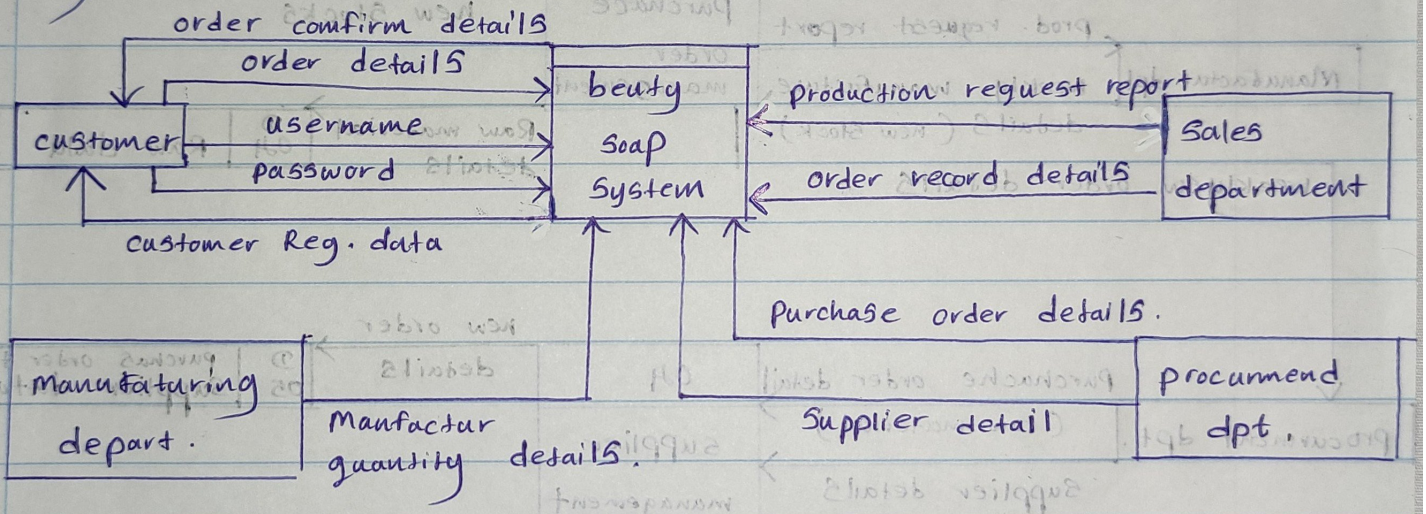
* basiness case beauty soap manufacturer system.

01) 1) • Coustomer (supermarkets) • Sales department
• manufacturer department • procurment department

3) • System login and register with the system
• place order (managing)
• purchase order (managing) • Supplier management

2) Context level DFD,



Level 0 DFD → next page.

20.2 | 20.3 (Soap)

Para (1)

takes order

'Beauty' Soap manfactare ← Local customer's

↓ sells for

Shop detail's

only supermakets (customer's)

customer data (1)

Register with 'Beauty'

system logging
- username
- password

→ customer ID
→ username
→ password

place order → schedule delivery

3 weeks

customer order data (2)

order consists

1..* Soap → type, quantity → record → order details

Para (3)

Soap batch → has → unique code

↓ allocated to

order → of → customer.

- complete ← delivery
- partial

↑ record by

Sales dpt.

Para (2)

Sales dipart. → produce

orderd coustomer quantity

stock available "

stock data (3)

production reguest report → used to place order's → raw matierials ← from Suppliers.

Local

Foreign

Supplier data (6)

Manufacture dipartment

purchase order

handles

Procurement department

raw material data (4)

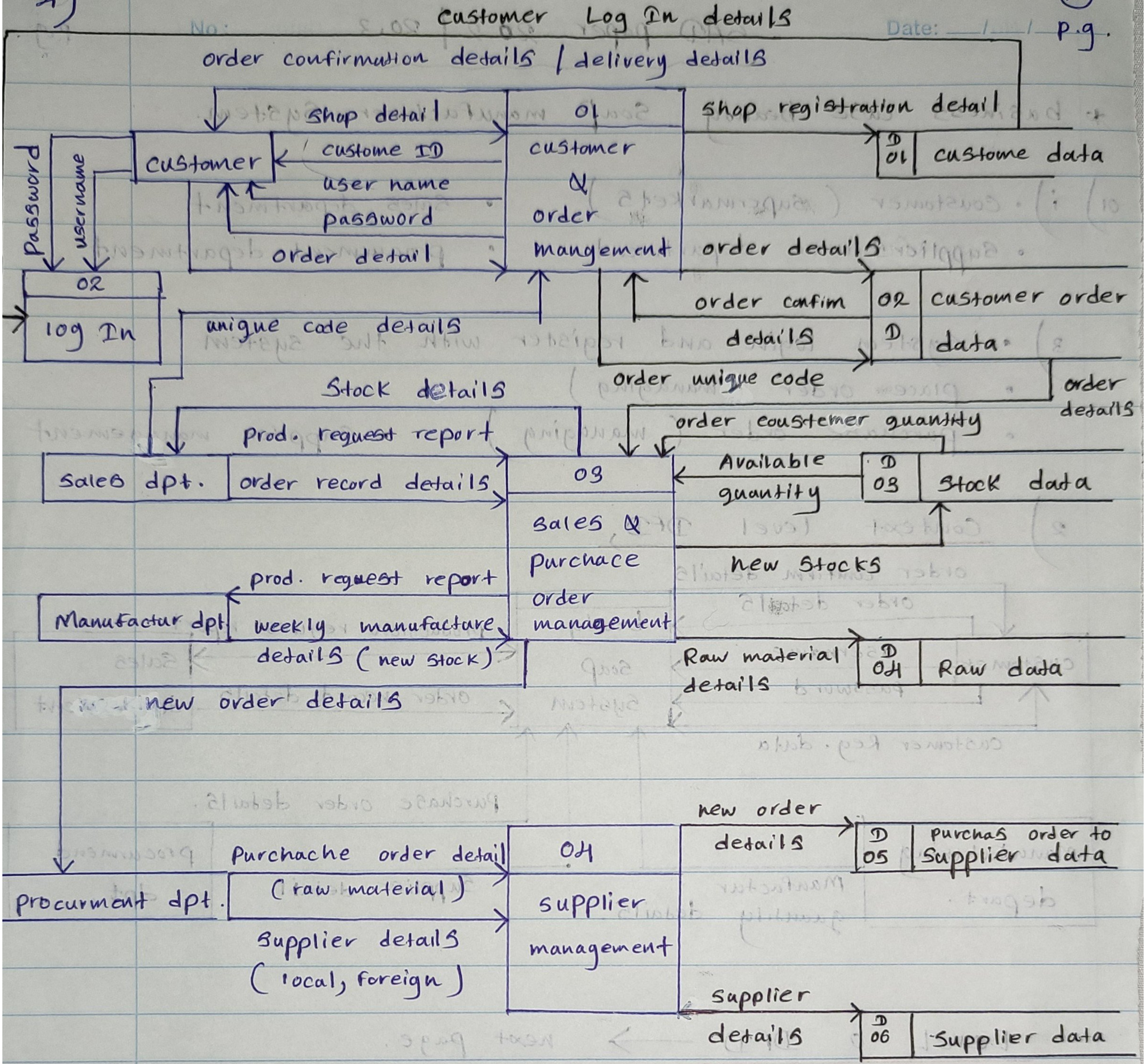
weekly quntity of each Soap type

purchace order to Supplier data (5)

RATHNA

RATHNA

4)



Question 02

1)
- customer
- order
- deliver
- Supplier
- Dapartment
- Stock
- report
- purchace order
- Raw material

2) customer → - ID : string + Add coustomer ( )
- username : string + delete " ( )
- Password : string

class name — Attribudets — method (functions)

(crud [illegible])

Question 02

Date: / /

02)

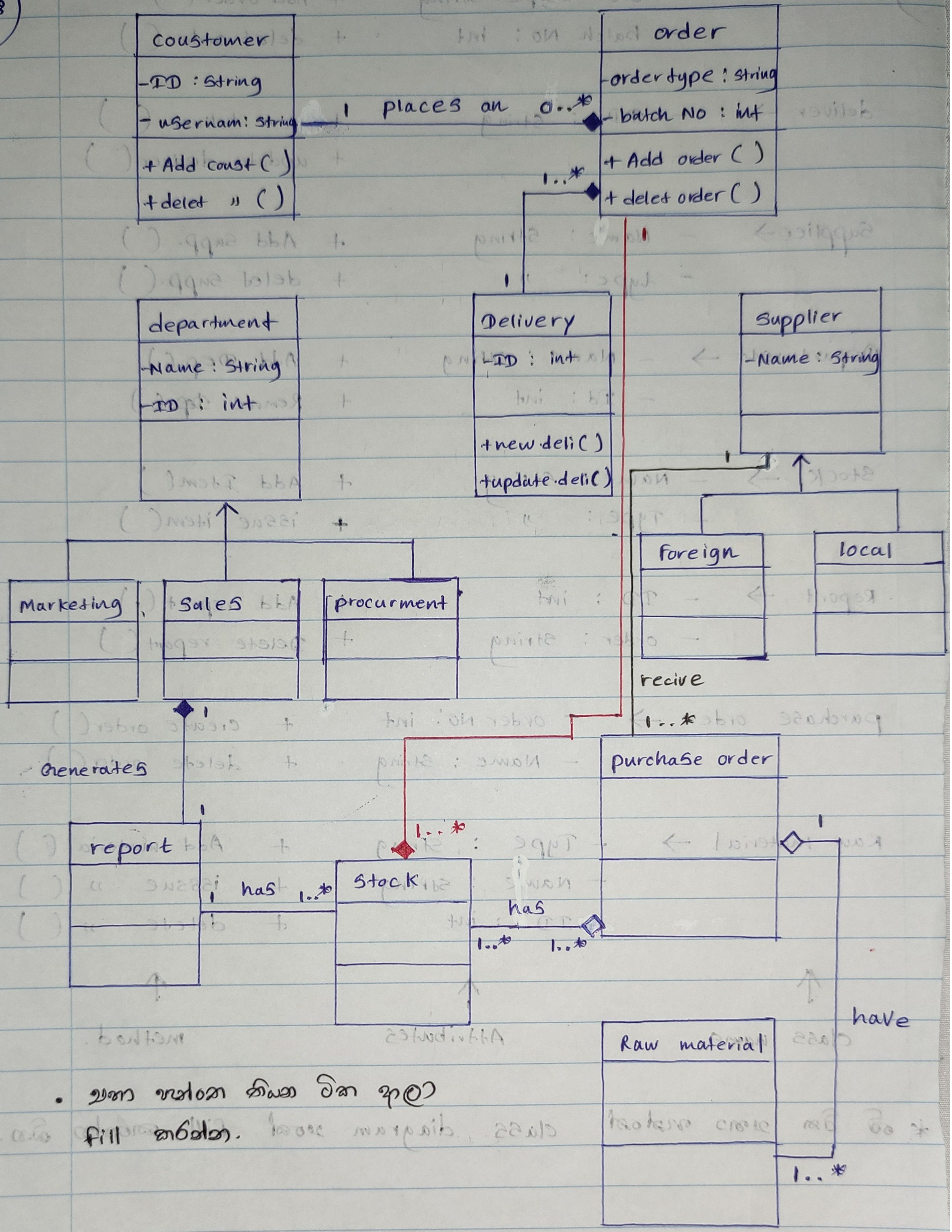
Class name	Attributes	Method
order →	− order type: String − batch No: int	+ Add order( ) + delet order( )
deliver →	− ID : String	+ new deliver( ) + update deliver( )
Supplier →	− Name: String − type: "	+ Add supp.( ) + delet supp.( )
Department →	− Name : String − Id : int	+ Add Dep.( ) + Remove Dep.( )
Stock →	− Name : String − Type : "	+ Add Item( ) + issue item( )
Report →	− ID : int − order : String	+ Add report( ) + Delete report( )
purchase order →	− order NO: int − Name : String	+ create order( ) + delete order( )
Raw material →	− Type : String − Name : String − ID : int	+ Add material( ) + isssue " ( ) + delete " ( )

↑ class name ↑ Attributes ↑ method.

* මේ ටික තමා ගන්නේ class diagram එකේ fill කරන්න ඕන.

Class diagram

3)

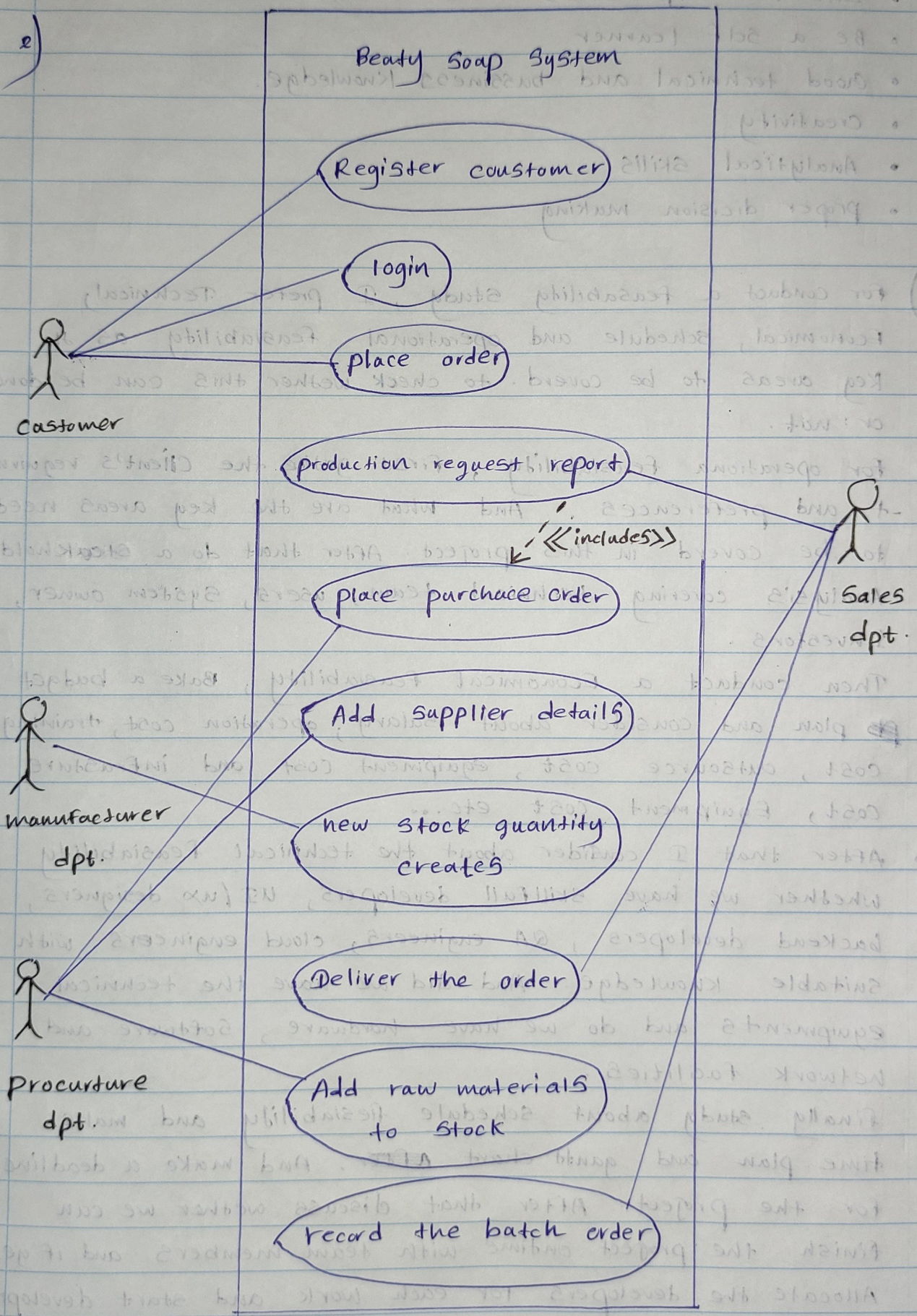


• ඔනා හන්න තියන ටික අලට
fill කරන්න.

Question 03

1). • customer • Sales dpt. • Manufacture dpt. • procurment dpt.

2)



1)
- Good communication skills
- Interelationship skills
- Be a self learner
- Good technical and bassiness knowledge.
- Creativity
- Analytical skills
- proper dicision making

2) for conduct a feasability study, I prefer Technical, Economical, schedule and operational feasiability as 4 key areas to be coverd. to check wether this can be done or not.

- for operationa feasiability, first gathe the client's requirmen-t and preferences. And what are the key areas need to be coverd in this project. After that do a Stakeholder Analysis covering technical team, users, system owner, Investors.
- Then conduct a Economical feasiability, take a budget plan and consider about salary, operation cost, training cost, outsource cost, eqaipment cost and infrasture cost, Equipment cost etc...
- After that I consider about the technical feasiability whether we have skillfull developers, UI/ux desiguers, backend developers, QA engineers, cloud engineers with suitable knowledge. And did we have the technical equipments and do we have hardware, software and network facilities.
- finally study about schedule fiesiability and make time plan and gantt chart ~~after~~. And make a deadline for the project. After that discuss wether we can finish the project ontime with team members and if yes Allocate the developers for each work and start development

Question 04.

3) How we working on this project using Agile (Scrum) methodology ?

- So we are using the most common approach for develop this project. It is suitable because we have limited time period to end this project completly. main features of Agile development are,
  1) good teamwork with better communication
  2) working software with comprehensive documentation
  3) Coustomer collaberation in project
  4) respond to change over the following plan.
- So our main partres are development team, Scrum master, and product owner. first of all we gather clients requirment, product owners ideas. and in sprint planing stage we plan the scope of the project and identify the users of this system. and create user stories. then create product backlog including the list of components / functions that shoud be in the system. for sprints priortizing the client requirments. And the backlog (product) should be editable an upgradable when requirment changes.
- our system will be develop within 4 weeks. So we divided the project scope and tasks in to 2 sprits / cycles. each sprint allocate 2-weeks of time to completion.
- In 1st sprint we design the sketch of UI and wireframe it and start to design the final UI design. In the other end front end developer start the development. In each day we did a daily standup / daily scrum meeting discuss about the completed tasks. and discuss the issues. (before this we created the 1st sprint backlog.) At the end of 1st sprint we conduct a sprint review and update the product owner (client) And conduct sprint retrospective.

> ~~Feasibility Study~~

- ~~There are 4 main factors to analyze,~~
  1) ~~Technical~~
  2) ~~operational~~
  3) ~~Economic~~
  4) ~~Schedule.~~

Question 04.

03) Then we start the 2nd sprint which has 2 weeks of time. and create the 2nd sprint backlog. The final tasks need to perform are develop the backend and connect it with front end, QA testing, ux (user experience). evaluating and debugging the errors / bugs. Backend developers start the development and dailly scrum meeting continoues every day for 15 minutes of time. At the end we conduct sprint review and sprint retrospective which reflect the collaboration of our team members. Finally we hand over the completed project to the product owner (client) after a better evaluation.