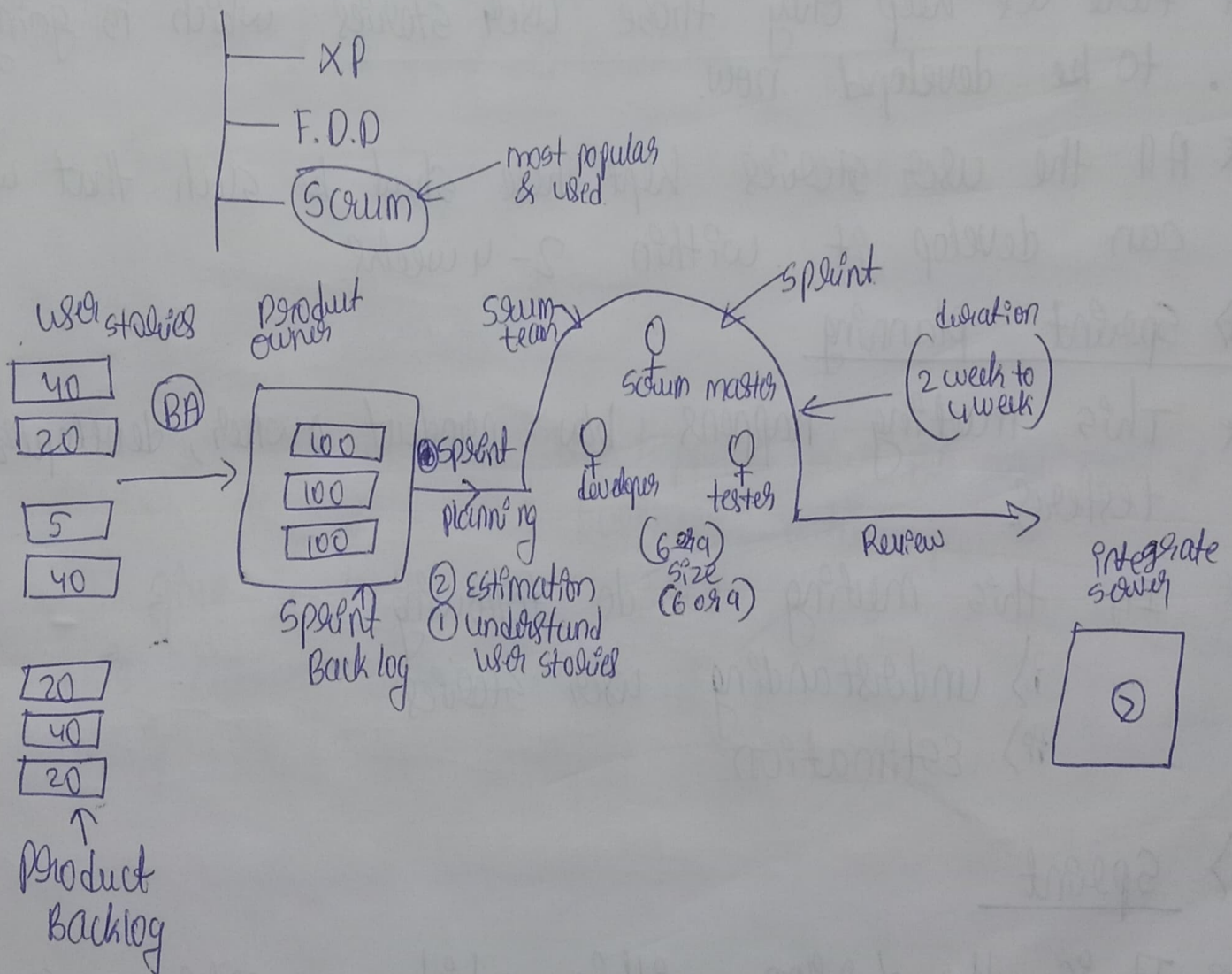# Agile

It is a methodology that helps us to build the software quickly in least possible time without compromising with the quality of work.

Agile methodology

- XP
- F.D.D
- (Scrum) ← most popular & used

user stories

| 40 |
| 20 |

(BA)

| 5 |
| 40 |

Product owner

Sprint Back log

| 100 |
| 100 |
| 100 |

| 20 |
| 40 |
| 20 |

↑
Product
Backlog

② Estimation
① understand user stories

Scrum team

Scrum master

developer (6 or 9)
size

tester (6 or 9)

● Sprint planning

Sprint

duration
(2 week to 4 week)

Review →

Integrate server

Ⓢ

> **Product Backlog** :- It consists of all the user stories which needs to be developed.

* Every user stories consist of Business value points. to classify importance of user stories.

2) Product owner

* He is a domain expert.
* He maintains product backlog.
* He also ideally conducts sprint planning.

3) Sprint Backlog

* Here we keep only those user stories which. is going to be developed now.

* All the user stories kept here shud be such that we can develop it within 2-4 weeks.

4) Sprint planning

* This meeting happens b/w product owner, developers & testeres.

* In this meeting we do following
  i) understanding user stories
  ii) Estimation.

5) Sprint

* It is the duration within which a working software is developed.

* sprint duration shud always be b/w 2-4 week.

6) Scrum team

* Scrum team consists of scrum master, developers, testers.
* Scrum team size shud always be b/w 6-9.

* There will be several scrum teams in the project. work done by the individual scrum team after the review will be integrated with features developed by other teams in integration sower and then we once again test how well they are integrated.

If the work is not completed within the sprint duration then we blow up the sprint and again start with a new sprint & new estimation.
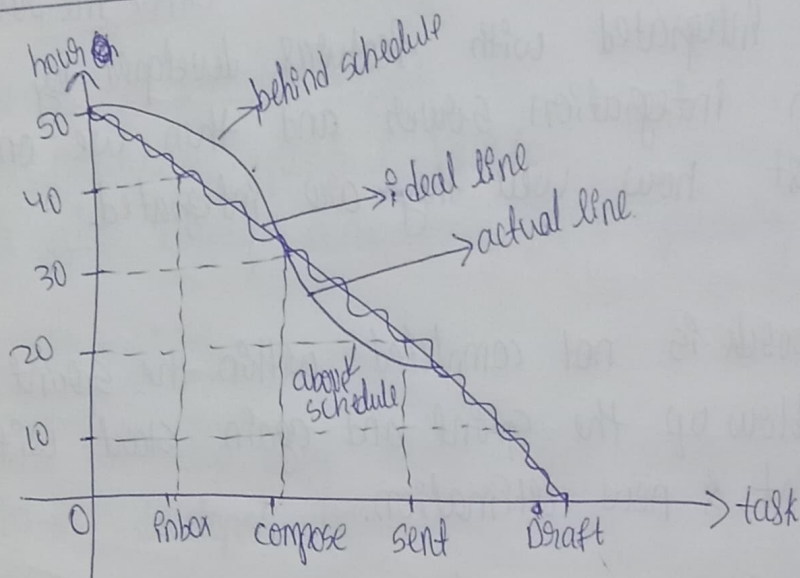
note: A project will have several scrum teams.

Planning Poker Activity

* It is the meeting that happens b/w BA and product owner. to give the business value points.
* To give business value points we we poker cards.
* This classification helps us to decide which user story shud be developed first.

Scrum-master

* Scrum master shud generate burn down chart to analyze progress of work. we can also make use of Burn-up chart but it is not that popular in industry.

Burn Down chart

* He shud conduct daily stand-up meeting.
* Stand-up meetings goes upto 15 minute.
* He shud remove the obstacles encountered by the team.
* He shud promote scrum values.

Note: People committed in the projects are called as pigs.
     eg: Developers, testers, scrum master, product owner etc.

     the one who is not committed in project in agile are called as hen.
     eg: managers, vp etc.

In stand-up meeting only pigs are supposed to talk while hen can only attend the meeting but shud not talk during the meeting.

To maintain transparency in agile among the team members we prepare KANBAN chart.

eg:

User Stories	Developer	Tester	Integration environment
		5	
	6	1	
9			

Advantages of Agile

* Helps us to build the software quickly.
* Transparency among team members.
* Better communication among team members.
* Gives assurance of quality softwares.

Disadvantages of agile

* Manager looses his authority.
* We require little bit of experience to work in this process.