User Interface

'Database' Layer

Extra layer (TBD)

+ attribute1:type = defaultValue
+ attribute2:type
- attribute3:type

+ operation1(params):returnType
- operation2(params)
- operation3()

More than likely, this can just be the TrackerViewHelper! The trackShipment and stopTracking methods will do the api calls?

ServerApplication

- shipments: Shipment[]
- updates: map<String, Update>

- addShipment()
- findShipment()

Sends requests to server for Information???

Responds with requested information

Asks for information

Client

Gives information, including sending out api calls (in case this is what we have to do for shipments)

Sends Updates to

Server API

Sends yay or nay back

Something like this idk

Factory Pattern Possibilities:
1. 4 different types of shipments

Singleton Pattern possibilites:
1. Updates
2. Server?
3.

User Interface

Creates and uses these

<<interface>>
Subject

+ addSubscription(observer: Observer)
+ removeSubscription(observer: Observer)
+ notifyObservers(shipment: Shipment)

Singleton

ServerApplication

- shipments: Shipment[]
- updates: map<String, Update>

- addShipment()
- findShipment()

TrackerViewHelper

+ shipmentId: State<String>
+ shipmentNotes: State<String[]>
+ shipmentUpdateHistory: State<String[]>
+ expectedShipmentDeliveryDate: State<String>
+shipmentStatus: State<String>
+location: State<String>
+ shipmentExists: Boolean
*all attributes have a private setter in this class

+ trackShipment(id: String)
+ stopTracking()
- setCard(shipment: Shipment)

<<interface>>
Observer

+ update(shipment:Shipment)

0..*

Shipment

+ status: String
+ id: String
+ notes: String[]
  private set;
+ updateHistory: ShippingUpdate[]
  private set;
+ expectedDeliveryDateTimeStamp: Long
+ currentLocation: String
- observers: Observers[]

+ addNote(note: String)
+ addUpdate(update: ShippingUpdate)

ShippingUpdate

+ previousStatus: String
+ newStatus: String
+ timestamp: Long

0..*

1

<<interface>>
Update

+ performUpdate(arguments: List<String>)

Create

Delayed

Shipped

Lost

Location

Canceled

Delivered

NoteAdded