Data Model Diagram

Citizen

```
                    Citizen
                   /        \
               !  /          \  *
       Username /              \ Proficiency
             /                  \
          ! /                    \ +
         String                 String
```

Message / Exchange

```
         String
           ^
         ! |
           | Exchange ID
         * |
        Message  <----------- Messages ! ----------- Exchange
       / * | * \                                      / * \ *
      /    |    \                              User2 ID     User1 ID
Timestamp !|*  Medium                            /            \
    / !       \ !                            ! /               \ !
   Time      String                        String            String
   Content    Author
   ! /         \ !
  String      String
```
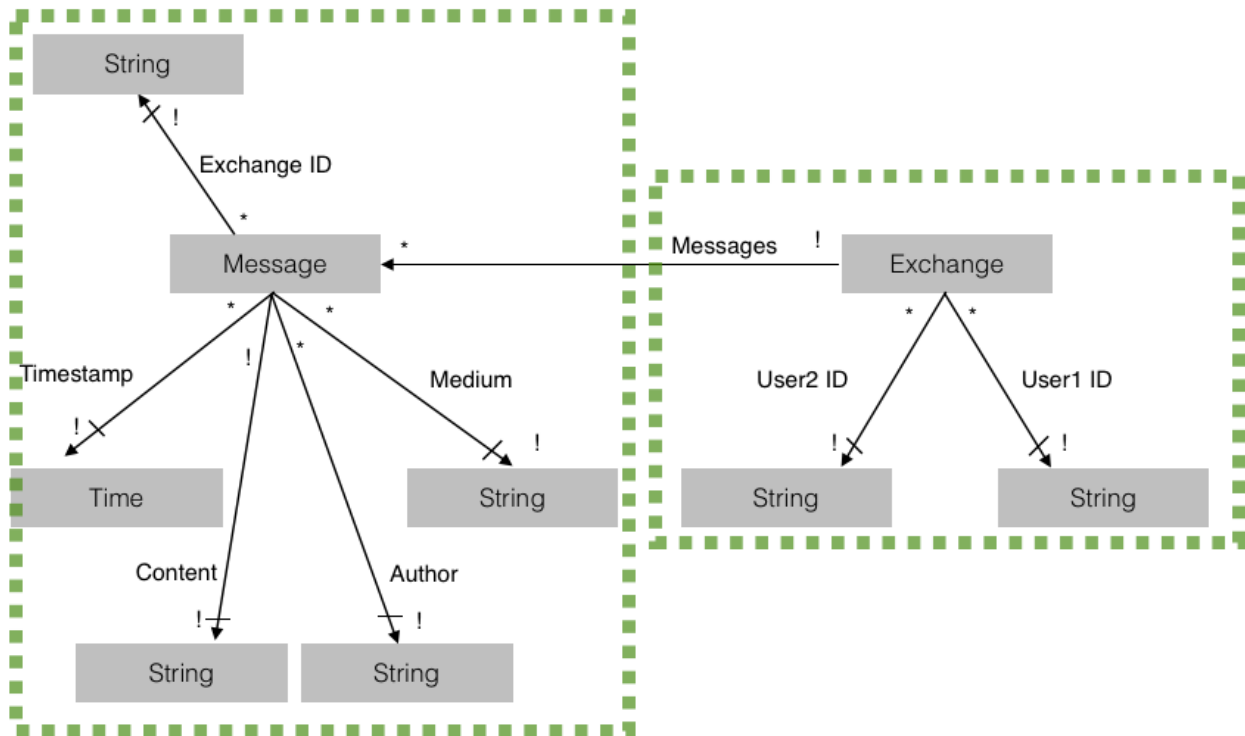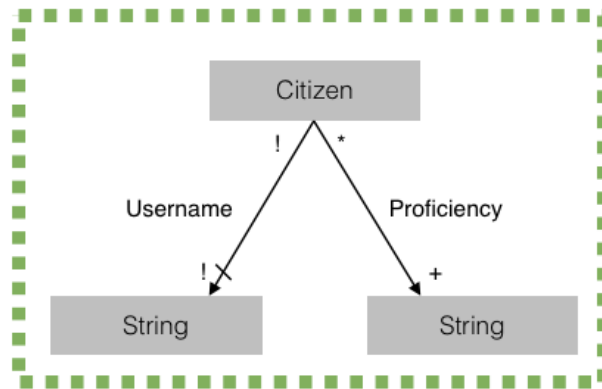
Data Design Example

```
Citizen
{
Username: "Joe",
 Proficiency: ["Spanish","English"]
}

Exchange
{
User1ID: "123",
User2ID: "456"
Messages:[
    {
    Medium: "Text",
    Author: "Bob",
    Content: "Hola!",
    Timestamp: "1416369281003",
    ExchangeID: "507f1f77bcf86cd799439011"
    },
    {
    Medium: "Text",
    Author: "Joe",
    Content: "Muy bien",
    Timestamp: "1416369281004",
    ExchangeID: "507f1f77bcf86cd799439011"
    }
}
```