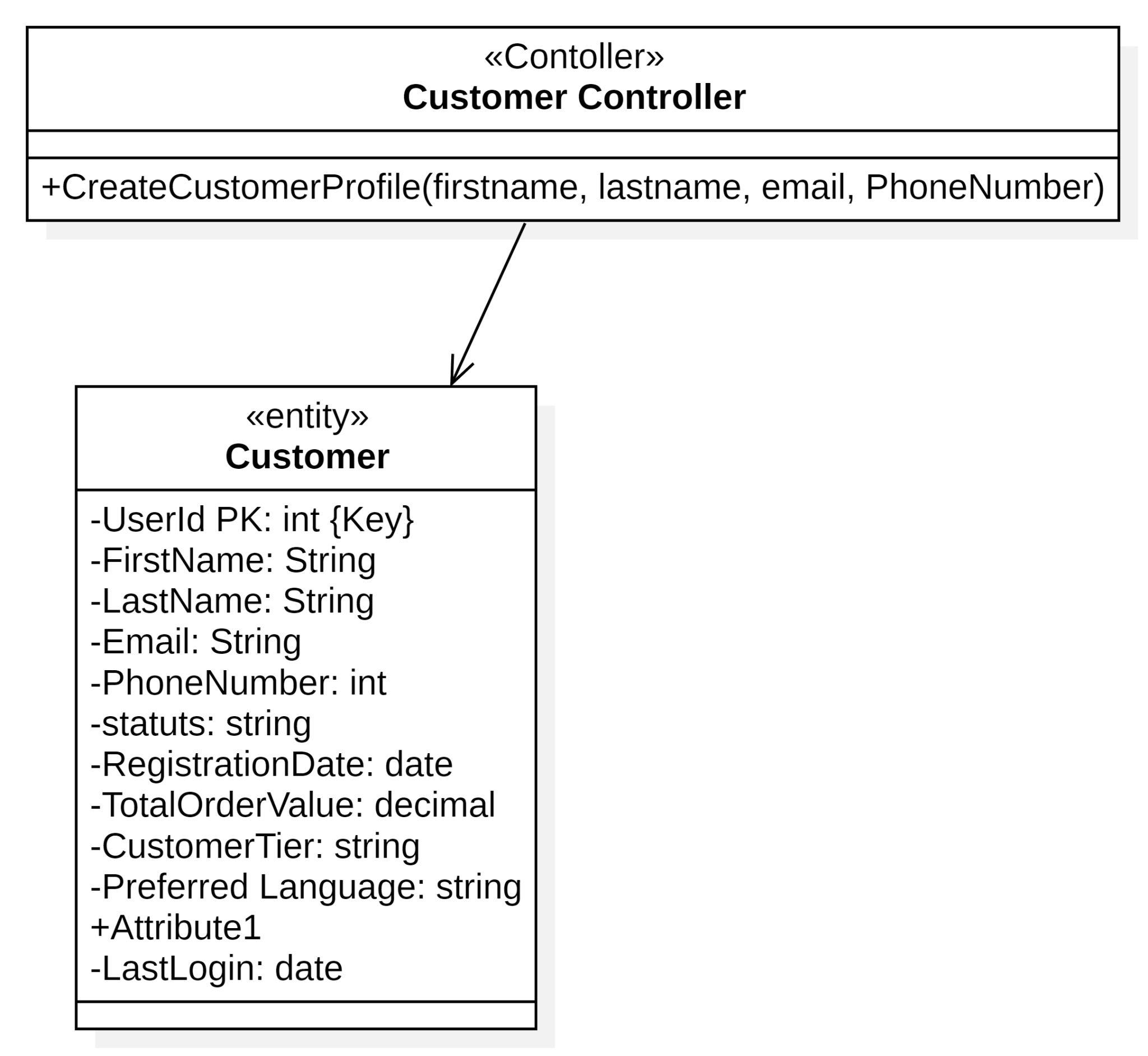
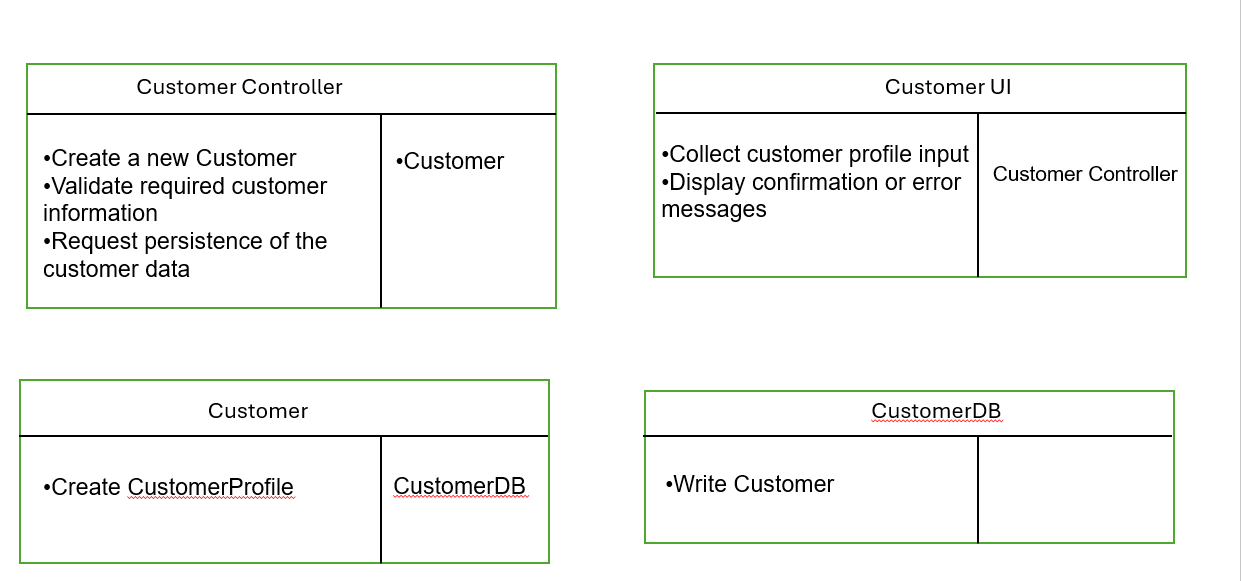
**Use case Create customer Profile: Simple**

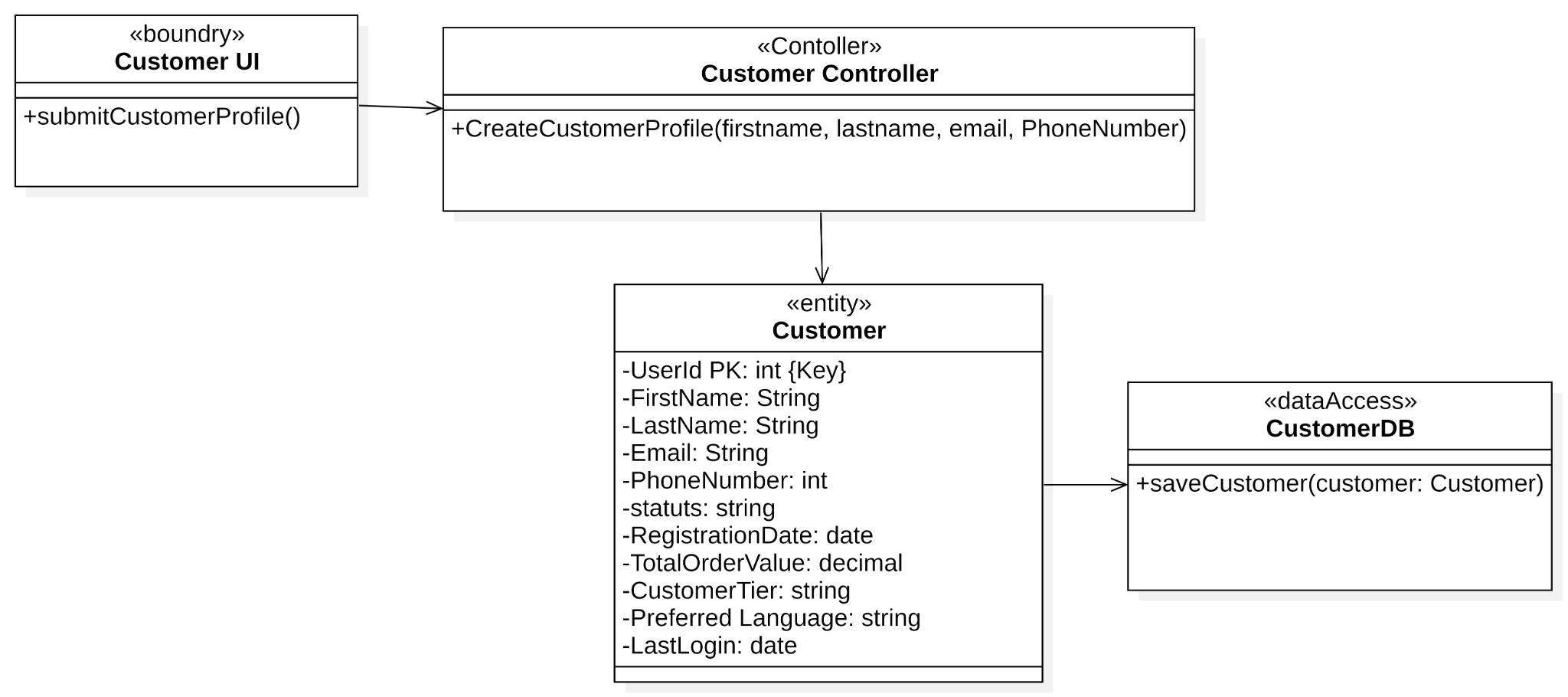
First cut design class diagram:



CRC:

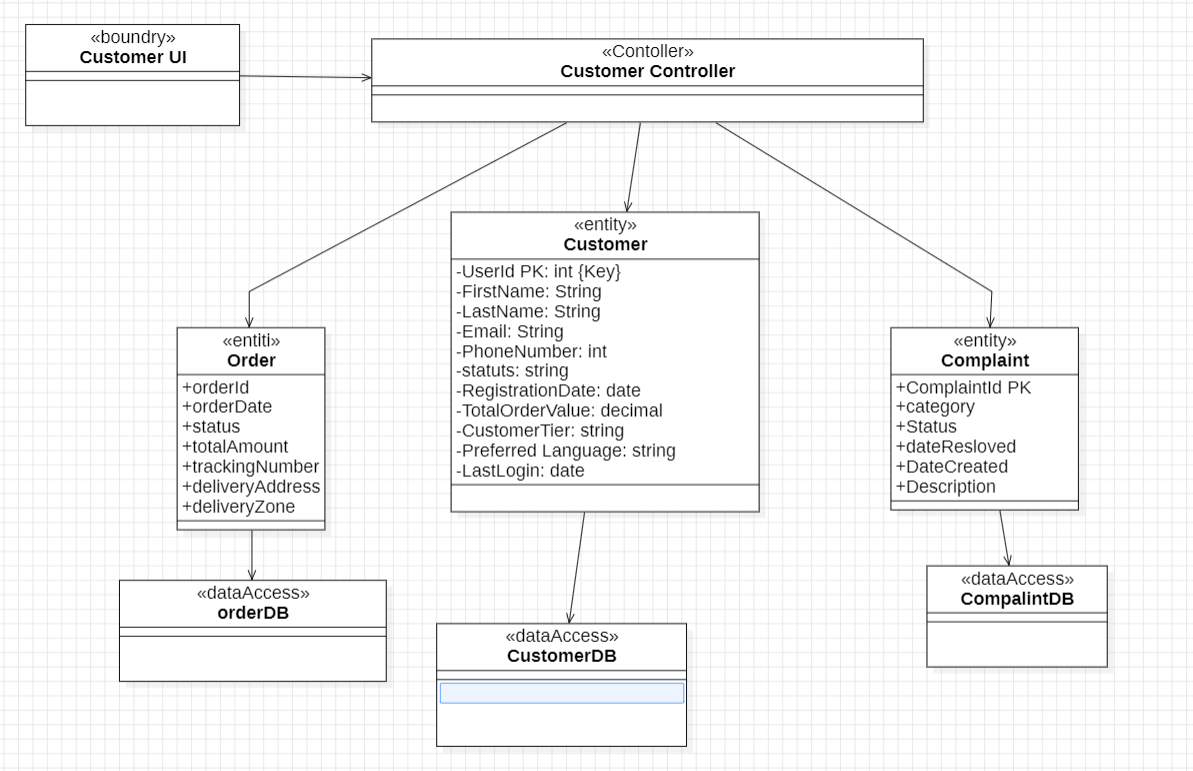


Final Design class Digram:



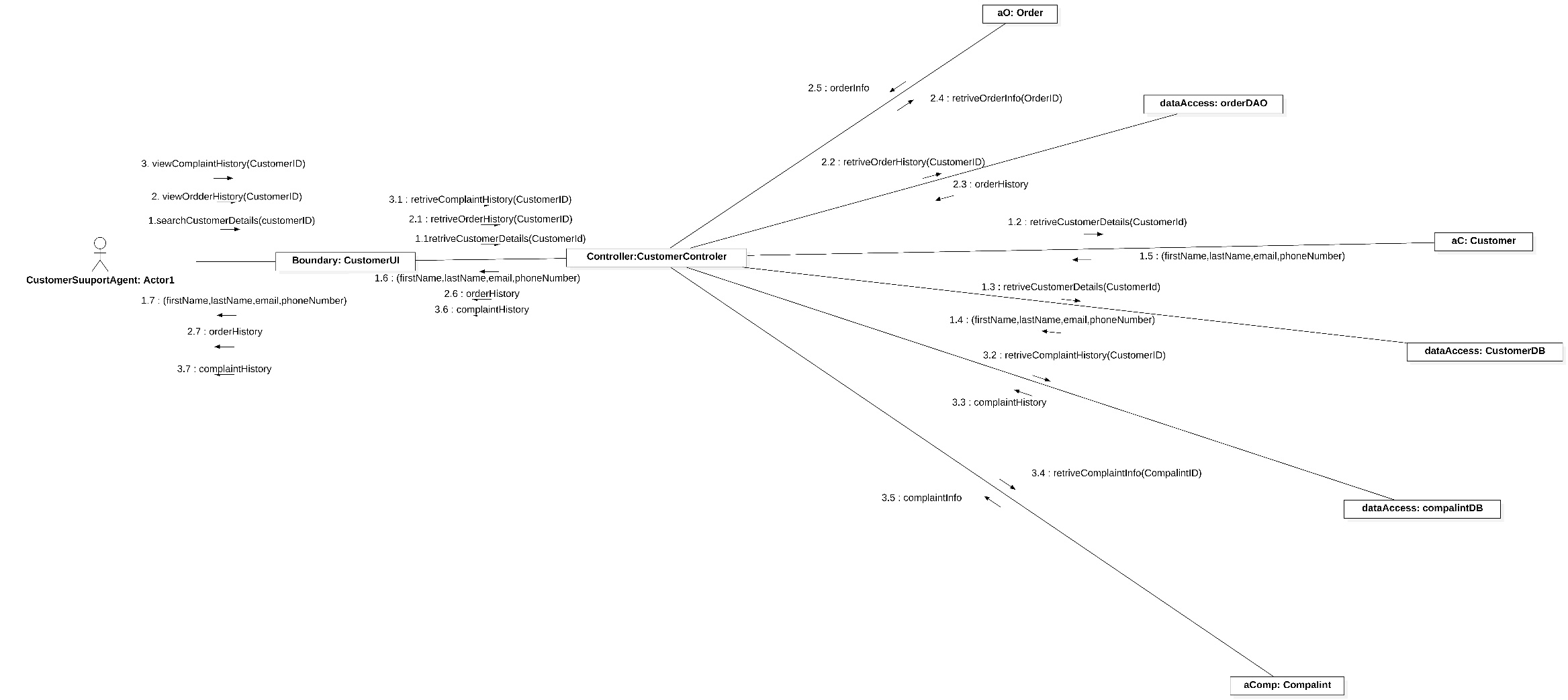
**Use Case**: **Retrieve Customer Information :Moderate**

**first Cut Design Class diagram:**

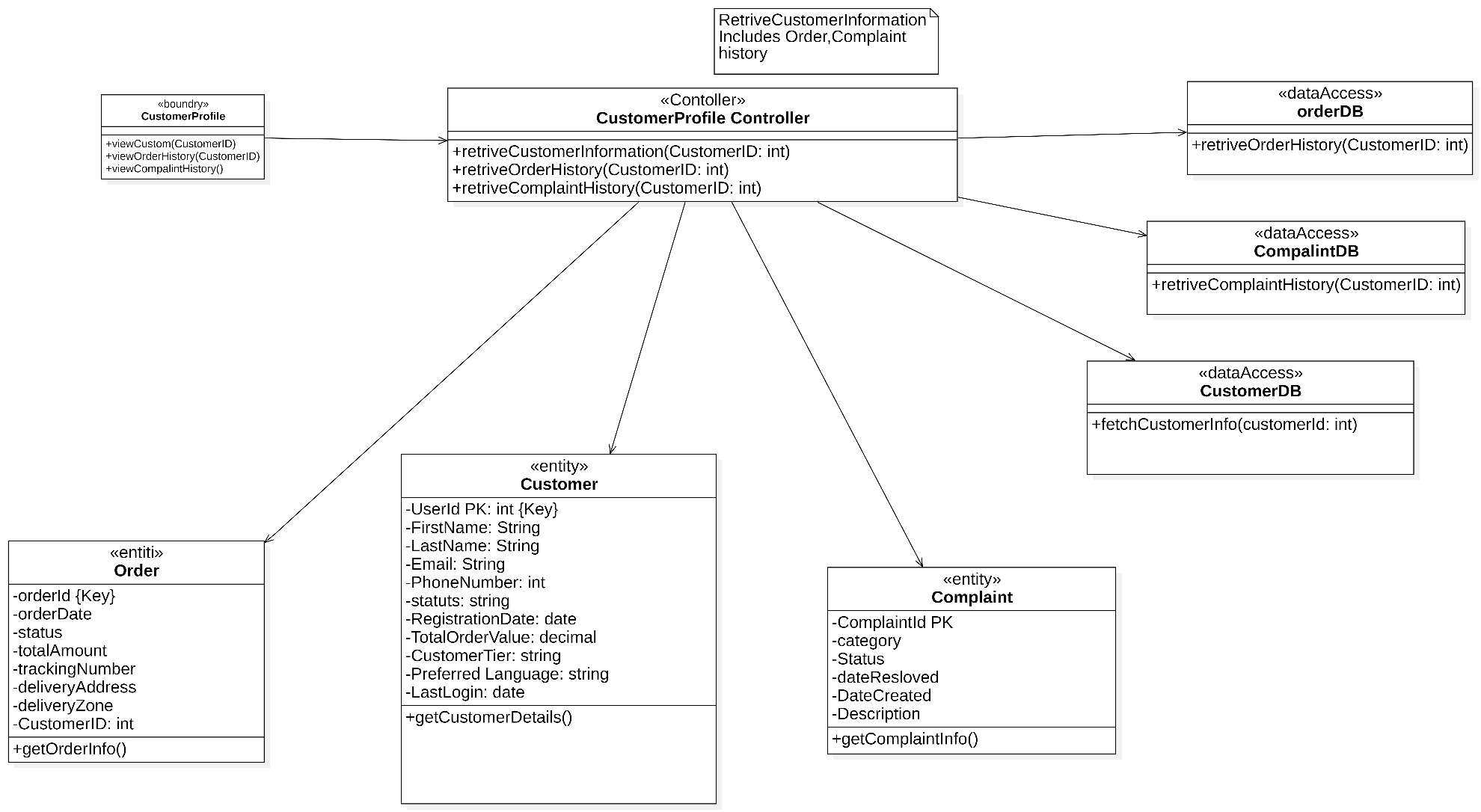


rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr

Communication Diagram:

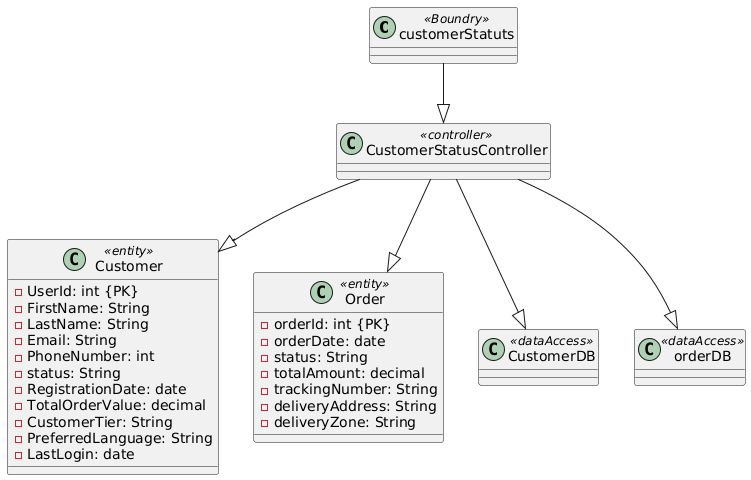


Final design Diagram:

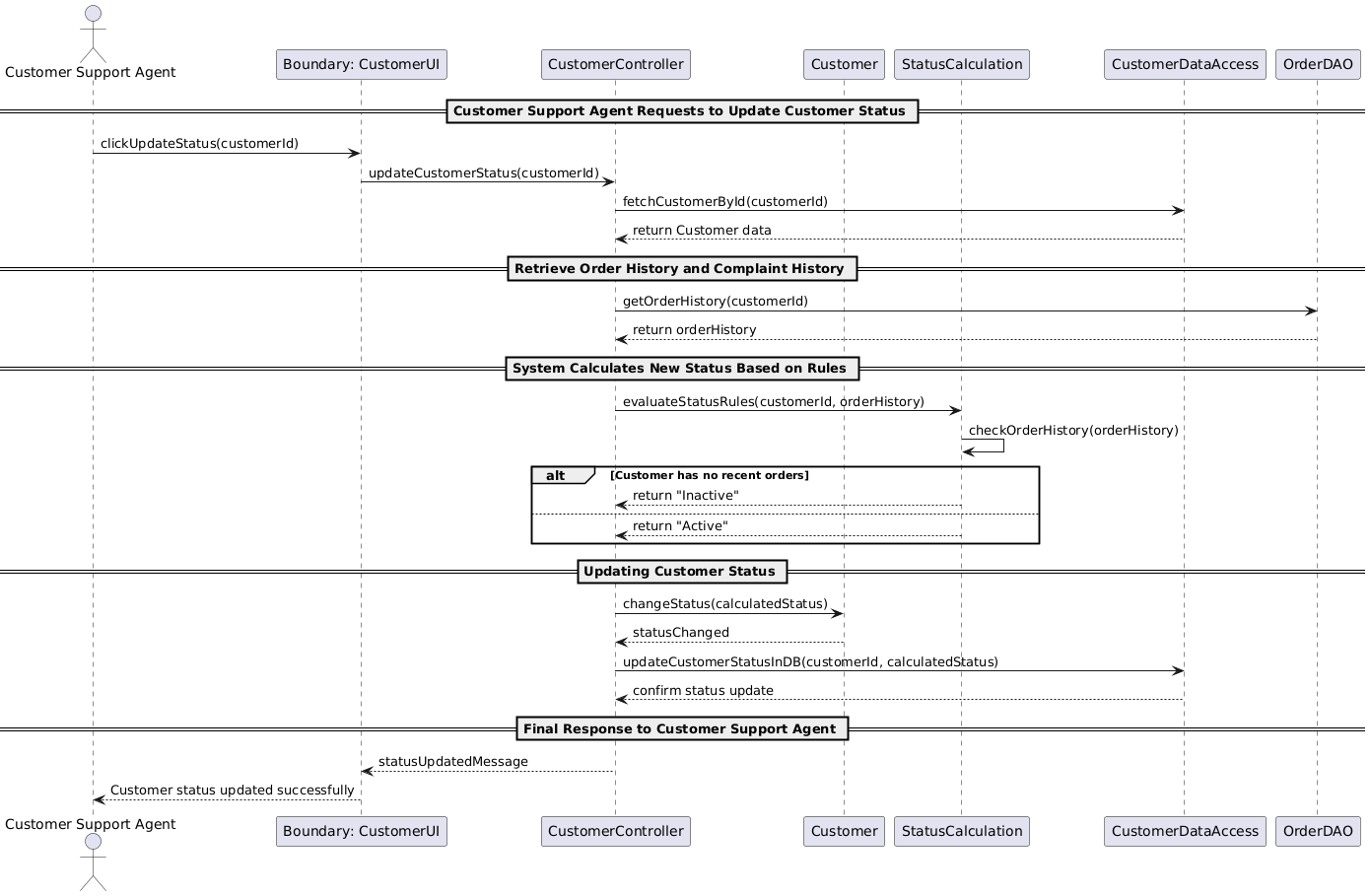


**Update customer status:**

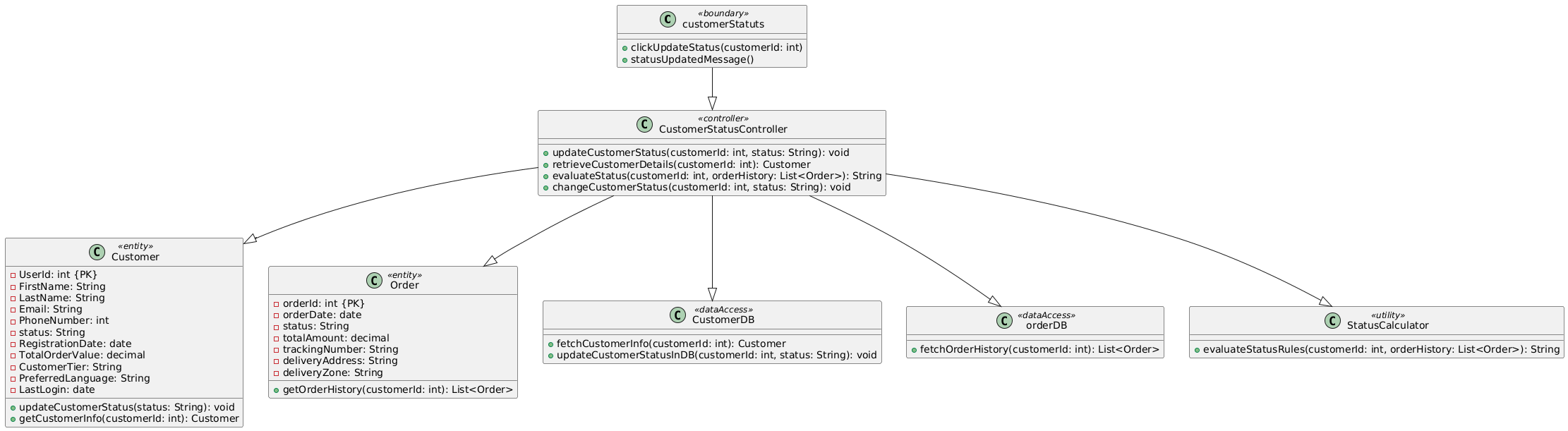
First cut edge:



Multi layer sequence diagram:

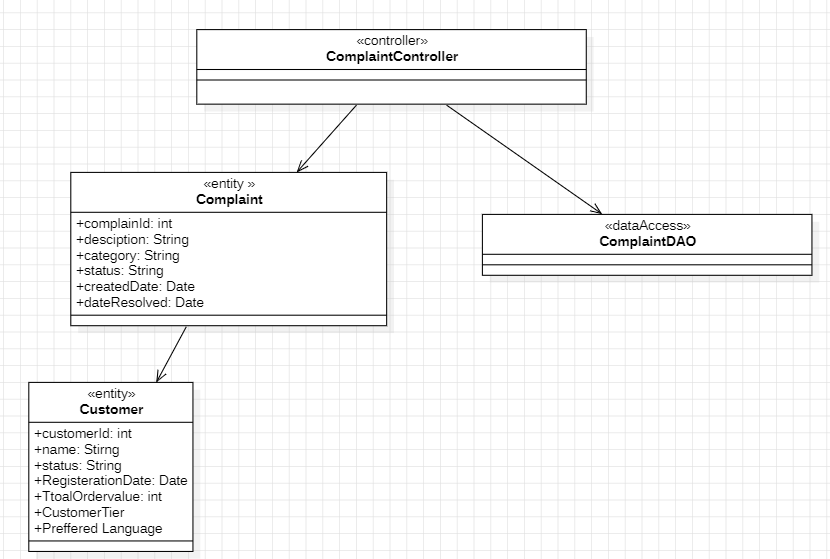


Final design :

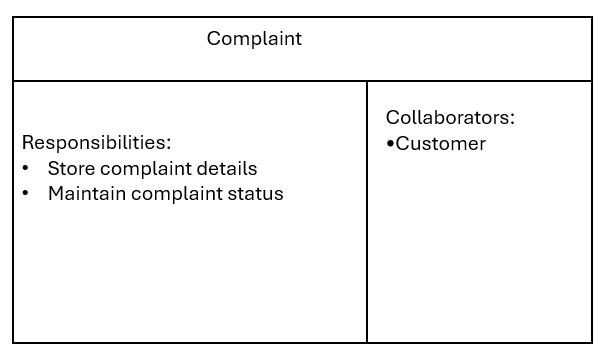
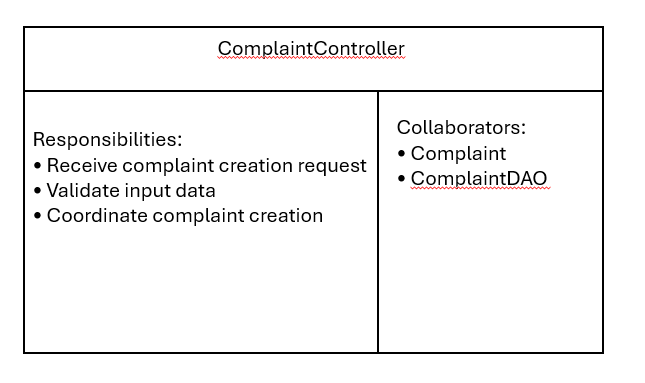


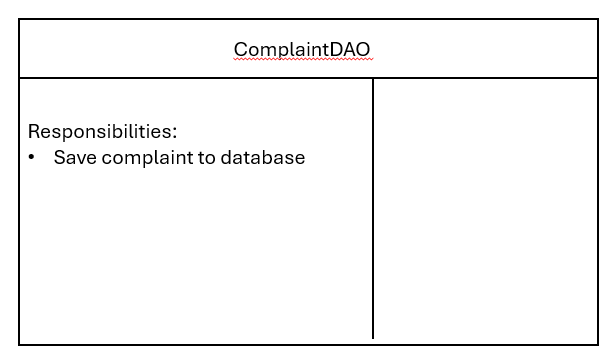
Use Case 1: Create Complaint Record(Simple)

* First-Cut DCD Before CRC:

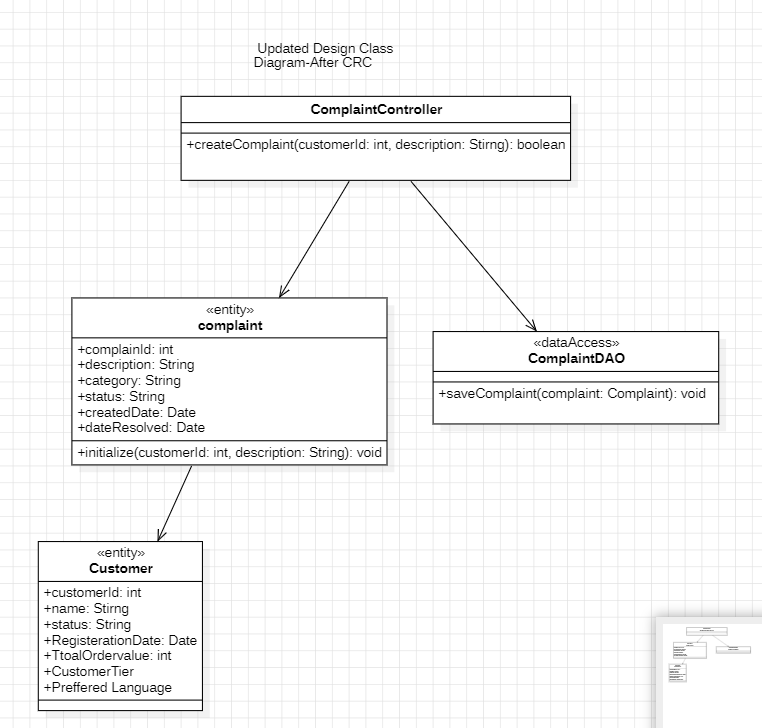


CRCs for create complaint record:



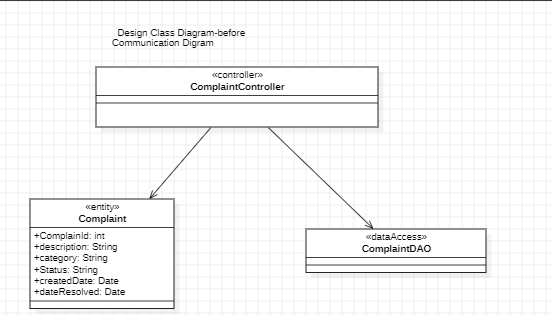


DCD After CRC:

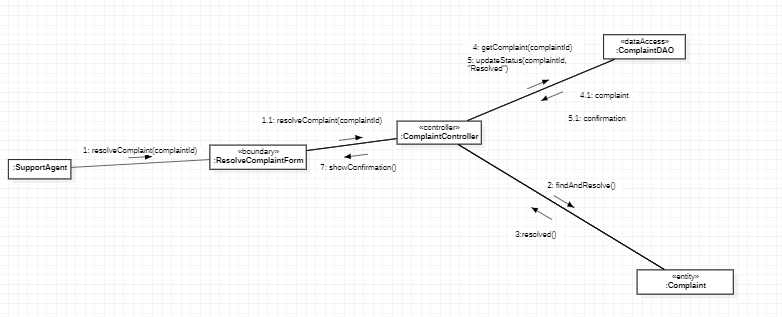


Use Case 2: Resolve Customer Complaint(Moderate)

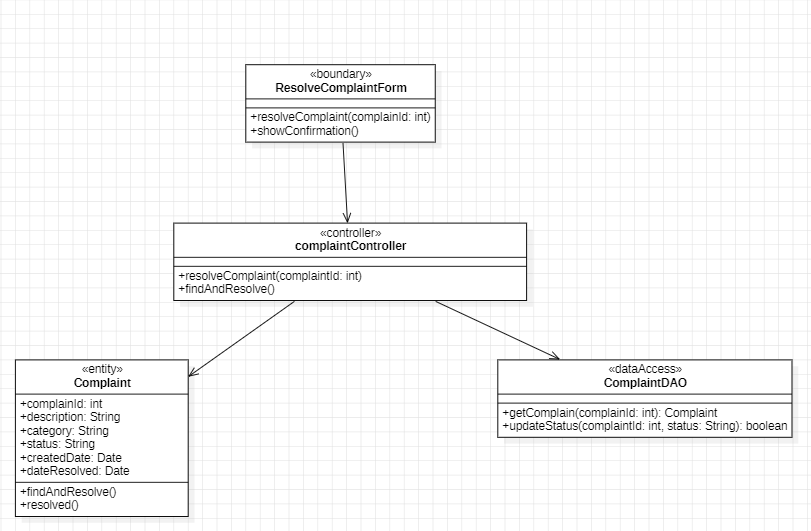
* First-Cut DCD before communication Diagram:



Communication Diagram:

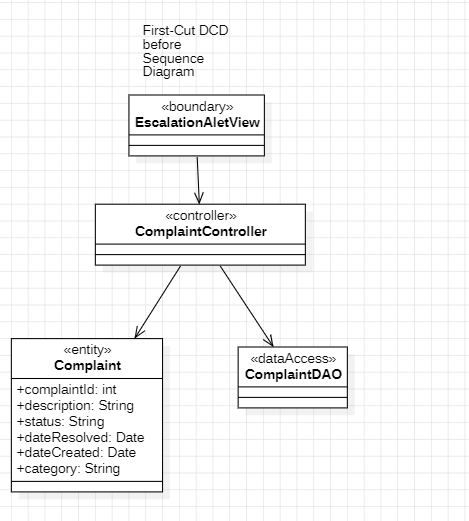


DCD after communication Diagram:

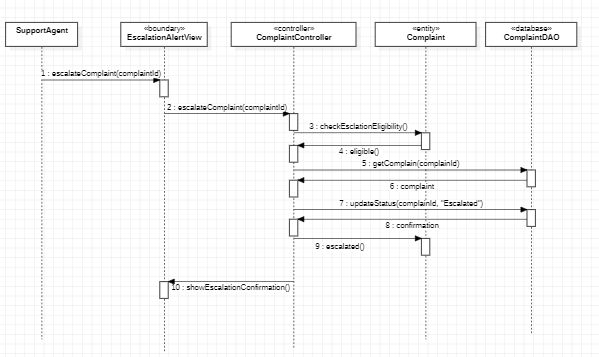


Use Case 3:Escalate Unresolved Complaint (complex):

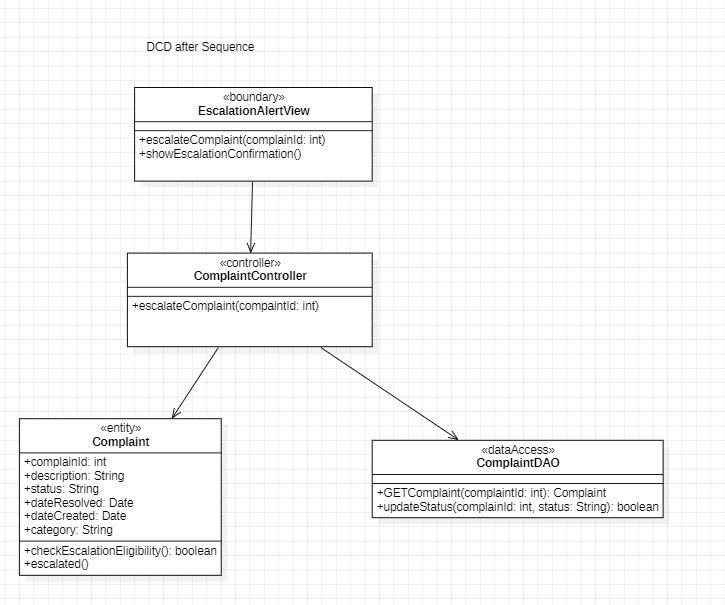
* First-Cut DCD before Sequence Diagram:



Sequence Digram:

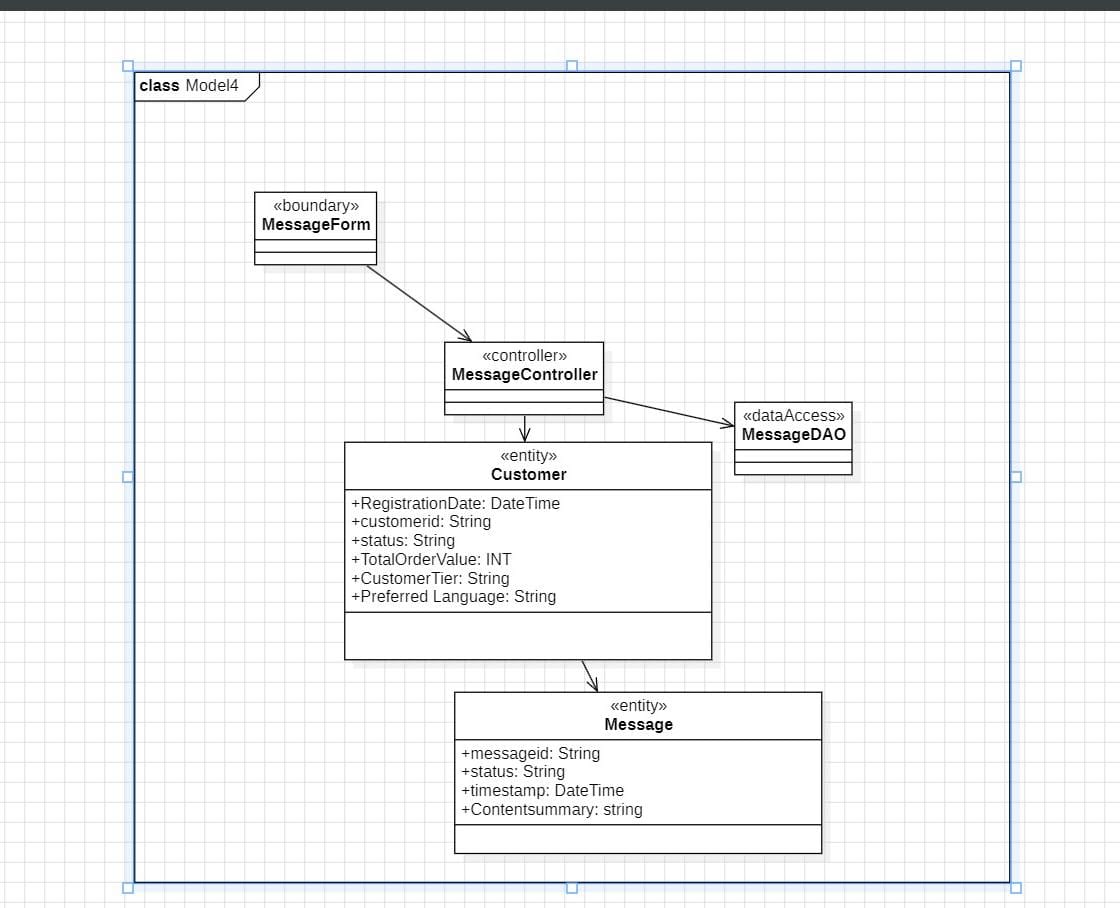


DCD after Sequence Diagram:



### **Use case :Send Message To customer:**

**First DCD:**

****

### **CRC Card: MessageController**

|  |  |  |
| --- | --- | --- |
| **Class** | **Responsibilities** | **Collaborators** |
| **MessageController** | **• Accept send message request**  **• Validate message content**  **• Delegate message creation and persistence** | **Customer, Message, MessageDAO** |

### **CRC Card: Message**

|  |  |  |
| --- | --- | --- |
| **Class** | **Responsibilities** | **Collaborators** |
| **Message** | **• Store message content**  **• Timestamp the message**  **• Link message to the corresponding customer** | **Customer** |

### **CRC Card: Customer**

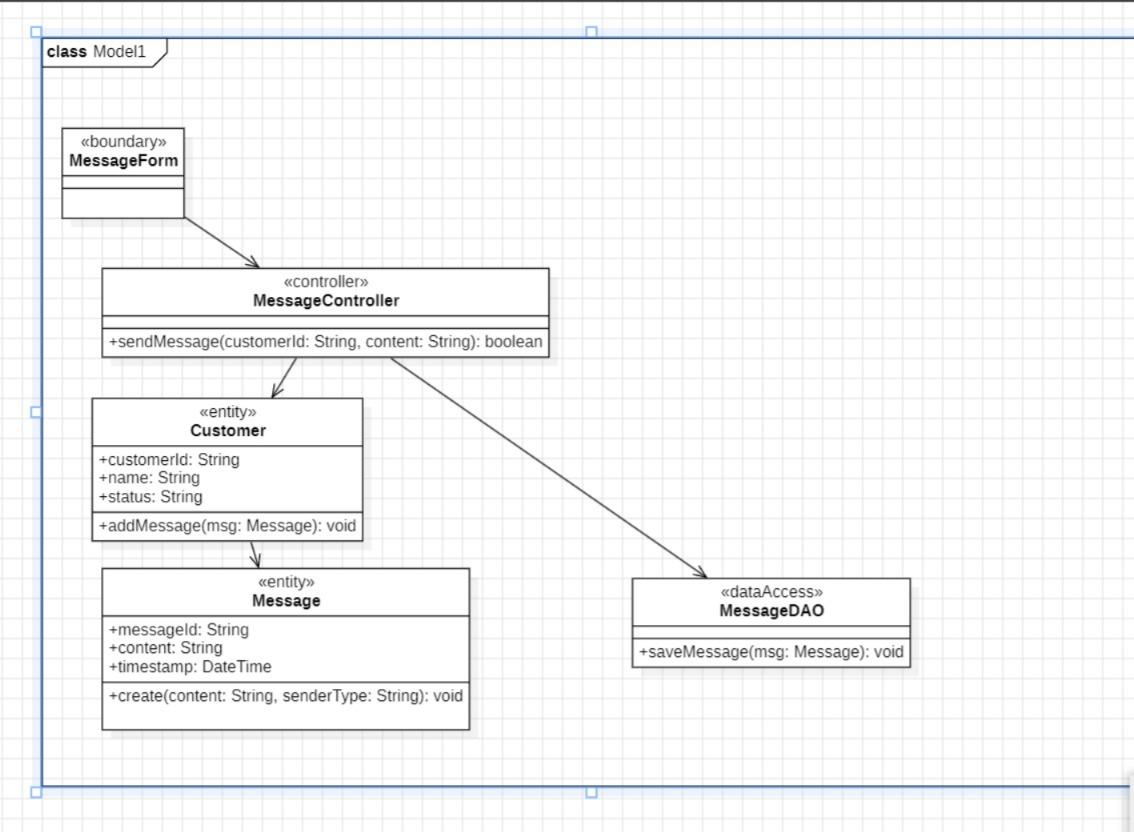
|  |  |  |
| --- | --- | --- |
| **Class** | **Responsibilities** | **Collaborators** |
| **Customer** | **• Maintain customer profile**  **• Maintain customer message history** | **Message** |

### 

### **CRC Card: MessageDAO**

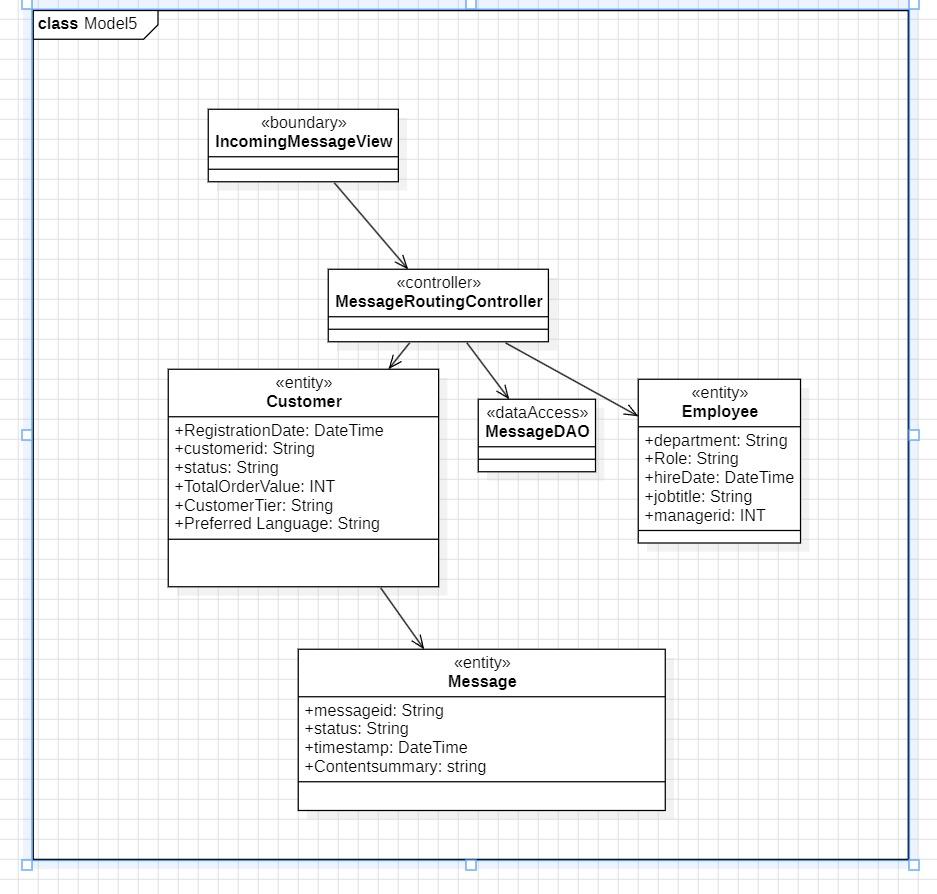
|  |  |  |
| --- | --- | --- |
| **Class** | **Responsibilities** | **Collaborators** |
| **MessageDAO** | **• Save message to the database**  **• Retrieve message history for a customer** |  |

**FINAL DCD**

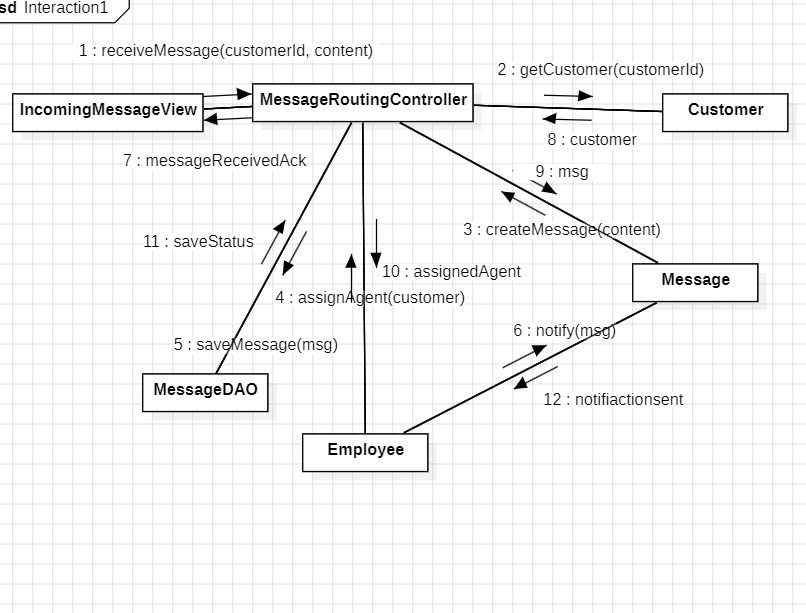


**Use Case: Receive and route customer Message**

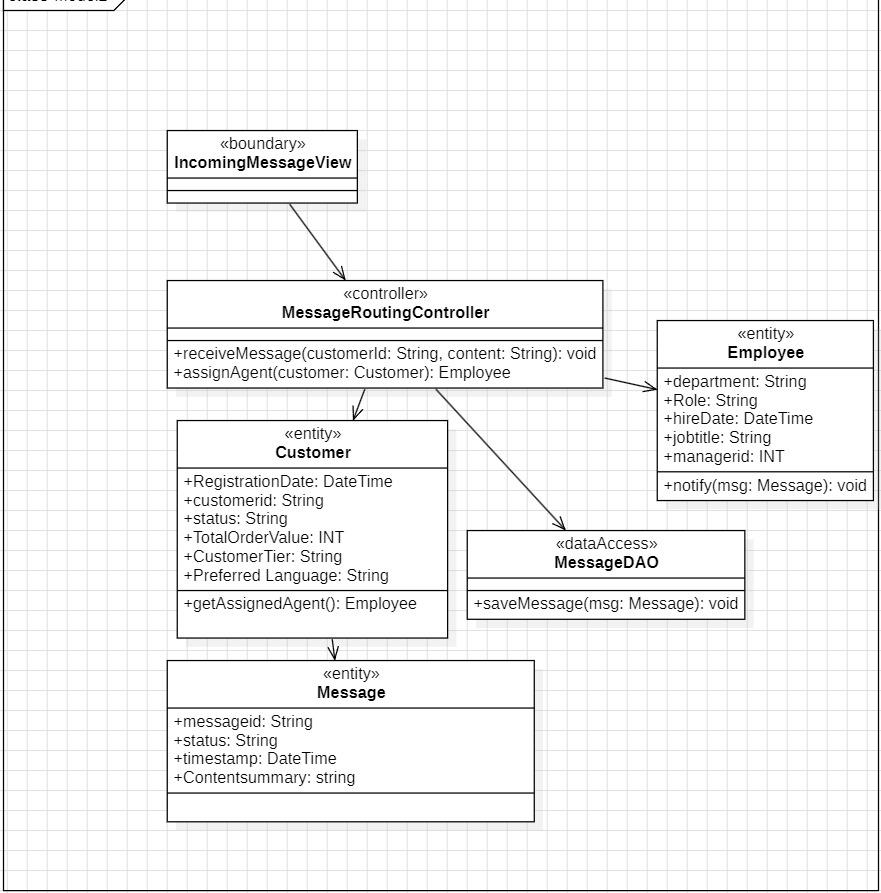
**FIRST CUT DCD**



COMMUNICATION DIAGRAM

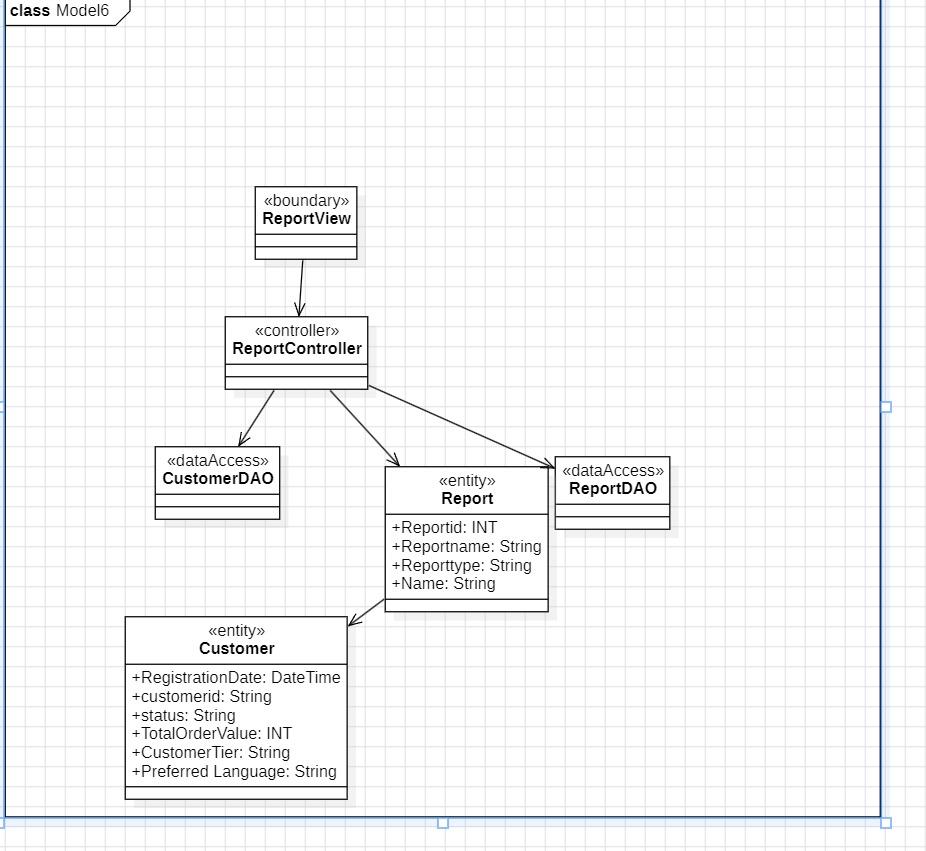


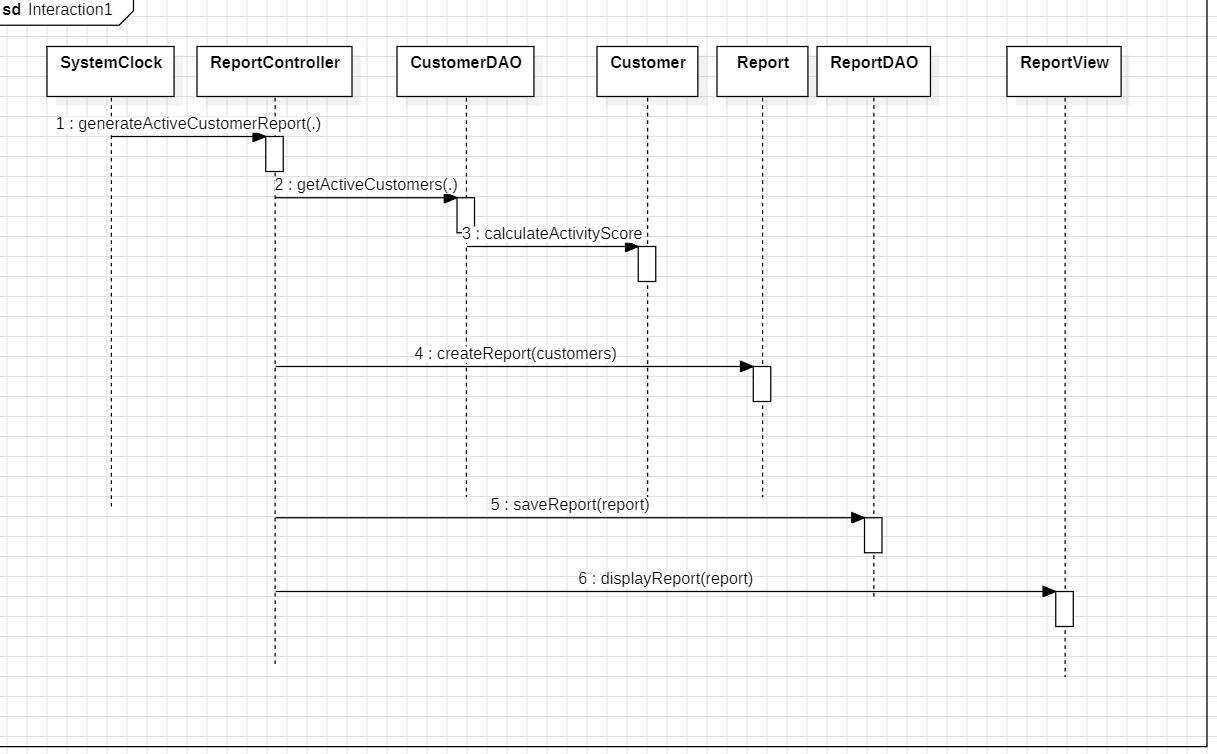
FINAL DCD



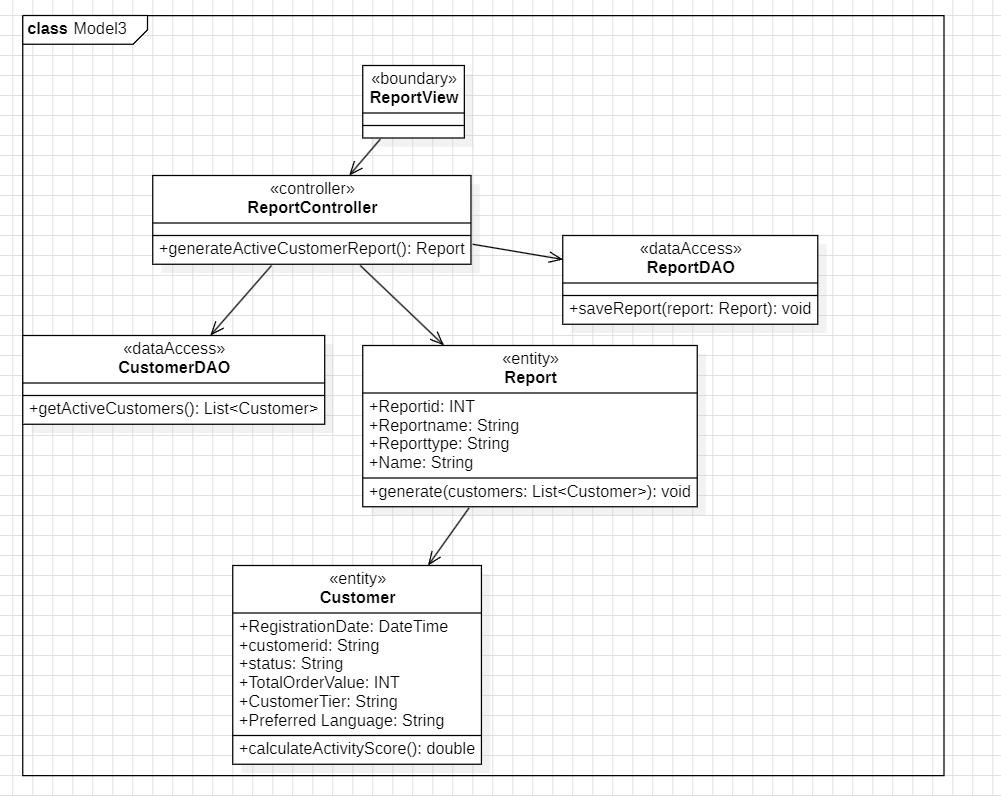
**Use Case: Generate Active Customer Report**

FIRST CUT DCD

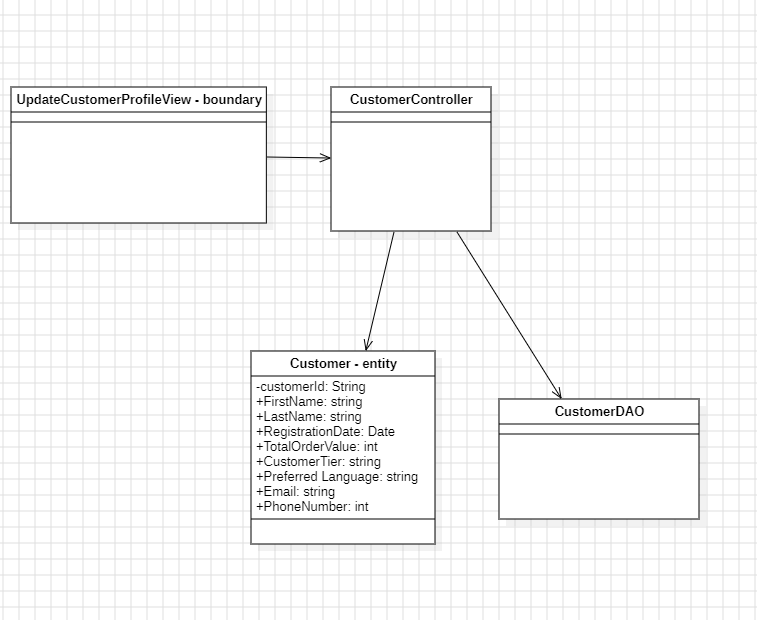


SEQUENCE DIAGRAM

FINAL DCD



Update customer profile - first cut



CRC:

Customer

Hold customer data

Apply profile updates

CustomerDAO

Customer DAO

Retrieve customer

Persist updates

Customer

Customer Controller

Receive update request

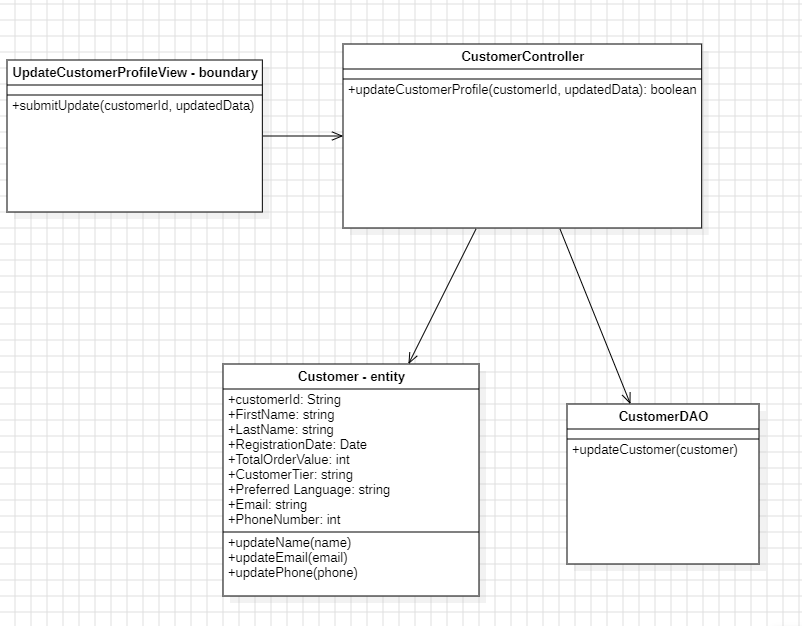
Validate input

Delegate update

Customer

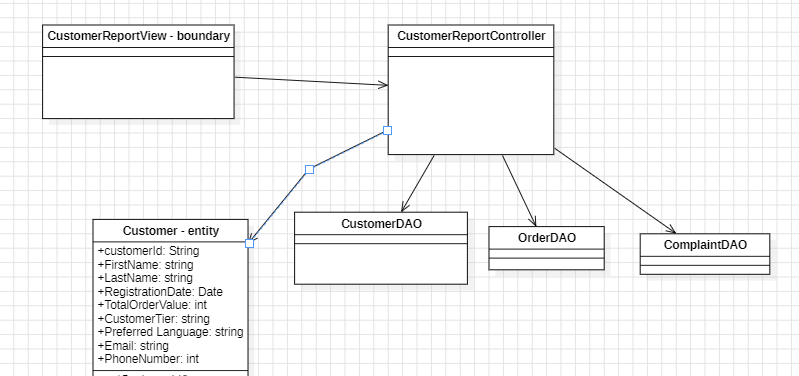
CustomerDAO

DCD - final

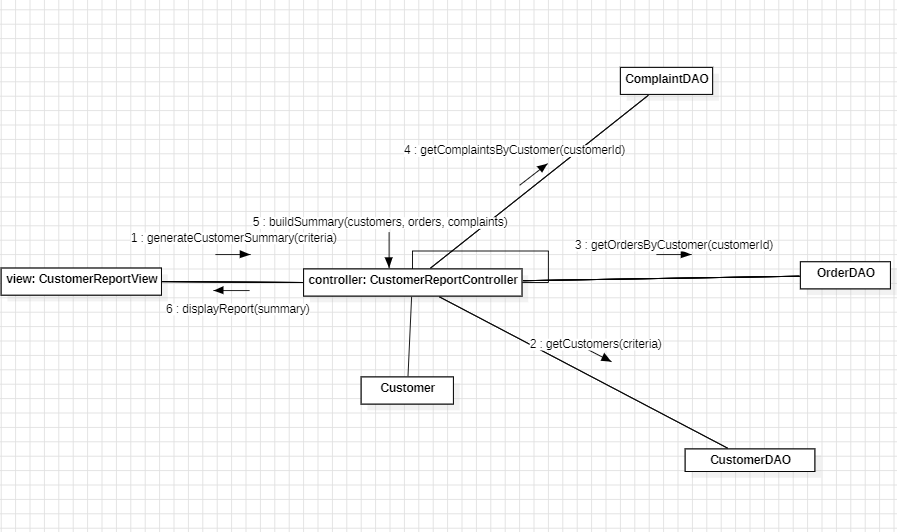


Generate customer summary

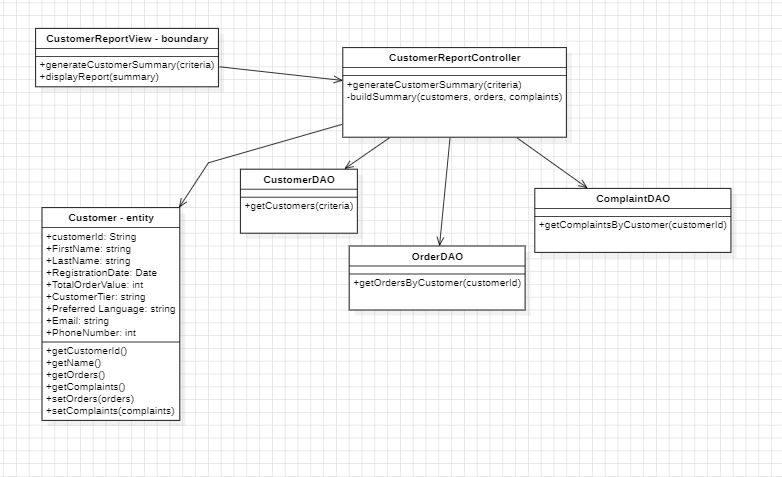
First cut



Communication diagram

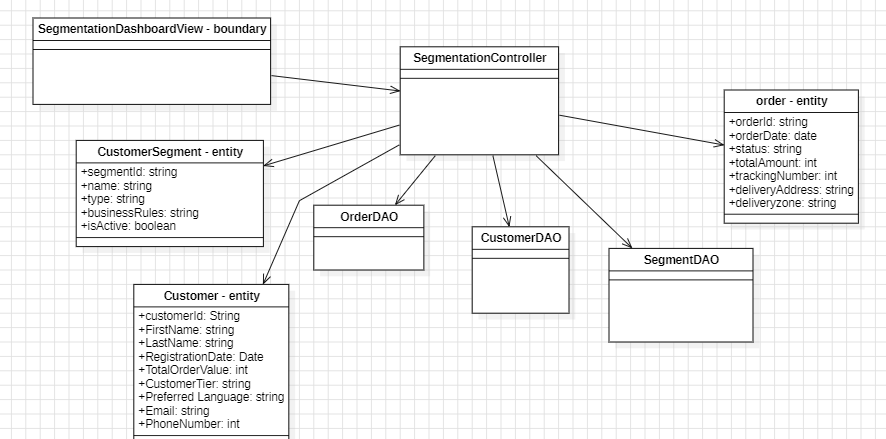


Final cut

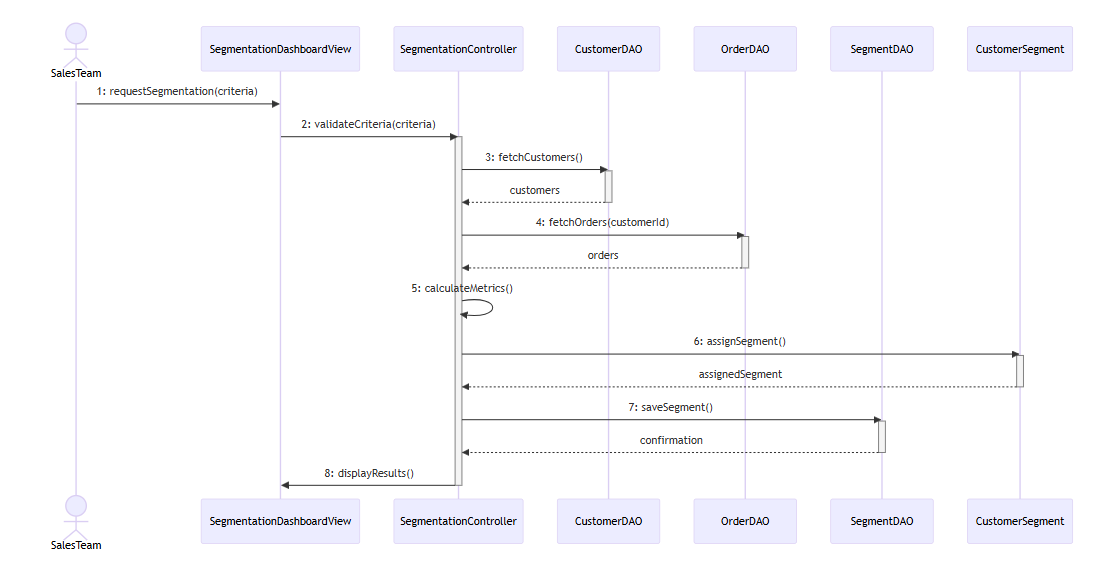


Generate Customer Segmentation Analysis

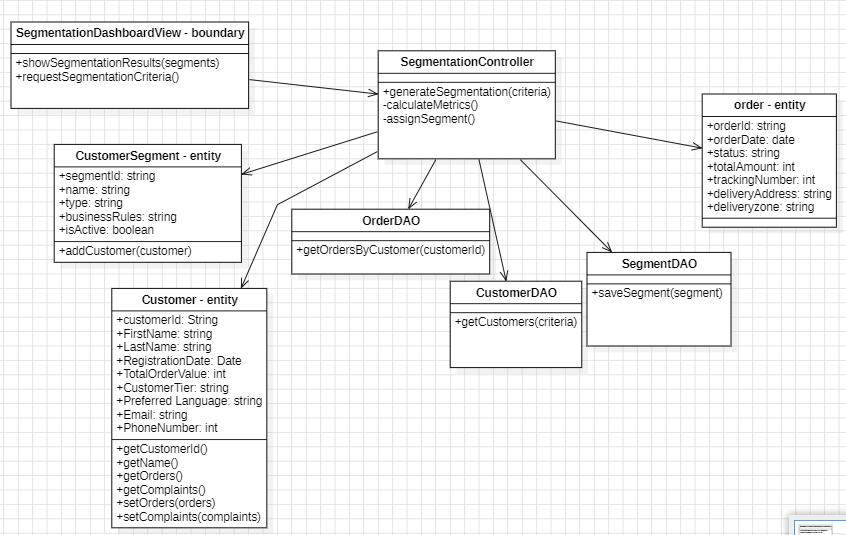
First cut



Sequence diagram:



Final cut



**Final Design Diagram:** will be in the zip file dues to the resolution issues

**Package Diagram:**