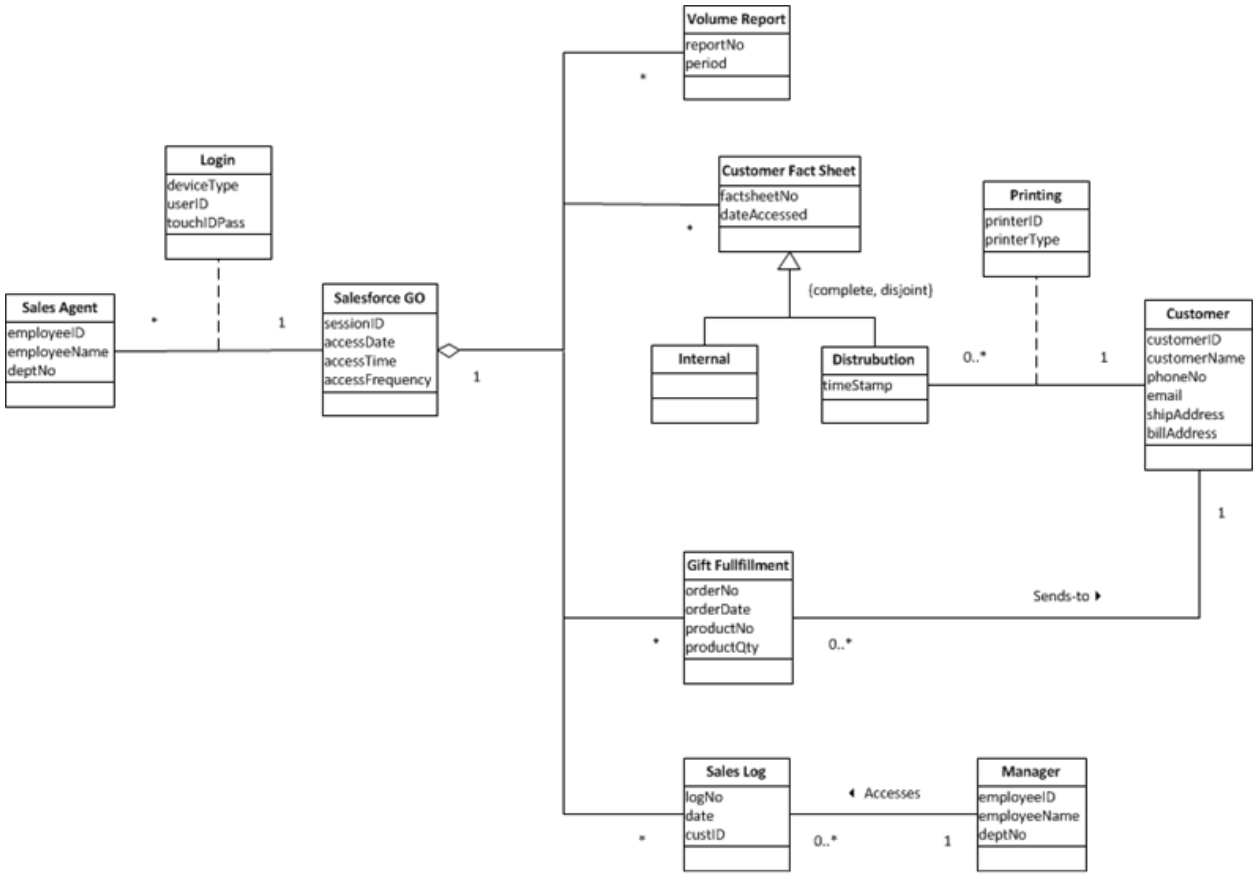
3b. Agent enters client's phone number.

3c. Agent enters client's company/association.

Related Information

Superordinate Use Case: Access SFDC App (Use Case 1)

Conceptual Class Diagram



Assumptions

- Generalization
  - Complete – because factsheet must be either distribution or internal.
  - Disjoint – because factsheet cannot be both distribution and internal.
- Relationships
  - Volume report is used to monitor personal sales only.
  - Gift fulfillment does not require approval from management.
  - Sales entry logs are meant to be written by sales agents and checked by management.
  - Internal customer fact sheet are for use by sales agents only.
  - Distribution fact sheets are to be given to customers by agents.
- Multiplicities
  - A sales agent can access their Salesforce account from several devices.
  - Only the department manager views sales activity logs.
  - There is only one Salesforce mobile application.
- Aggregation
  - Salesforce GO is composed of Volume report, Customer fact sheets, Gift fulfillment and Sales activity entry log. However, this relationship is not composition, because without this application, these functions would still exist in the desktop version of SFDC.

Note: Some attributes are self explanatory and do not need repeating..

CLASS - Sales Agent
The Agent logs into the Salesforce App and uses four aggregations via the app.
Attributes
Unique Employee ID, name and department.

CLASS - Login
The Login will allow access to Salesforce App.
Attributes
Device Type (Detect device), User ID (specific 10 character ID to access App), touch ID password (highl secure unique identifier as a password)

CLASS - Salesforce Go
Actual application to access secure system.
Attributes
Session ID (creates a unique ID for each time a Sales Agent logs in for record keeping), AccessDate, AccessTime, AccessFrequency (where the number of log in attempts can be monitored).

CLASS - Gift Fulfullment.
Gifts are handled via an external site, with their own production and distribution. However, internal records are kept of the...
Attributes
Order Number (through external site), Order Date, Product Number (that which it appears on the external site), Quantity of Product (being gifted)

CLASS - Sales Log
Shows important data about the sales pertainent to a Sales Agent. These include..
Attributes
LogNo (when the Sales invoce was logged), Date of Log, Customer ID (to whom the sales were made).

CLASS - Customer
A person or organization that buys services from the business.
Attributes
CustomerID, Customer Name, Phone No, Email, Shipping Address, Billing Address

CLASS - Printing
The priting must take place before Distribution Fact Sheets are sent out to Customer.
Attributes
PrinterID (Which printer we're using), Printer Type (Ink Jet, Laser, or if we're using a Fax)

CLASS - Customer Fact Sheet
Fact Sheets about popular products, distribution channels and methods,

Relationships
Many Sales Agents are employed. Each one Sales Agent may use one (the) Salesforce Go App, but not before passing a login verficiation.

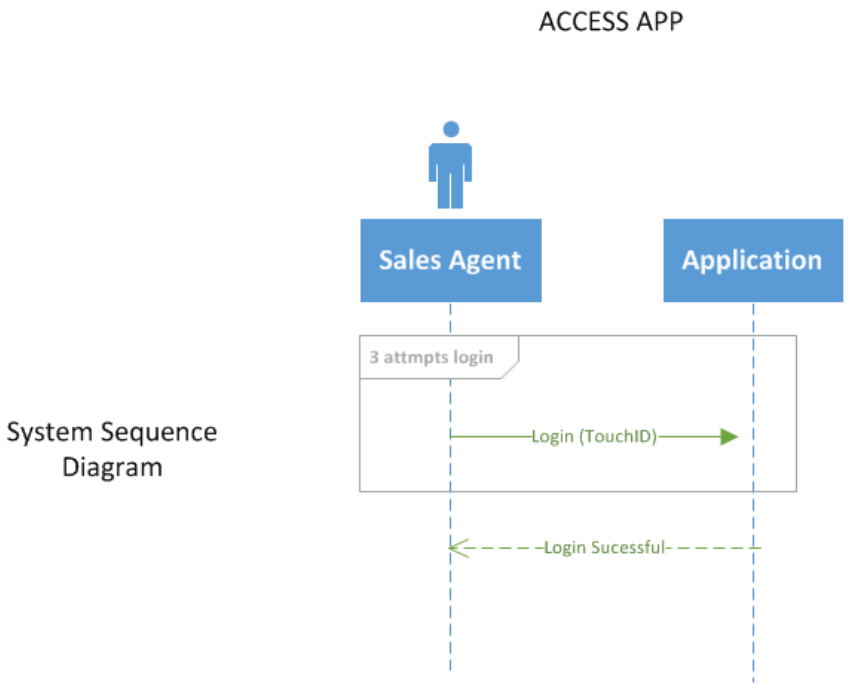
Once in the App, one Sales Agent creates many Volume Reports, accesses many Customer Fact Sheets*, handles many Gift Fulfillment requests**, and creates many Sales Logs***

*Customer Fact Sheets. There are two Customer Fact Sheets, one for Internal use, and one for distribution to Customer. 0 to Many of these Distribution sheets may be Printed for a single Cusomer, depending on volume.

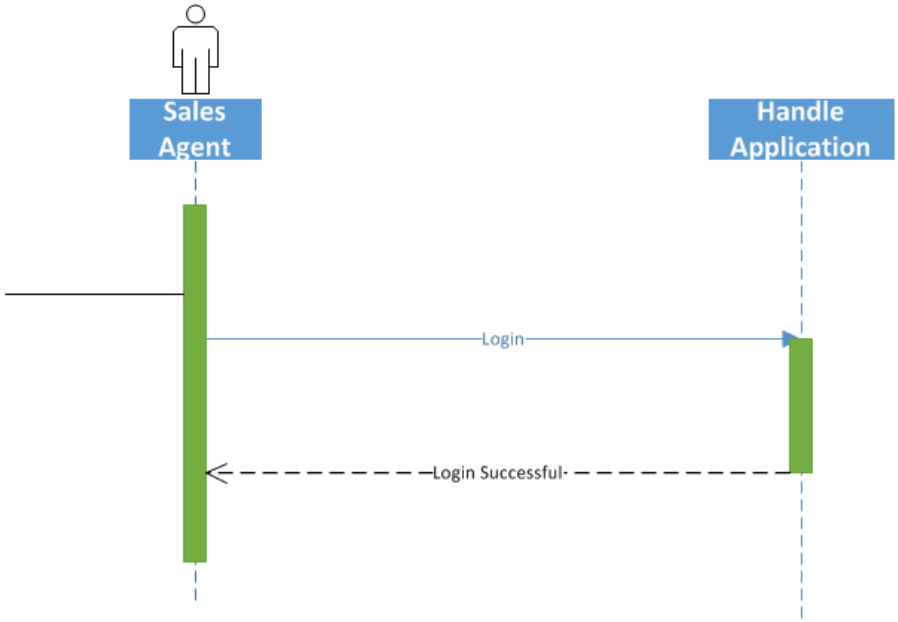
**Gift Fulfillment. 0 to Many gifts may be sent to a single Customer, and any Customer may not receive a gift.

***Sales Logs. One Manager may access 0 to many of these Sales Logs depending on volume.

System Sequence, Sequence, Interaction,
State, Activity, Design Class Diagrams



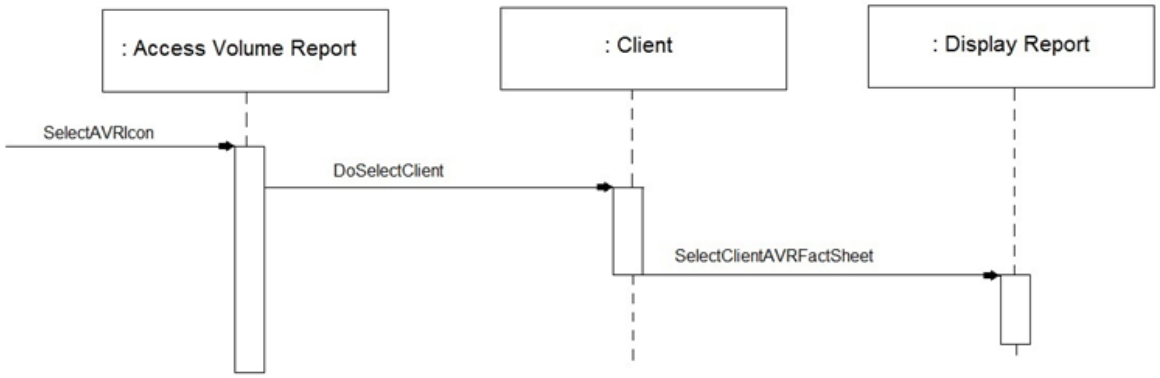
System Sequence Diagram



Sequence Diagram

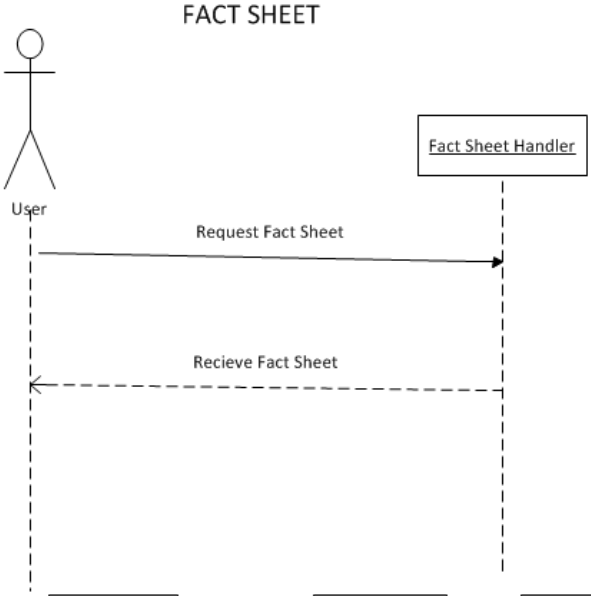
APPLICATION VOLUME REPORT

Sequence Diagram

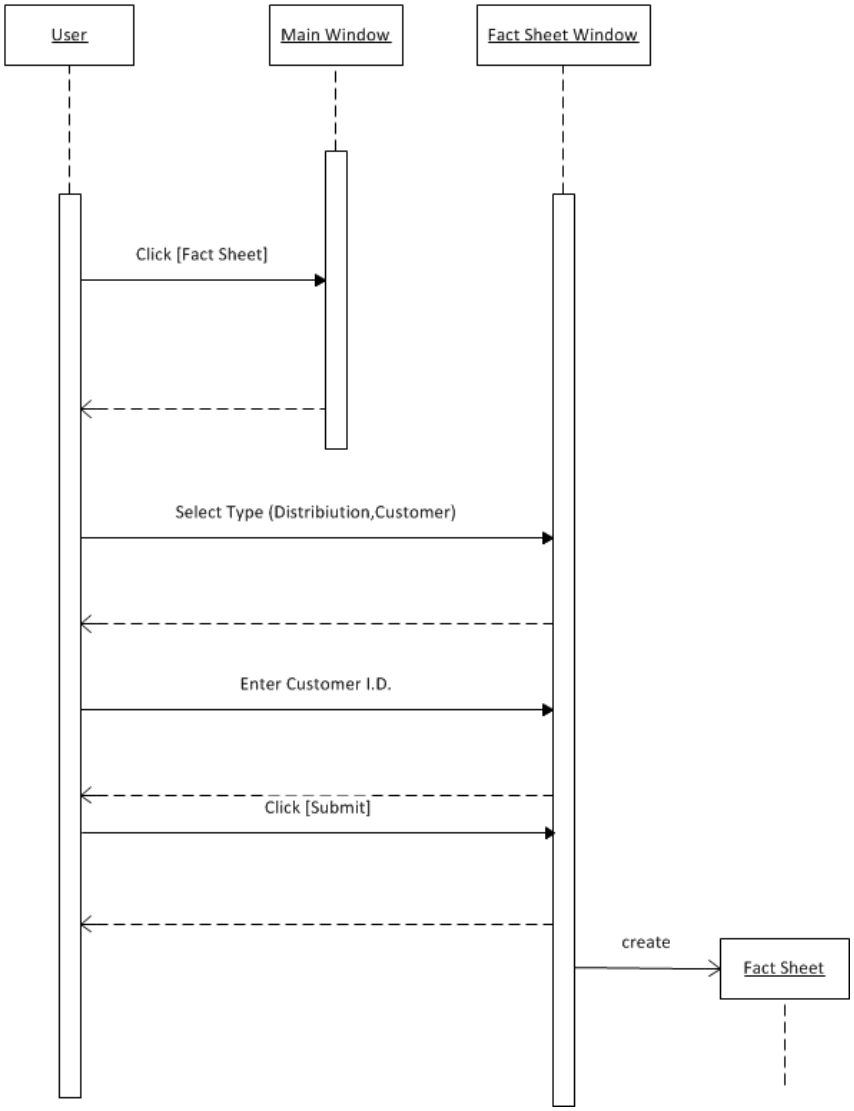


FACT SHEET

System Sequence Diagram

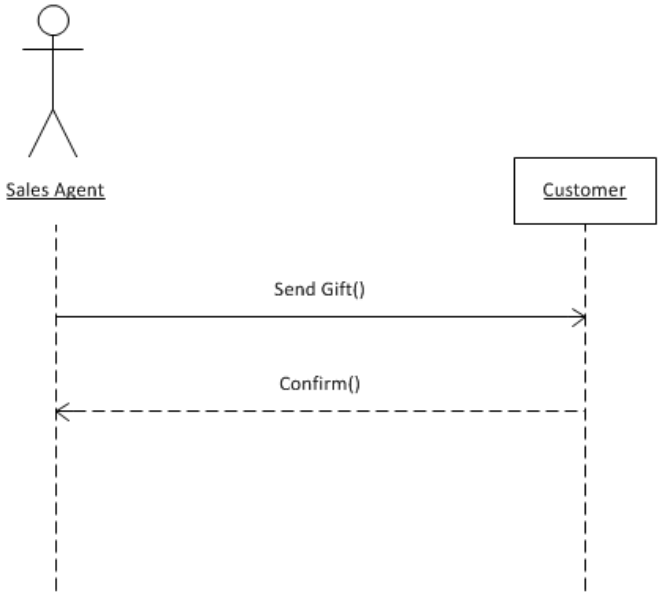


State Diagram

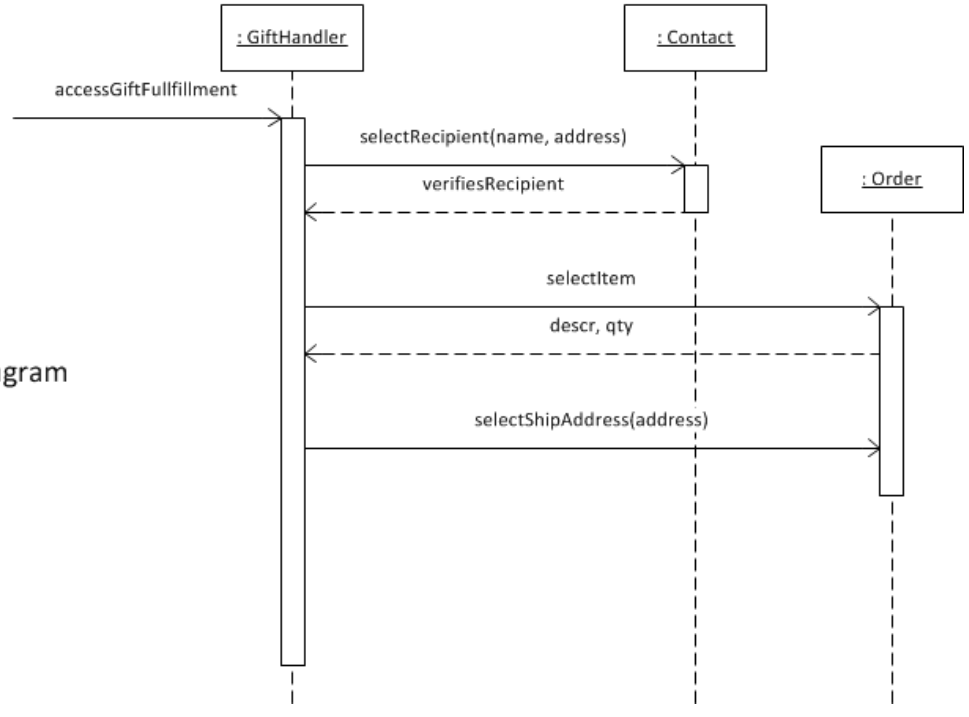


GIFT FULFILLMENT

System Sequence Diagram

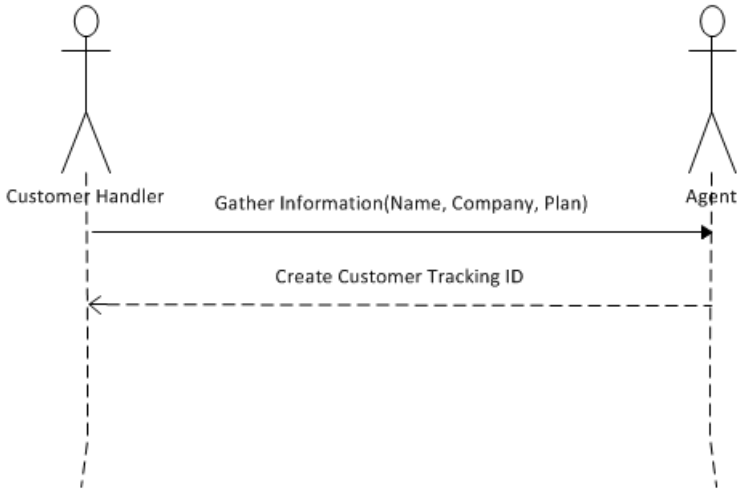


Sequence Diagram

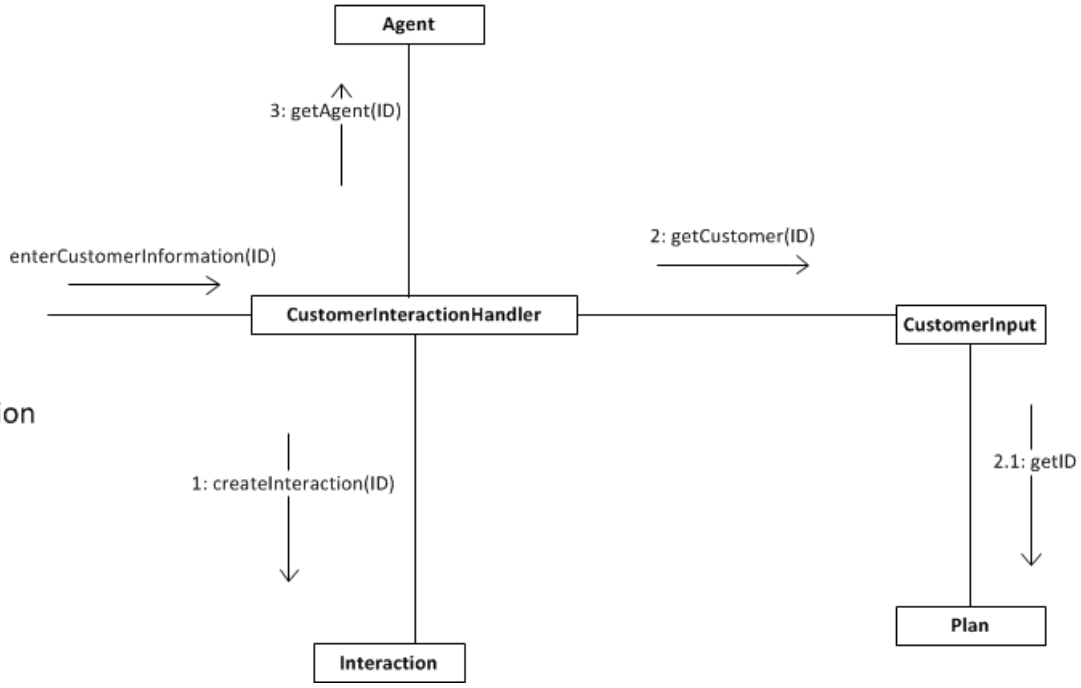


SALES ACTIVITY LOG

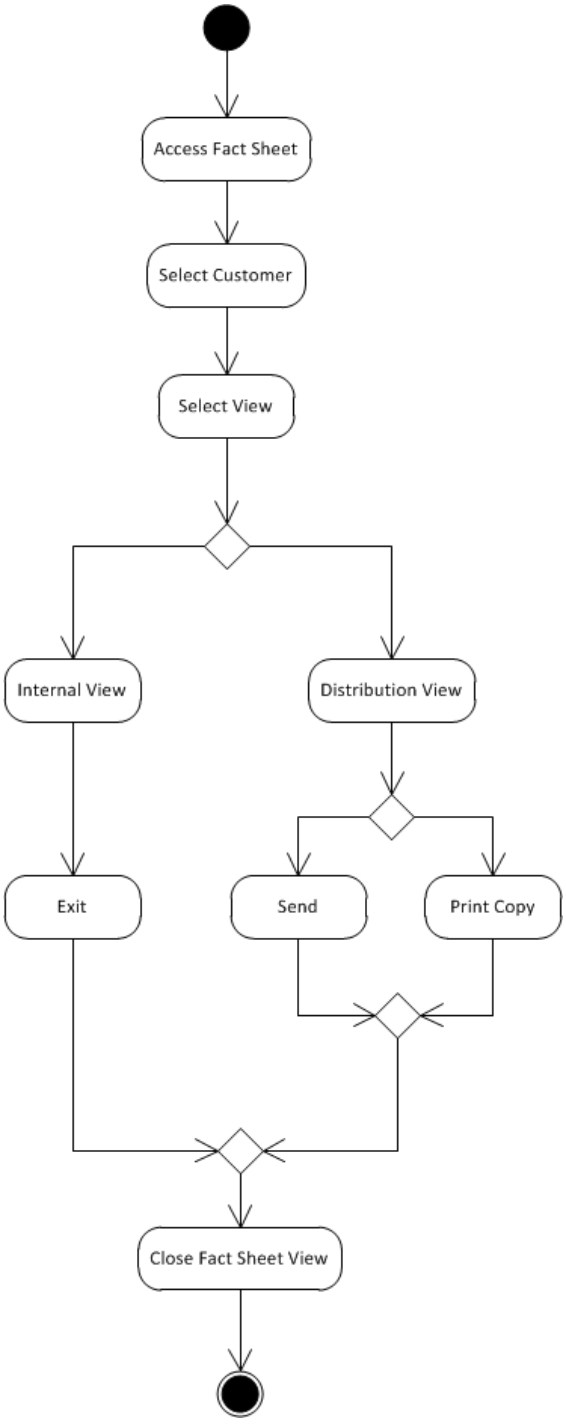
System Sequence Diagram



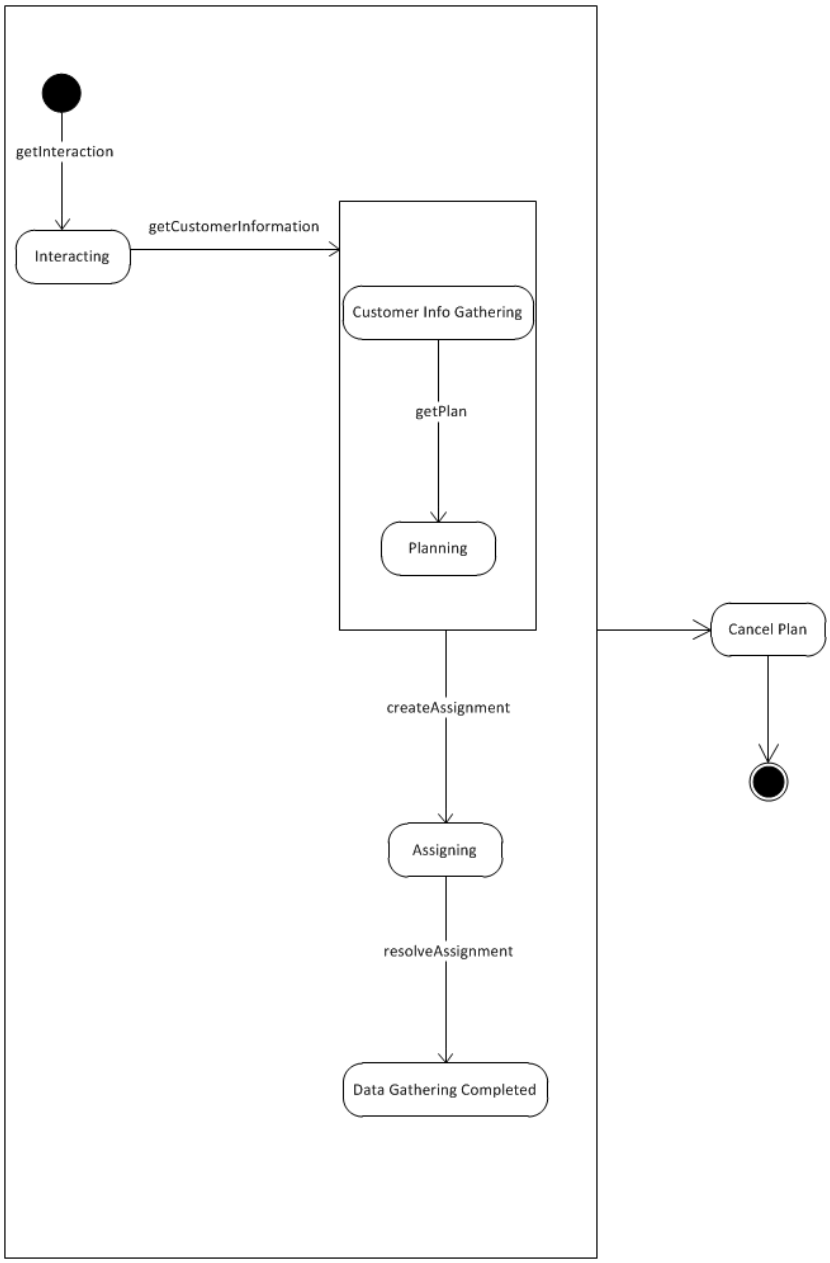
Communication Diagram



FACT SHEET (ACTIVITY DIAGRAM)

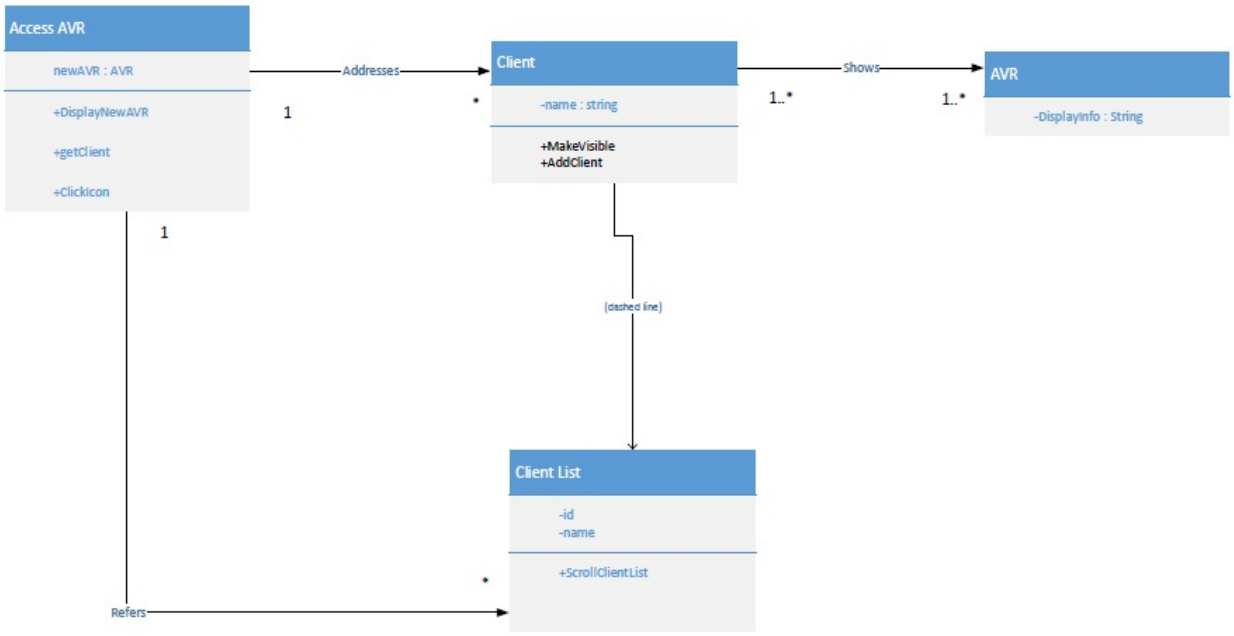


SALES ACTIVITY LOG (STATE DIAGRAM)

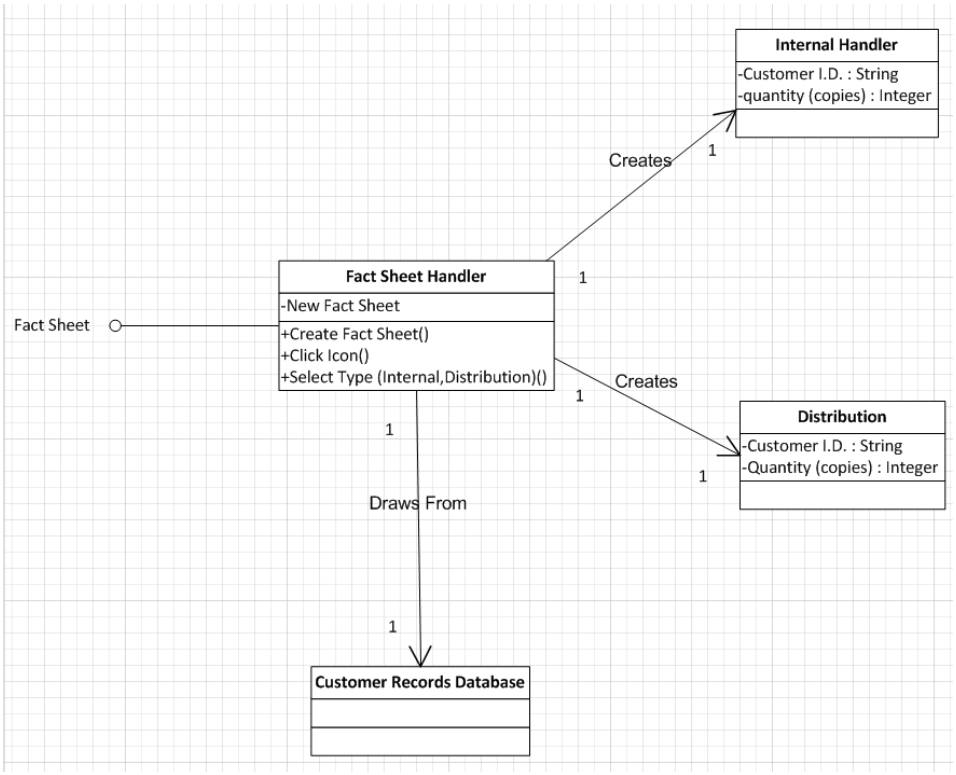


Design Class Diagram (Fragments)

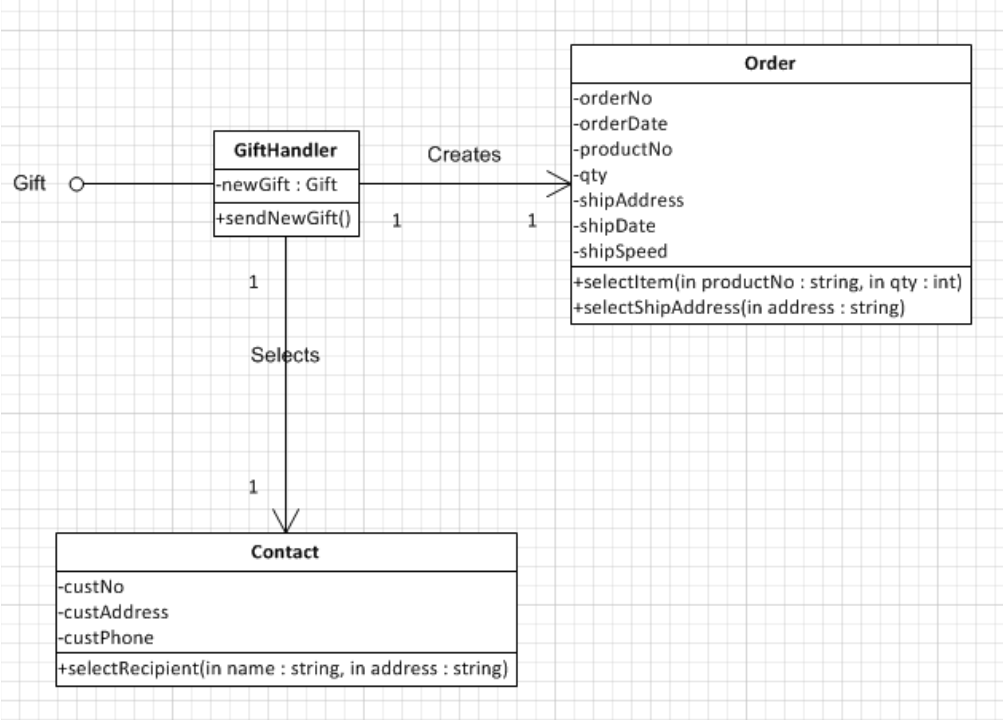
Application Volume Report



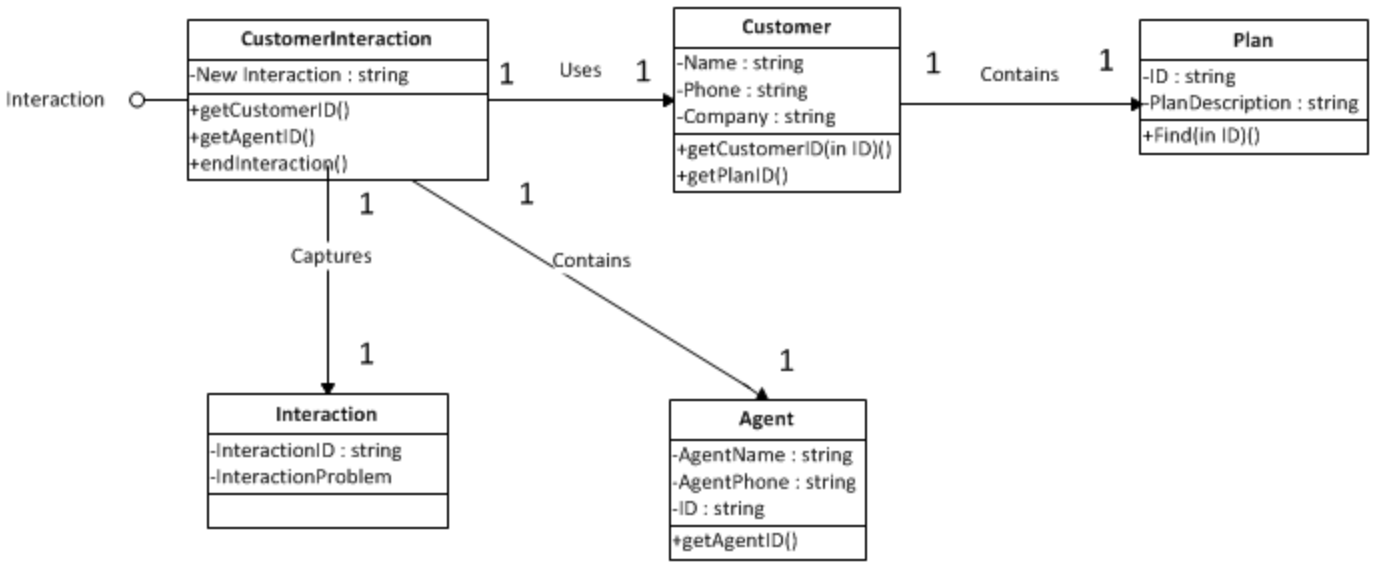
Customer Fact Sheets



Gift Fulfillment

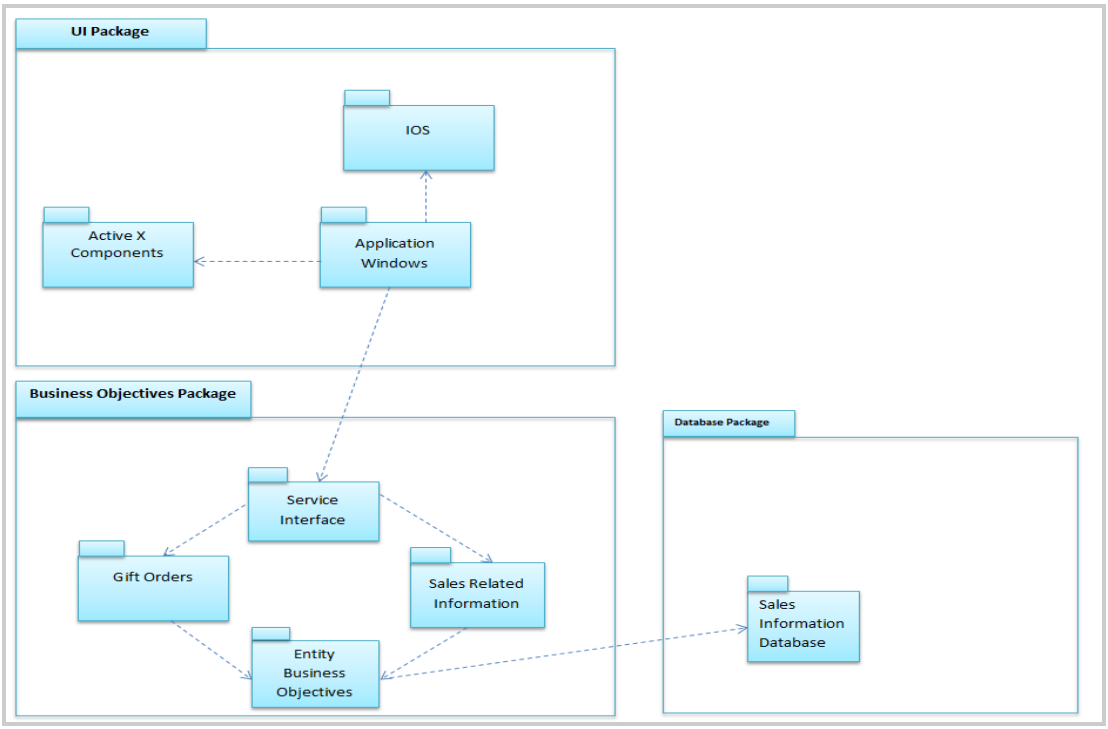


Customer Interaction

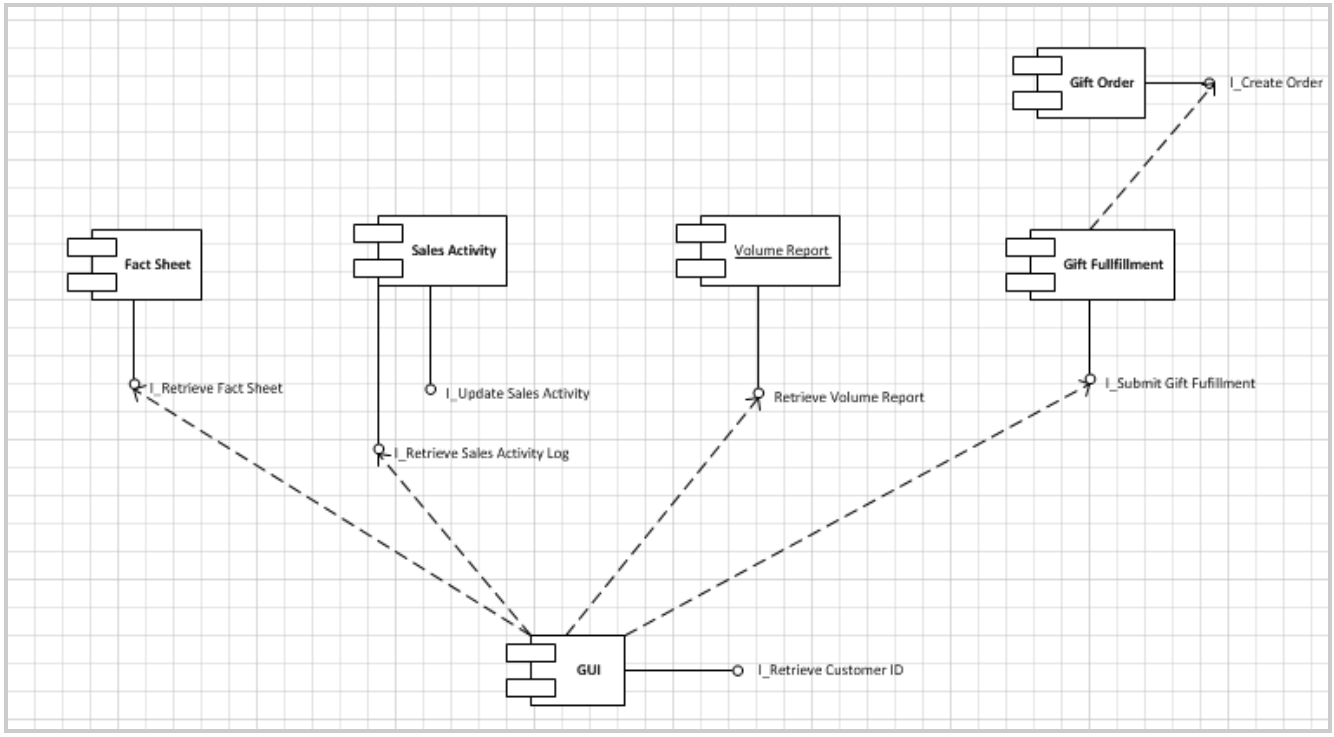


Logical Architecture, Physical Architecture, Service-Oriented Model

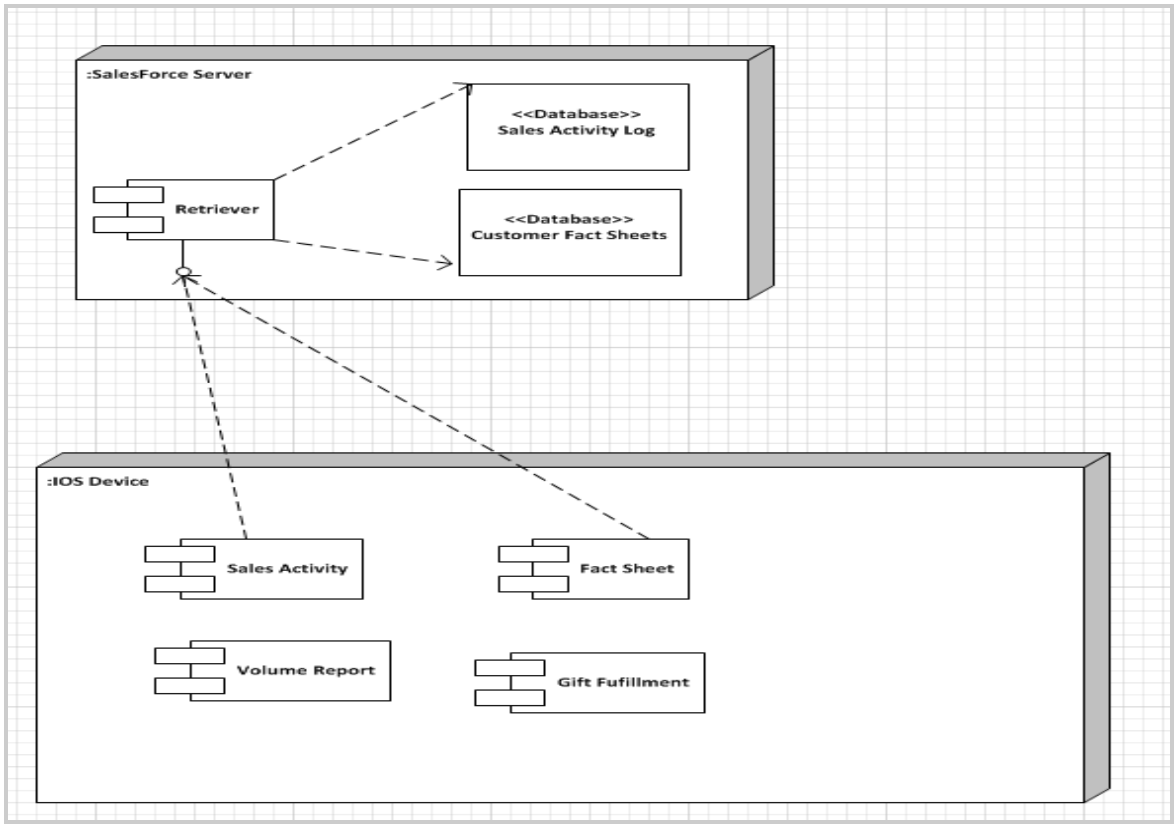
Logical Architecture (Layers & Packages)



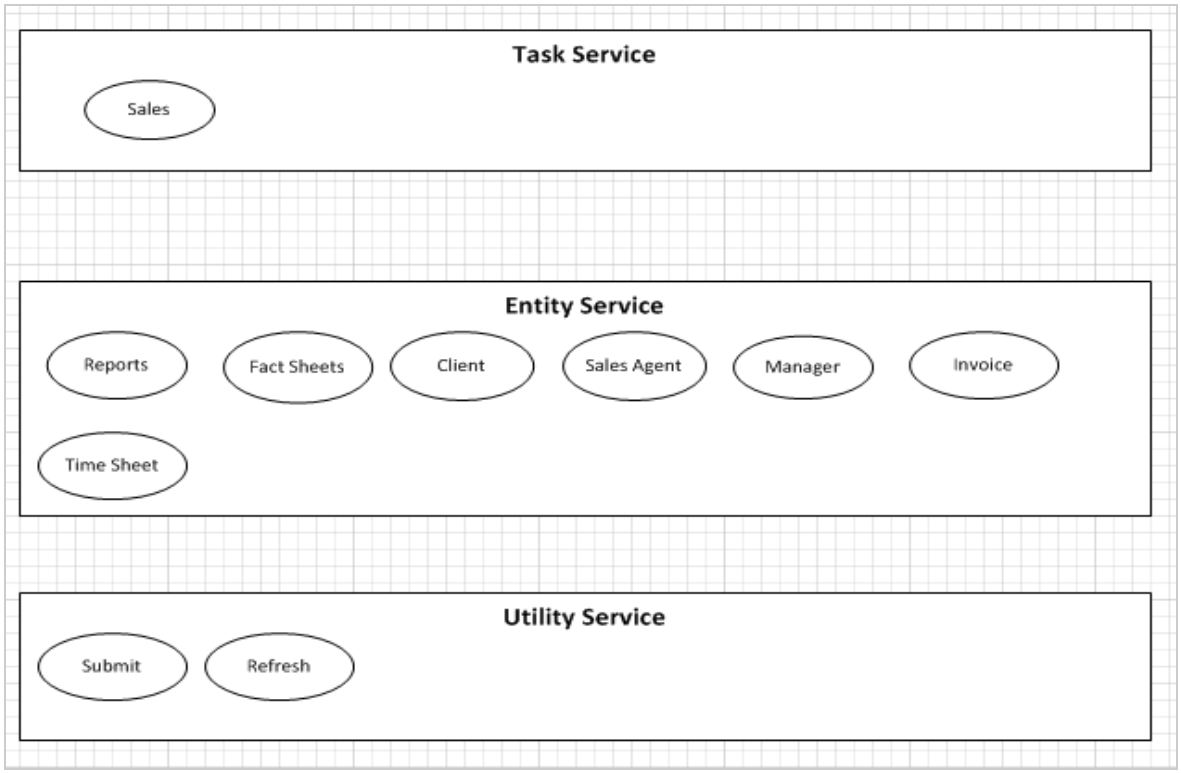
Physical Architecture (Component Diagram)



Physical Architecture (Deployment Diagram)



Service-Oriented Model



Interface Definitions

I_AccessApplication
Operations
- enterFingerPrint ()
- confirmFingerPrint ()
- cancelAppAccess ()

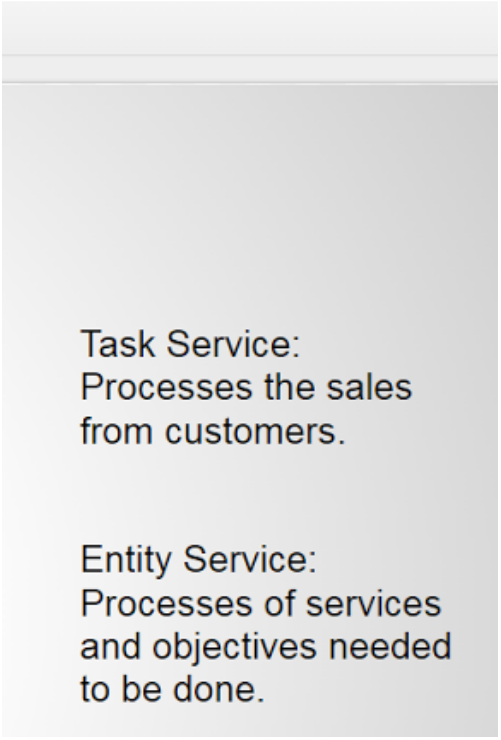
I_RetrieveCustomerID
Operations
- enterCustomerID ()
- confirmCustomerInfo ()
- cancelRetrieve()

I_RetrieveVolumeReport
- selectClient ()
- displayVolumeReport ()

I_UpdateSalesActivity
Operation
- selectCustomer ()
- enterNewCustomerID ()
- enterCustomerInfo ()
- updateSalesActivity ()

I_RetrieveSalesActivity
Operation
- selectSalesAgent ()

I_RetrieveFactSheet
Operations
- selectCustomer ()
- selectType ()

I_GiftFullfillment
Operations
- SendNewGift ()

I_GiftOrderer
Operations
- SelectRecipient ()
- SelectItem ()
- SelectShipAddress ()