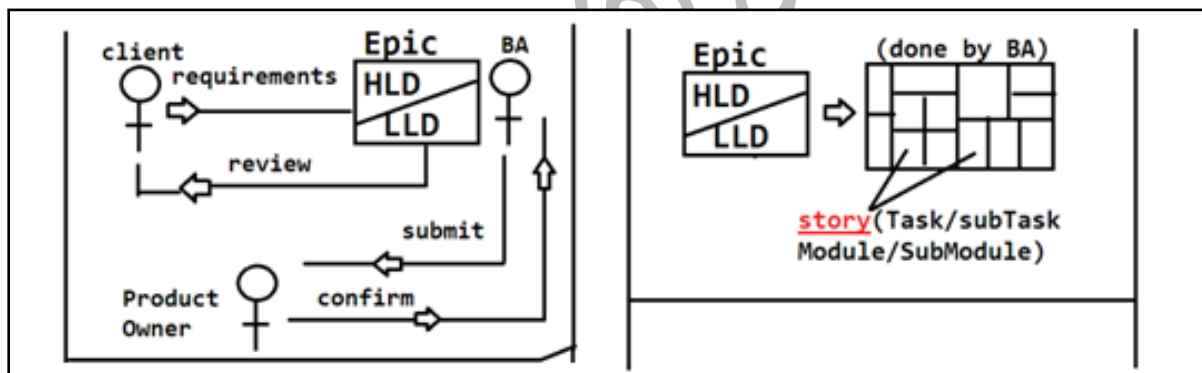


AGILE

It is a SDLC methodology to develop a product in company. It uses Spiral + RAD methods in development, divide and develop parallel. It this process has below Roles :

- A. Business Analyst.(BA)
- B. Developer (DEV)
- C. Quality Analyst.(QA)
- D. Architecture (Arch.)

1) Epic: End client/customer provides all his requirements to BA. BA prepares the document (known as EPIC). Which contains functional and technical requirements. It is like a reference book to product/project. We need to develop only points provided in document(not more or less) This document needs a final review by End Client and approval by Product Owner.



2)Epic Conversion: Epic will be divided into 2 parts initially. Those are

- High level Design/Document
- Low level Design/Document

HLDs are constructed for End User(for product understand and usage) and LLDs are done for Programmer View.

3)Scrum Team: To develop the product Owner creates a Team with DEV,BA,QA & Arch with MASTER and Leads.

4)Story creations: A story is a part of project, It can be a module/sub module/task/sub task. A story can be combination of modules/tasks also.

- Size and limits of Stories are defined by BAs.
- Each story Contains "Acceptance Criteria" ie what to implement for given story in point by point to Dev/QA/Arch given by BA.

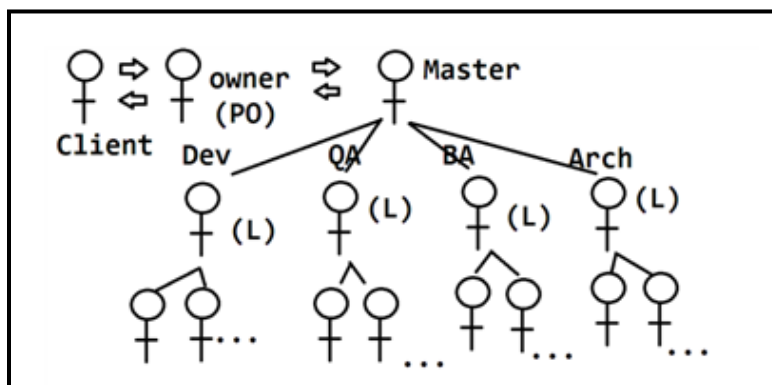
5)Story points Calculations: Time taken to develop a story is known as "Efforts Estimations". These are guess values(Not exact) given by team members.

1 Story point = 8 Hours , 0.5 Story point = 4 Hours

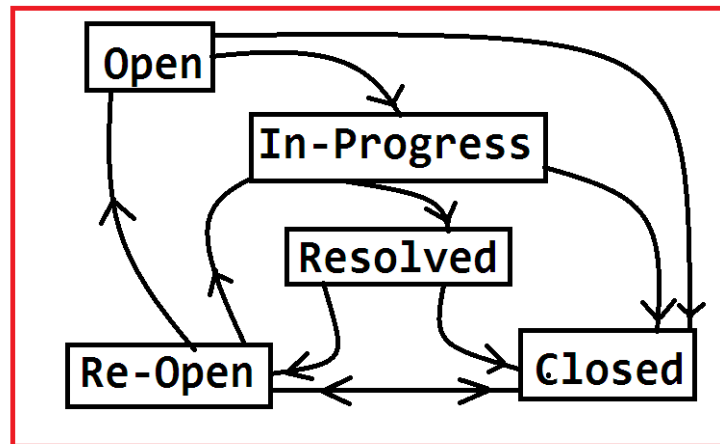
ex: Story-8560 needs 4.5 story points total time (hours)is:36

6) Sprint Planning: "For a period of time what stories we need to implement" is decided in a meeting. Also known as Spring Planning. A sprint is known as milestone/small release/targets. In this meeting BA explains about story to all others. They should understand and provide efforts for those.

- A sprint can be planned for 10 days,15 days, 1 month... (based on company & project)
- At a time we cannot plan for all stories. for example, in our project we have 100 stories and we planned as below:
- Sprint-1 (Story 1 to 12) for 15 days.
- Sprint-2 (Story 13 to 32) for 25 days.
- Unplanned stories comes under product backlogs (Story 33 to 100).
- In Sprint-1 we planned for 12 Stories, but only 10 are finished after 15 days then, 2 will be moved to Product backlogs.



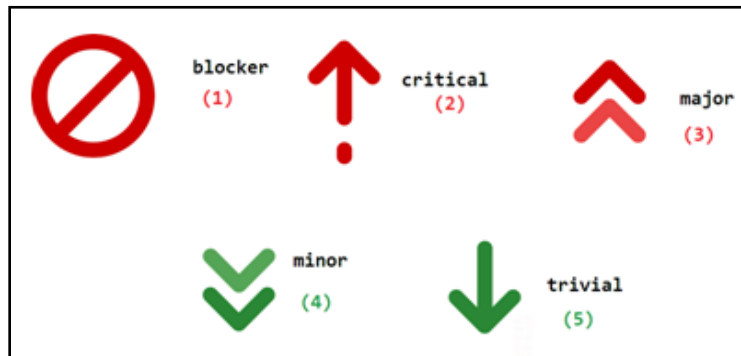
7)Sprint Evaluation: From Day-1 coding/implementation is started by developer. To implement any story dev has to code and Test from his side. To represent work status of a story, we follow Story life cycle. Shown as below, (possible values are: Open->In Progress->Resolved ->Closed or Re-Open)



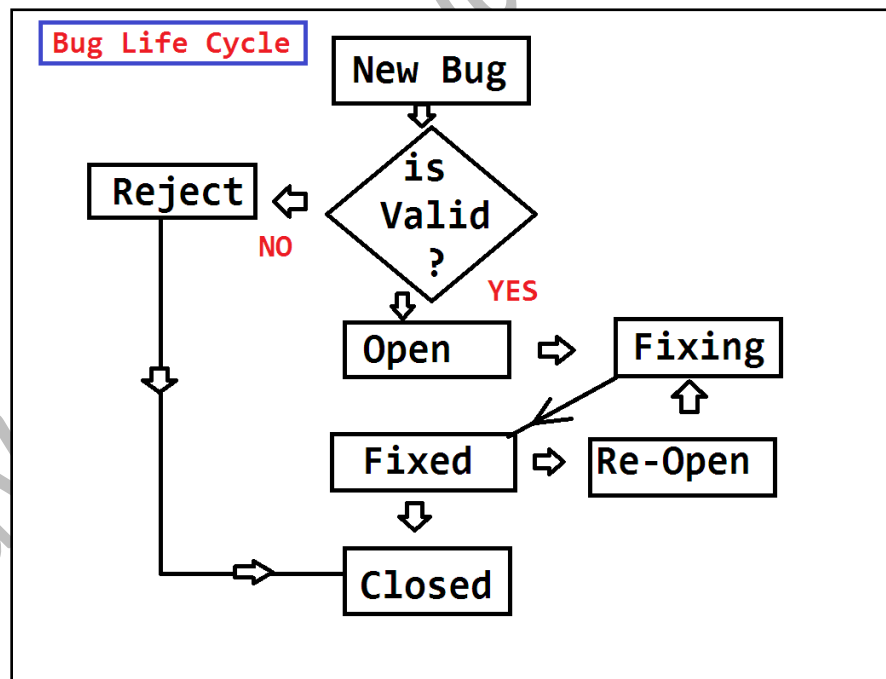
- **Open:** Every developer gets story in Open Status, which indicates ready to start (ready for coding)
- **In-Progress:** Which indicates story is under implementation (coding is started)
- **Resolved:** Indicates Coding and Unit Testing is done. Code is available in Repository (ex: GIT).
- **Closed:** Once Testing done by QA and working fine, then story status will be Closed.
- **Re-Open:** If code contains Bugs, then story is not complete which will be converted to Re-Open and QA creates a BUG with below priority levels.

BUG : It indicates problem in application. Every bug has a level in AGILE process, those are given below with meaning and symbols.

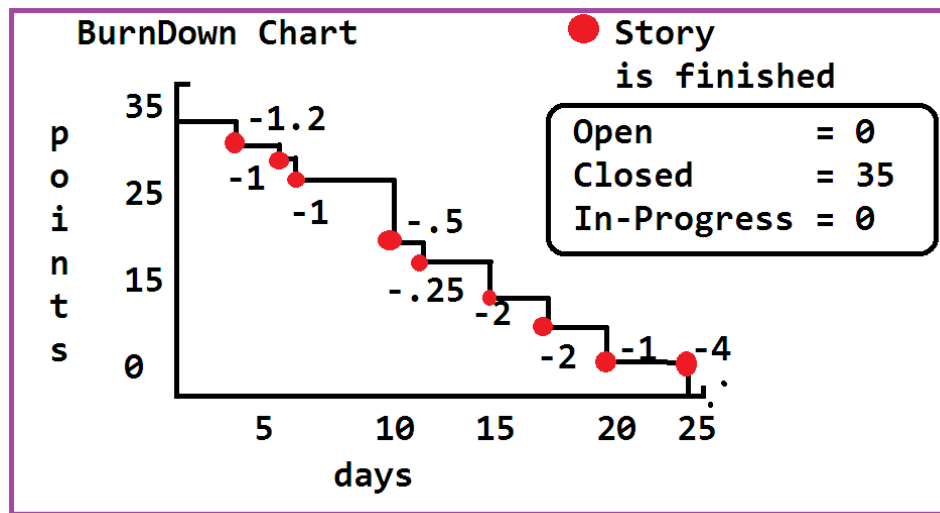
- I. **Blocker:** Unable to do any process.
- II. **Critical:** High level problem (But not stopping complete process)
- III. **Major:** Normal/Medium problem (Stopping in one way/ other possible processing ways are available)
- IV. **Minor:** Small problem or occurs very rare.
- V. **Trivial:** Ignorable problem. not makes any problem in process.



8)Bug/Defect Life cycle: While developing a story, it may contain problems (bug) or it is incomplete then QA identifies the bug and reports to Developer. ex: Bug-32(Critical): Email is not sending while vendor registration. Attached to Story-54(Vendor Registration). Developer checks bug and validates , if valid starts fixing else reject the bug.



9)Burn Down Chart: This is a global chart, constructed to represent status of the sprint/Sprints. Up-to-date what % of work done is shown by this chart. If one story is finished, then it shows -value ex: -3.25 points. At end all stories should be finished. +ve value indicates Work is re-opened.



10)Scrum Meetings: On Starting Sprint, every day we need to provide status updates to Scrum Master. For this every day meeting is taken by master mostly 15-20 minutes. ex: 10:45 to 11:00 AM. sometimes 3:00 to 3:25 PM. In this meeting we need to tell "what we did yesterday, what we will do today and tomorrow".



FB Group: <https://www.facebook.com/groups/thejavatemple>