

1. Types of UML diagram

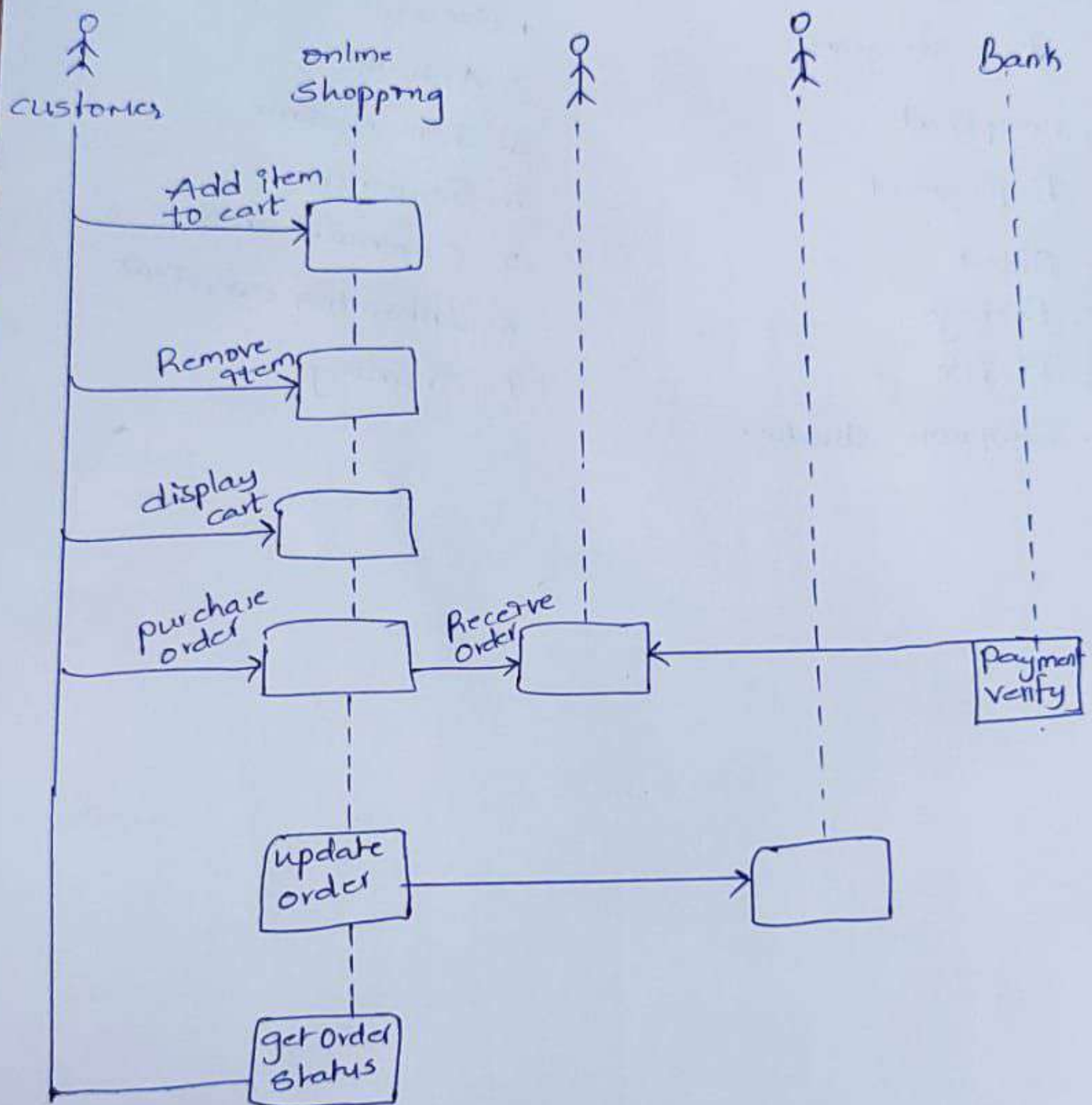
* Structure diagrams

1. Class diagram
2. Component
3. Deployment
4. Object
5. Package
6. Profile
7. Composite Structure

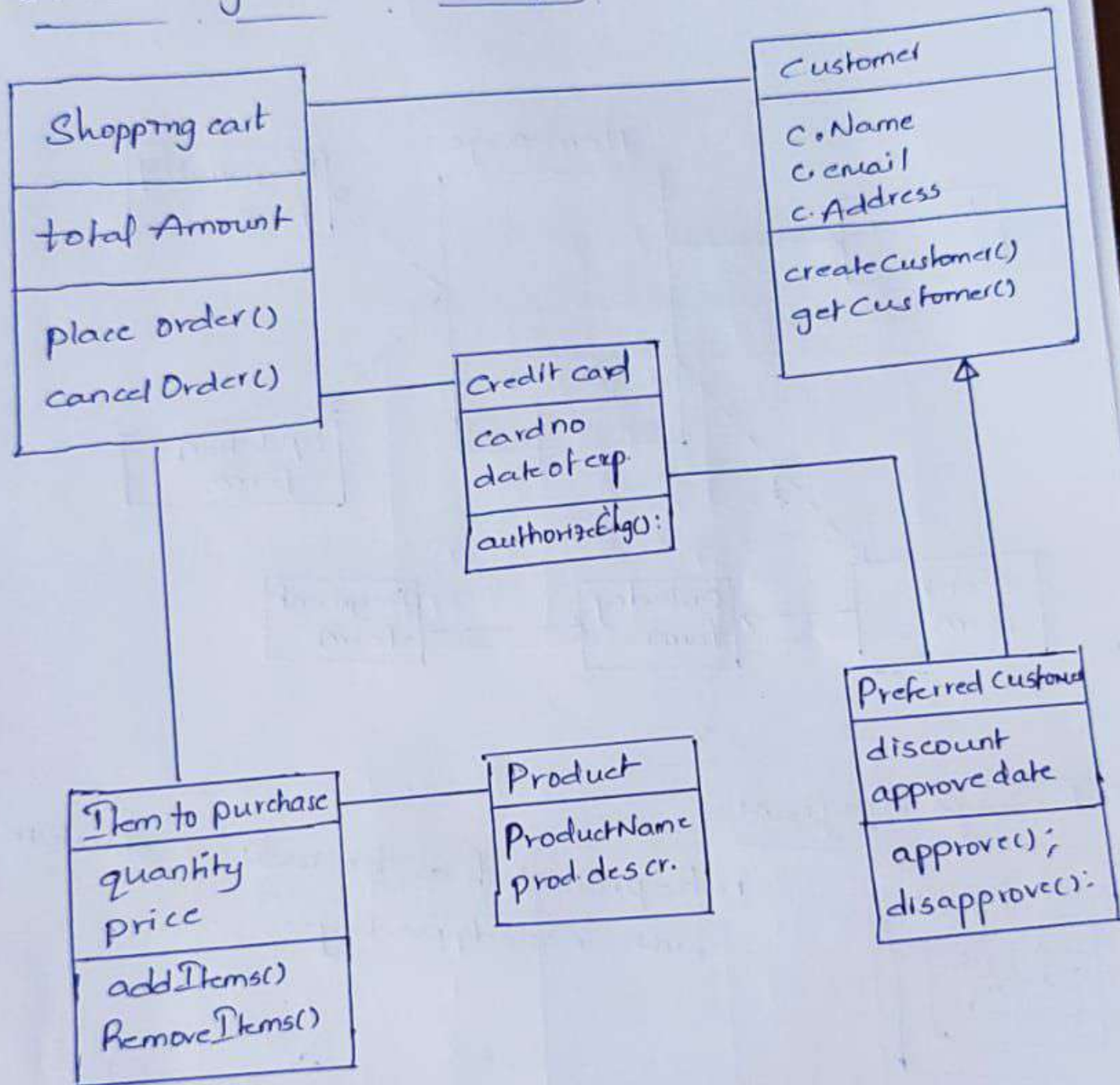
Behavioural diagrams

1. Use case diagram
2. Activity
3. State Machine
4. Sequence
5. Communication
6. Interaction overview
7. Timing

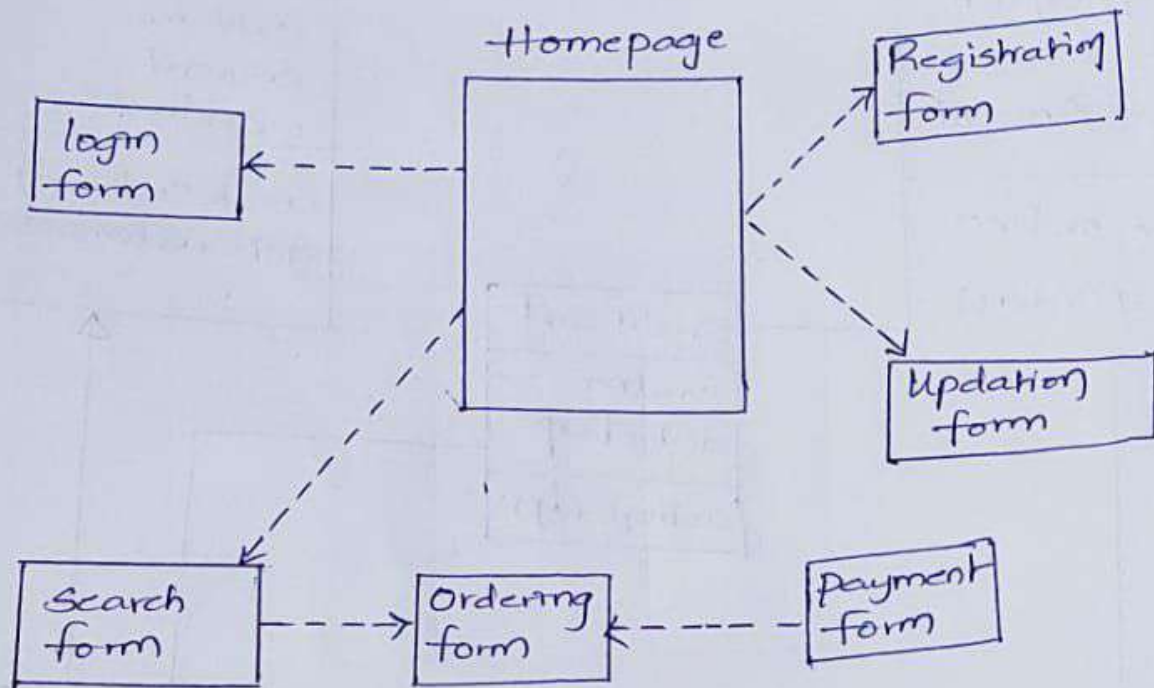
Sequence diagram for Shopping Mart:



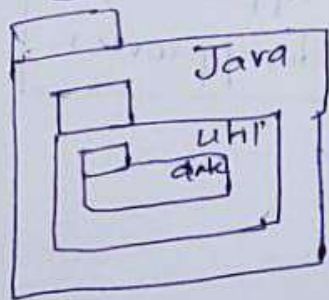
3. Class diagram for shopping cart



4. Deployment diagram for book store:



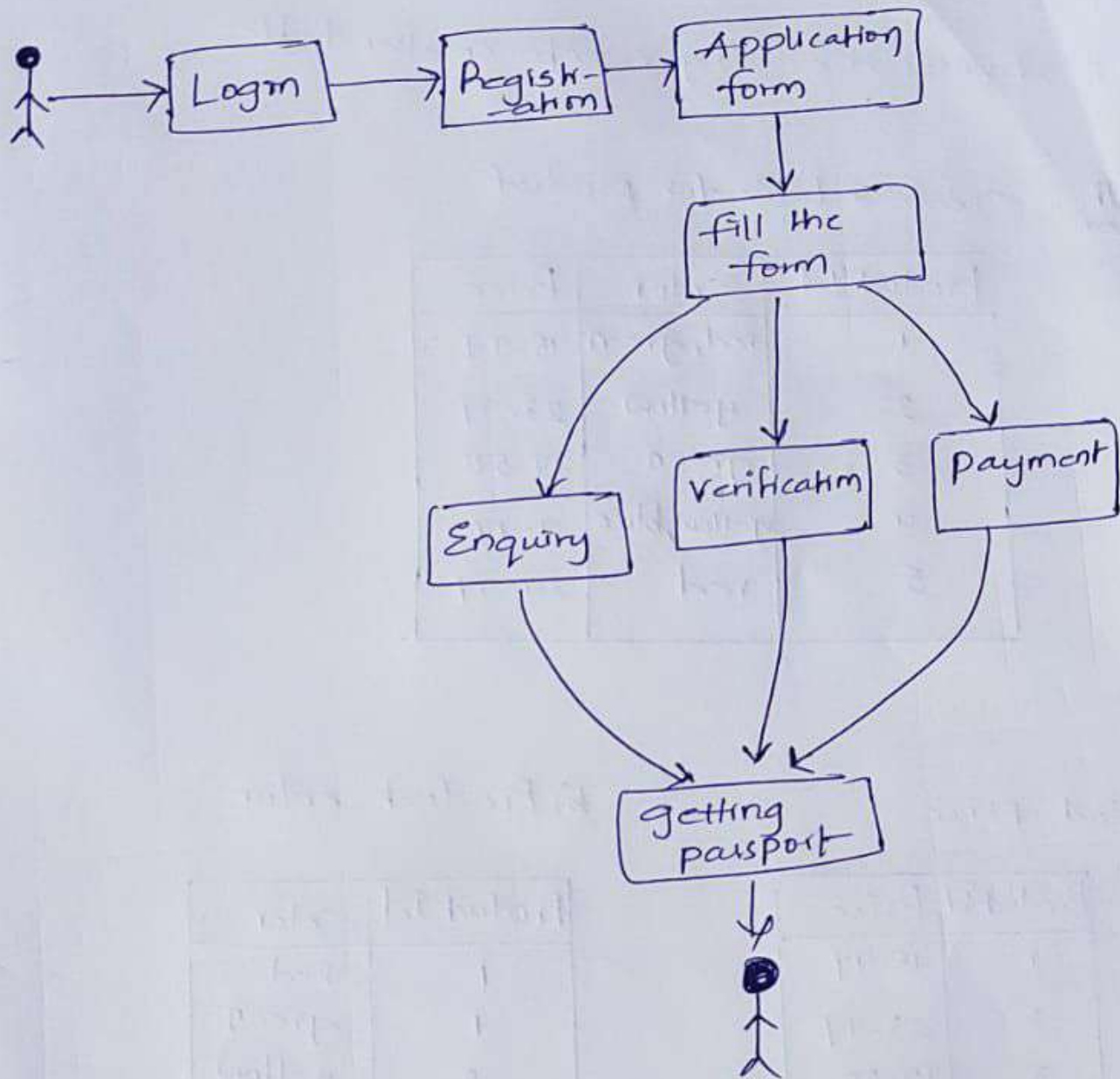
⑥ Package diagram:-



1. Represented as hierarchical structure with nested packages.

→ Package diagram shows the arrangement & org. of model elements in middle to large scale project that can be used to show both structure & dependencies b/w sub system / modules.

5. State diagram for Social Networking (Passport APP).



⑦ Normalisation:

It is the process of organising data in db.

It is used to minimize redundancy from relations.

It divides the larger into smaller table.

1NF: Create a table for product

ProductId	Color	Price
1	red, green	15.99
2	yellow	23.99
3	green	17.50
4	yellow, blue	9.99
5	red	29.99

a) Product price

ProductId	Price
1	15.99
2	23.99
3	17.50
4	9.99
5	29.99

b) Product color

Product Id	Color
1	red
1	green
2	yellow
3	green
4	yellow
4	blue
5	red

- It contains only one atomic value.
- And there is no repeating groups.

2NF : It must be in 1NF

teacher-id	Subject	teacher-age
111	Maths	38
111	Physics	38
222	Biology	38
333	Physics	40
333	Chemistry	40

teacher details table

teacher-id	teacher-age
111	38
222	38
333	40

teacher subject table

teacher-id	Subject
111	Maths
111	physics
222	biology
333	physics
333	chemistry

3NF: It must be 2NF

teacher-id	subject
111	Maths
111	Physics
222	Biology
333	Physics
333	Chemistry

subject	teacher age
Maths	38
Physics	38
Biology	38
physics	40
chemistry	40