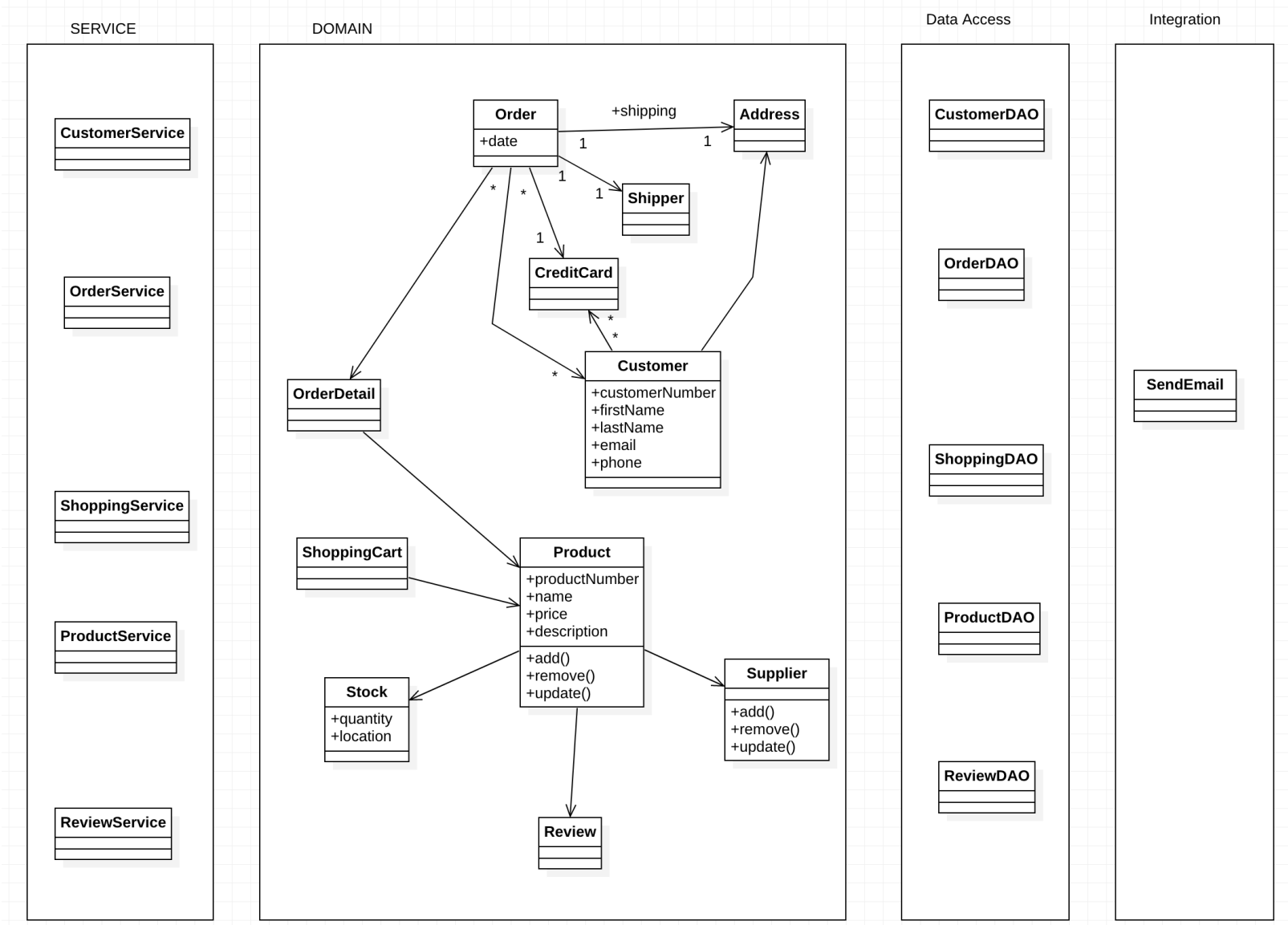
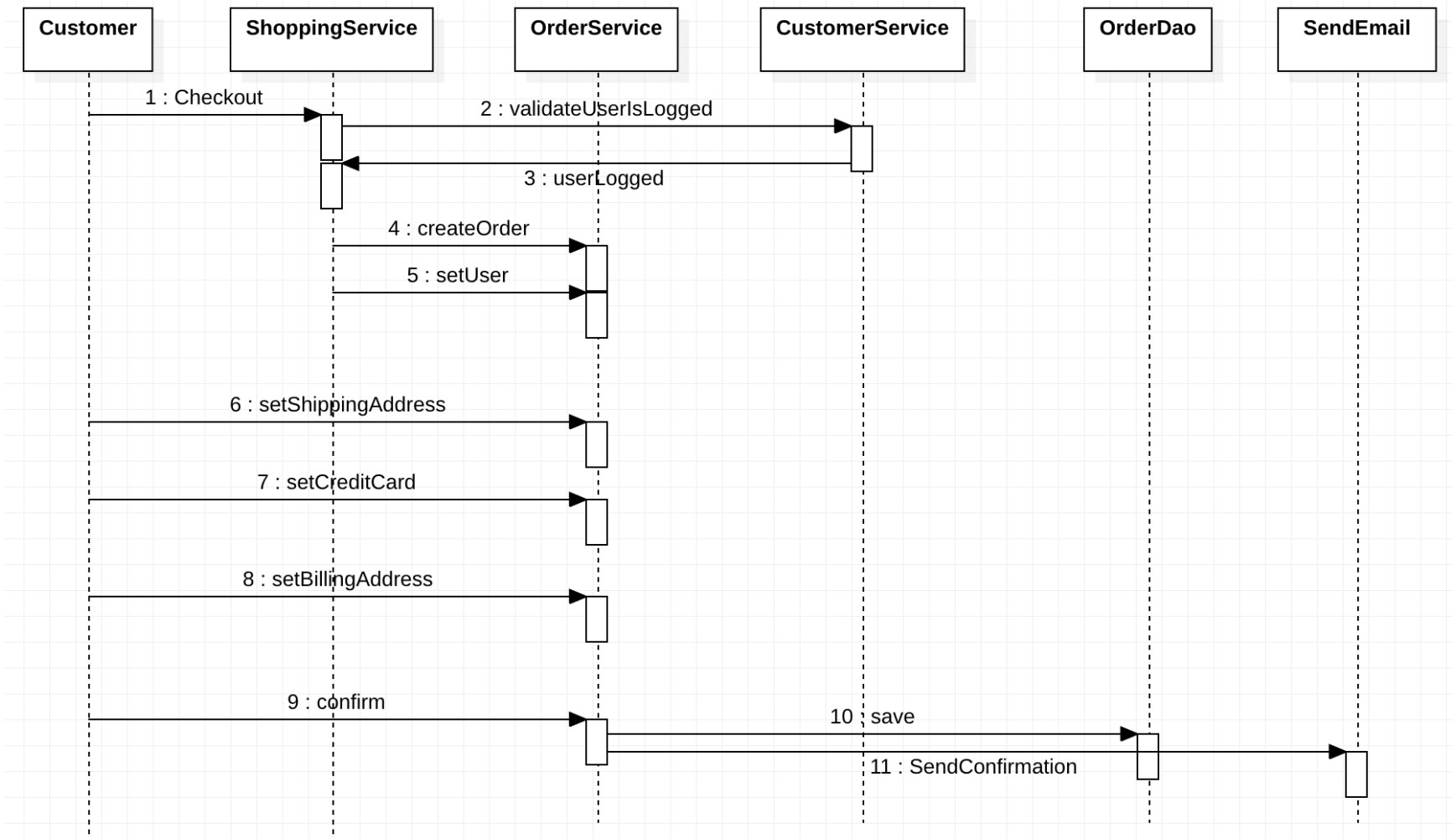
Exercise 1


SERVICE
DOMAIN
Data Access
Integration
CustomerService
OrderService
ShoppingService
ProductService
ReviewService
Order
+date
+shipping
Address
Shipper
CreditCard
Customer
+customerNumber
+firstName
+lastName
+email
+phone
OrderDetail
ShoppingCart
Product
+productNumber
+name
+price
+description
+add()
+remove()
+update()
Stock
+quantity
+location
Supplier
+add()
+remove()
+update()
Review
CustomerDAO
OrderDAO
ShoppingDAO
ProductDAO
ReviewDAO
SendEmail


Customer
ShoppingService
OrderService
CustomerService
OrderDao
SendEmail
1 : Checkout
2 : validateUserIsLogged
3 : userLogged
4 : createOrder
5 : setUser
6 : setShippingAddress
7 : setCreditCard
8 : setBillingAddress
9 : confirm
10 : save
11 : SendConfirmation

Exercise 2

		Advantages	Disavantages
Front-End	Mobile (Android, iOS)	Faster, Scalable	volatile
	Browser		
Back-End	Server	easy to share in modules	less scalable
	Database	long time persistence	Low performance

Exercise 3

Integration possibility	**Advantage**	**Disadvantage**	**When to apply**
RMI		Only works in JAVA	Just for development and test
JMS	Asynchronous	Need middleware	Applications between same company
SOAP	Secure	Only works with XML	When need security and standard
REST	Many languages, XML, JSON	Less security	Everywhere
Serialized objects over HTTP	Simple	Only works in JAVA	Applications managed by the same project
Database Integration	Simple	Low performance	Never
File Based Integration		Low performance	Only to send documents