

## Scrum interview questions and answers

### State some major principles of Agile testing.

- Customer satisfaction
- Face to face communication
- Sustainable development
- Quick respond to changes
- Continuous feedback
- Successive improvement
- Self-organized
- Focus on essence
- Error-free clean code
- Collective work

### Name some methodologies and development where you have used the Agile model.

Answer: While answering this type of agile scrum interview questions, keep in mind to mention those methodologies that are familiar with. Some of the methodologies and development where the Agile model can be used are –

- **Crystal methodologies** - **Crystal** method is an agile software development approach that focuses primarily on people and their interactions when working on a project rather than on processes and tools. Alistair believed that the people's skills and talents as well as the way they communicate has the biggest impact on the outcome of the project.
- **Lean software development**- The Seven **Lean** principles (in this order) are: eliminate waste, amplify learning, decide as late possible, deliver as fast as possible, empower the team, build integrity in, and see the whole. The **Lean** process is about working only on what must be worked on at the time, so there's no room for multitasking.
- **Dynamic development**
- **Feature-driven development** is an iterative and incremental software development process. It is a lightweight or Agile method for developing software. FDD blends a number of industry-recognized best practices into a cohesive whole. These practices are driven from a client-valued functionality (feature) perspective.

### User Story Status

- **New** — It's in the initial state and nobody has started working on it yet.
- **In Progress** — Assignee of user story has started working on it
- **Completed** — Implementation of user story is completed.
- **Accepted** — User story has been formally accepted by product owner.
- **Pending** — For some reason, user story can't progress further. It's best practice to add comment with reason when status is marked as pending.

- **In Evaluation** — Product owner or development team is evaluating the user story. It may be due to technical or business reasons. Marking of this status means that, this user story for time being can't be implemented.
- **Rejected** — For some reason this user story can't be implemented, or not relevant any more or could be any reason.
- **Blocked** — User story is blocked by some other task or reason. It indicates that, development team can't progress further until the blocking reason is resolved.
- **In Verification** — User story is implemented and going through QA verification cycles.

**Burn down impact**— If user story is in "Completed or Accepted" status the burn down will show the points as burned.

#### Issue Status

- **New** — The issue is reported and no one has started working on it. At this stage, issue could be assigned to any team member
- **In Progress** — Assignee of the issue (responsible of issue) has started working on it.
- **Resolved** — The issue is resolved and issue responsible person (assignee) may put the "Resolved reason" in comments.
- **Closed** — Issue is verified and closed
- **Ignored** — Issue is not relevant and is ignored, assignee of issue may comment the ignored reason.
- **Duplicate** — Issue is marked as duplicate of another issue. When marking as duplicate, you can set the other issue ID as duplicate issue ID.
- **Reopened** — Issue might have been resolved earlier, but if it appears again, or QA couldn't verify it, then it can be set to "Re-opened" state
- **Blocked** — Issue is blocked for some reason or there is dependency on other item.
- **In Evaluation** — Issue requires further evaluation before it can be resolved.
- **No Reproducible** — Issue is not reproducible, developer or QA is unable to produce the issue again based on defined steps in issue description.
- **Enhancement** — It is not an issue but a change in implementation or design.
- **Rejected** — Not an issue or not relevant.

#### Task Status

- **New** — No one has started working on it.
- **In Progress** — Task responsible person (assignee) has started working on it
- **Done** — Task is implemented (completed).

#### Epic

- **New** — No one has started working on it.
- **In Development** — Being implemented by team, it may mean that, user stories associated to Epic have been planned and team is working on them.
- **Implemented** — Epic is completed and status can be marked as Implemented.

## Sprint

- **Planning** — Sprint contents are being defined and sprint is planned for future date.
- **Active** — Sprint is active and team is working on it.
- **Accepted** — Sprint date has ended, review is done and user stories has been updated.
- **Closed** — If some user stories and issues were left open, decision has been taken whether to move them to backlog, new sprint or left it in current sprint and no further action is needed on the sprint, thus it can be marked as Closed

## Release

- **Planning** — Contents are being defined for release and it will start in some future date.
- **Active** — Release is being worked by team and start date of release has passed
- **Accepted** — Release work is completed and end date has passed

### Q #1. How is scrum different from waterfall?

The major differences are:

- The feedback from customer is received at an early stage in Scrum than waterfall, where the feedback from customer is received towards the end of development cycle.
- To accommodate the new or changed requirement in scrum is easier than waterfall.
- Scrum focuses on collaborative development than waterfall where the entire development cycle is divided into phases.
- At any point of time we can roll back the changes in scrum than in waterfall.
- Test is considered as phase in waterfall unlike scrum.

### Q #2. How is scrum different from Iterative model?

Scrum is a type of iterative model only but it is iterative + incremental.

### Q #3. Do you know any other agile methodology apart from Scrum?

Other Agile methodology include – KanBan, XP, Lean

### Q #4. What are the ceremonies you perform in scrum

There are 3 major ceremonies performed in Scrum:-

1. Planning Meeting – Where the entire scrum teams along with the scrum master and product owner meets and discuss each item from the product backlog that they can work on the sprint. When the story is estimated and is well understood by the team, the story then moves into the Sprint Backlog.
2. Review Meeting – Where the scrum team demonstrates their work done to the stake holders

3. Retrospective meeting – Where the scrum teams along with the scrum master and product owner meets and retrospect the last sprint they worked on. They majorly discuss about 3 things:
  - What went well?
  - What could be done better?
  - Action Items

Apart from these three ceremonies, we have one more called “Backlog grooming” meeting. In this meeting, the scrum team along with the scrum master and product owner. The product owner put forward the business requirements as per the priority and the team discussed over it, identifies the complexity, dependencies and efforts. The team may also do the story pointing at this stage.

#### **Q #5. Do you know the Three Amigos in Scrum?**

The three Amigos are – The product Owner, The Scrum Master and the Scrum Team.

#### **Q #6. What do you think should be the ideal size of a Scrum team?**

The ideal size is 7 to 9 with +/- 2

#### **Q #7. What do you discuss in Daily stand up meeting?**

We discuss three things:-

- What did I do today?
- What I plan to do tomorrow?
- Any impediments / roadblock

#### **Q #8. What is the “time Boxing” of a scrum process called?**

It's called “Sprint”

#### **Q #9. What should be an ideal duration of a sprint?**

It is recommended to have 2 – 4 weeks of sprint cycle.

#### **Q #10. How requirements are defined in a scrum?**

Requirements are termed as “User Stories” in Scrum.

#### **Q #11. What are the different artifacts in scrum?**

There are two artifacts maintained in Scrum:

- Product Backlog – Containing the prioritized list of business requirements
- Sprint Backlog – Contains the user stories to be done by the scrum team for a sprint.

#### **Q #12. How do you define a user story?**

The user stories are defined in the format of

As a <User / type of user>

I want to <action / feature to implement>

So that < objective>

**Q #13. What are the roles of a Scrum Master and Product owner?**

Scrum Master – Acts as a servant Leader for the scrum team. He presides over all the scrum ceremonies and coaches the team to understand and implement scrum values and principals.

Product Owner – Is the Point of contact for a scrum team. He/she is the one who work closest to the business. The main responsibility of a product owner is to identify and refine the product backlog items.

**Q #14. How do you measure the work done in a sprint?**

It's measured by Velocity.

**Q #15. What is Velocity?**

Velocity is the sum of story points that a scrum team completes (meets the definition of done) over a sprint.

**Q #16. So in scrum which entity is responsible for deliverable? Scrum master or Product owner?**

Neither the scrum master, not the product owner. It's the responsibility of the team who owns the deliverable.

**Q #17. How do you measure the complexity or effort in a sprint? Is there a way to determine and represent it?**

Complexity and effort is measured through "Story Points". In scrum it's recommended to use Fibonacci series to represent it.

**Q #18. How do you track your progress in a sprint?**

The progress is tracked by a "Burn-Down chart".

**Q #19. How do you create the burn down chart?**

Burn down chart is a graph which shows the estimated v/s actual effort of the scrum tasks.

It is a tracking mechanism by which for a particular sprint; day to day tasks are tracked to check whether the stories are progressing towards the completion of the committed story points or not. Here we should remember that the efforts are measured in terms of user stories and not hours.

**Q #20. What do you do in a sprint review and retrospective?**

During Sprint review we walkthrough and demonstrate the feature or story implemented by the scrum team to the stake holders.

During retrospective, we try to identify in a collaborative way what went well, what could be done better and action items to have continuous improvement.

**Q #21. Do you see any disadvantage of using scrum?**

I don't see any disadvantage of using scrum. The problems mainly arises when the scrum team do not either understand the values and principles of scrum or are not flexible enough to change. Before we deciding on scrum, we must first try to answer the

**Q #22. Do you think scrum can be implemented in all the software development process?**

Scrum is used mainly for

- complex kind of project
- Projects which have early and strict deadlines.
- When we are developing any software from scratch.

**Q #23. During review, suppose the product owner or stakeholder does not agree to the feature you implemented what would you do?**

First thing we will not mark the story as done.

We will first confirm the actual requirement from the stakeholder and update the user story and put it into backlog. Based on the priority, we would be pulling the story in next sprint.

**Q #24. In case, the scrum master is not available, would you still conduct the daily stand up meeting?**

Yes, we can very well go ahead and do our daily stand up meeting.

**Q #25. Where does automation fit into scrum?**

Automation plays a vital role in Scrum. In order to have continuous feedback and ensure a quality deliverable we should try to implement TDD, BDD and ATDD approach during our development. Automation in scrum is not only related to testing but it is for all aspect of software development. As I said before introducing TDD, BDD and ATDD will speed up our development process along with maintaining the quality standards; automating the build and deployment process will also speed up the feature availability in different environment – QA to production. As far as testing is concerned, regression testing should be the one that will have most attention. With progress of every sprint, the regression suit keeps on increasing and it becomes practically very challenging to execute the regression suit manually for every sprint. Because we have the sprint duration of 2 – 4 weeks, automating it would be imperial.

**Q #26. Apart from planning, review and retrospective, do you know any other ceremony in scrum?**

We have the Product backlog refinement meeting (backlog grooming meeting) where the team, scrum master and product owner meets to understand the business requirements, splits it into user stories, and estimating it.

**Q #27. Can you give an example of where scrum cannot be implemented? In that case what do you suggest?**

Scrum can be implemented in all kinds of projects. It is not only applicable to software but is also implemented successfully in mechanical and engineering projects.

**Q #28. Tell me one big advantage of using scrum?**

The major advantage which I feel is – Early feedback and producing the Minimal Viable Product to the stakeholders.

**Q #29. What is DoD? How is this achieved?**

DoD stands for Definition of done. It is achieved when

- the story is development complete,
- QA complete,
- The story meets and satisfy the acceptance criteria
- regression around the story is complete
- The feature is eligible to be shipped / deployed in production.

**Q #30. What is MVP in scrum?**

A Minimum Viable Product is a product which has just the bare minimum required feature which can be demonstrated to the stakeholders and is eligible to be shipped to production.

**Q #31. What are Epics?**

Epics are equivocal user stories or we can say these are the user stories which are not defined and are kept for future sprints.

**Q #32. How do you calculate a story point?**

A Story point is calculated by taking into the consideration the development effort+ testing effort + resolving dependencies and other factors that would require to complete a story.

**Q #33. Is it possible that you come across different story point for development and testing efforts? In that case how do you resolve this conflict?**

Yes, this is a very common scenario. There may be a chance that the story point given by the development team is, say 3 but the tester gives it 5. In that case both the developer and tester have to justify their story point, have discussion in the meeting and collaborate to conclude a common story point.

**Q #34. You are in the middle of a sprint and suddenly the product owner comes with a new requirement, what will you do?**

In ideal case, the requirement becomes a story and moves to the backlog. Then based on the priority, team can take it up in the next sprint. But if the priority of the requirement is really high, then the team will have to accommodate it in the sprint but it has to very well communicated to the stakeholder that incorporating a story in the middle of the sprint may result in spilling over few stories to the next sprint.

**Q #35. In case you receive a story at the last day of the sprint to test and you find there are defects, what will you do? Will you mark the story to done?**

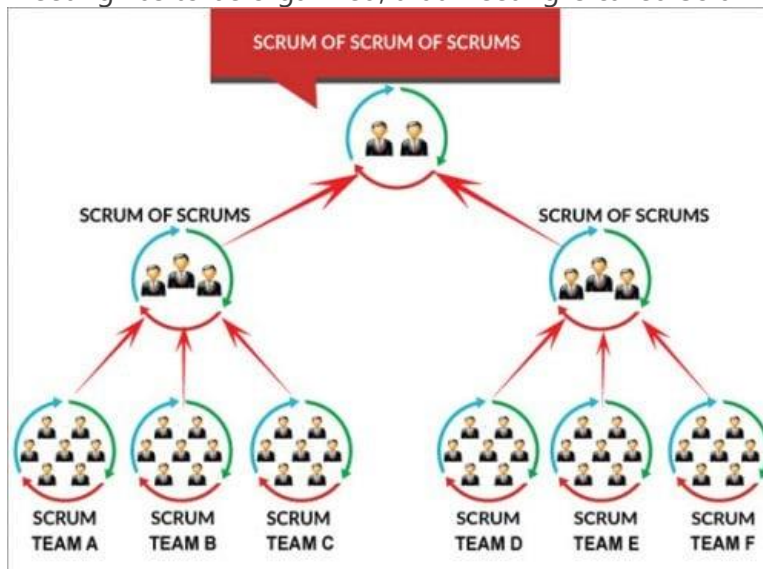
A story is done only when it is development complete + QA complete + acceptance criteria is met + it is eligible to be shipped into production. In this case if there are defects, the story is partially done and not completely done, so I will spill it over to next sprint.

**Q #1) How long the scrum cycle last?**

**Answer:** Basically, the Scrum cycle depends on the project size and team size. Team size may vary from 3 members to 9 members. Normally it takes 3 to 4 weeks to complete a Scrum sprint. On an average, a scrum sprint ends in 4 weeks.

**Q #2) What is the scrum of scrums?**

**Answer:** Suppose there are 7 teams working on a project and each team has 7 members. Each team leads its own particular scrum meeting. Now to coordinate among the teams a separate meeting has to be organized, that meeting is called Scrum of Scrums.



An ambassador ( a designated person who represents team) represents its team in the scrum of scrums.

**Few points discussed in the meeting are:**

- (a) The progress of the team, after the last meeting.
- (b) The task to be done before the next meeting.



(c) Hindrance which the team had faced while completing the last task.

**Q #3) Explain the term 'increment'?**

**Answer:** When the team finishes the sprint, hopefully, they have completed everything they forecasted. Sum of all the product backlog items which were completed in a sprint is called increments. This new increment also has the value of increment of the previous sprints.

**Q #4) What is Sashimi?**

**Answer:** *Sashimi* is a Japanese word that means a pierced body. Basically, it is a Japanese dish that consists of fresh meat or fish, sliced into thin pieces. Each piece is similar in taste when compared with the other pieces.

Sashimi in scrum methodology means every phase of the software development cycle in a sprint which includes requirement analysis, planning & design, development, testing, documentation is complete or not and the product is ready to be displayed etc.

**Q #5) What are impediments?**

**Answer:** Any hindrance which prevents the smooth flow of work or due to which the team is not able to perform its task in a better way is what we call 'impediments'

**Q #6) Explain 'scrum poker' or 'planning poker' technique?**

**Answer:** Scrum poker also called as planning poker, is a card-based estimation technique which is based on a general agreement.

1) To start it, the agile user story is read either by the customer or the owner and the estimator understand its features.

2) Each estimator has planning cards with different no. on it like 0,1,2,3,5,8 and so on. These values on the card are ideal days or story points.

3) Estimator select cards based on their estimation by discussing features set by the product owner.

4) If a common value is selected, it is an estimate, if not they discuss their max. and min. estimation.

5) This process is repeated till a general agreement is reached.

**Q #7) What are the principles of agile testing?**

**Answer: Some major principles of agile testing are:**

- Customer satisfaction
- Bug-free clean code
- Changes are welcome by customer
- Whole team business people and developers work collectively
- Instead of lengthy documentation, focus on essence

- It focuses on face to face conversation
- It promotes sustainable development

**Q #8) What are the disadvantages of the agile model?**

**Answer:** Some of the disadvantages of using agile model are as follows:

- a) Not easy to predict: When you encounter a large project, it is not easy to get an idea how much effort will it need
- b) If the guidelines given by the customers is not properly grasped, then final outcome of the project is not customer satisfying
- c) Sometimes focusing on design and documentation is not proper
- d) High-level decisions are under the hand of Veterans, if not combined with non-experienced one, freshers have little scope to grasp proper knowledge.

**Q #9) When to use the agile model?**

**Answer:** There are some development and methodologies where you can use agile like feature-driven development, lean software development, crystal methodologies, dynamic development.

**Q #10) What is the Release candidate?**

**Answer:** The release candidate is a code /version /build released to make sure that during the last development period, no critical problem is left behind. It is used for testing and is equivalent to the final build.

**Q #11) In what way does agile testing(development) methodology differ from the other testing(development) methodologies?**

**Answer:** In Agile methodology, the code is broken into small parts and at a time, only that particular code is worked or tested. Continuous communication on the particular code part is done by a team so that the focus is only on that particular code. This makes the agile process more flexible and focused.

**Q #12) Can agile methodology also be applied in other than software testing and development projects?**

**Answer:** There are several places where agile methodology can be applied in the field of biochemistry, biophysics, bio-medical or at the place where there is insufficient data, where the project needs to be completed in a small team, where to work in unknown and there are several areas.

**Q #13) How do you know if you are using agile development?**

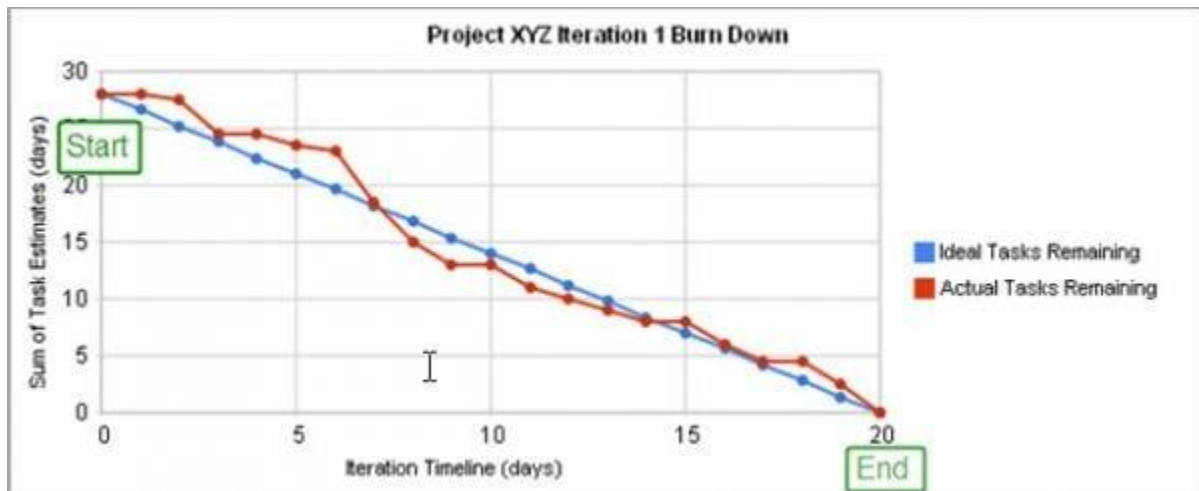
**Answer:** Whenever you are using certain things like Test-driven development, time-boxed task board, class responsibilities collaborators, daily stand up meeting, pair programming, continuous integration, reviews and much more... you will get to know that you are using agile development

**Q #14) Explain what is a story point in the scrum?**

**Answer:** It can be considered as a unit to estimate the total efforts required to complete or to do the particular task or implementing a backlog.

**Q #15) What does the X and Y axis of burndown chart?**

**Answer:** In burn down, chart X-axis shows working days and Y-axis shows remaining efforts.



Here, in the image blue line depicts the ideal time suggested for completing the project. For example in a project ideally, 28 tasks (efforts) are pending on the starting day of the project. And the project is scheduled to be completed in 20 days. So on the 20<sup>th</sup> day, zero task (efforts) should remain, which means the project should get completed.

On the other hand, the red line depicts the actual task (efforts) given with respect to the days. Here on day 5, 7 tasks need to be completed as per planning, however, in actual only 4 tasks were completed.

Thus, it provides proper tracking down of the progress of the project and thereby helps in improving the efficiency and on-time taken to deliver the project.

#### Q #16) What are the main roles in the scrum?

**Answer:**

- 1) **Scrum team:** – Scrum team is made by an individual person who works collectively to achieve a particular task. The team works in a bond to deliver committed and requested product
- 2) **Scrum master:** – scrum master is responsible for the proper execution or working of the scrum team. Being a servant – leader and a coach, he ensures the proper productivity of a team towards scrum a sprint goal.
- 3) **Product owner:** – product owner has the responsibility to deliver a complete picture of what to build and to convey that idea to the team

#### Q #17) What is a product burndown chart?

**Answer:** A description in the form of the graph which shows implemented and not – implemented product backlog is called the burndown chart.

#### Q #18) What is the sprint burndown chart?

**Answer:** A graph used to describe no. of implemented / non-implemented sprint in the Scrum cycle.

#### Q #19) What is the Release burndown chart?

**Answer:** The graph used to depict the pending release which was earlier planned is called **Release burn down the chart**.

#### Q #20) What is defect burn down chart?

Ans.20) No. of defect identified and removed is represented by the **defect burn down chart**

**Q #21) What is the sprint planning meeting?**

**Answer:** A sprint *planning meeting* is joined by all entities like scrum master, product owner and whole scrum team where they discuss the priority features of the team and product backlog items.

**Q #22) What is a Sprint Retrospective meeting?**

**Answer:** This is mostly the last part of the sprint or may be done after the sprint review meeting. Scrum master and the whole team participate in it, they discuss ' what was good during the sprint', ' what was bad', ' what needs to be improved'. It generally lasts for 2-3 hrs.

**Q #23) What do you know about 'build-breaker'?**

**Answer:** When sometimes developers accidentally commit bug in the software and when such bug stops the compilation process or generates the warning or failure in the normal execution of testing, we say that the build is broken and the major priority of the tester is to get back again to the normal stage by resolving the bug issue.

**Q #24) Tell me something about Kanban?**

**Answer:** *Kanban* is a tool that helps the team to overlook the work i.e., its progress. Progress, as well as the status of your current development story, is perfectly described using kanban and more accurately it is done by the 'Kanban board'.

Kanban board allows you to write the whole scenario of your project at a single place so that you can get a perfect picture of the bottleneck, a task done, workflow progress or basically the complete status of your project.

**Q #25) Describe the places where 'Scrum' and 'Kanban' are used?**

**Answer:** 'Scrum' is used when you need to shift towards more appropriate or more prominent process while if you want improvement in running the process without much changes in the whole scenario, you should use 'Kanban'

**Q #26) Why aren't user stories simply estimated in man-hours?**

**Answer:** Estimation of user stories on the basis of man-hours can be done but preferably not. You won't be able to concentrate on the quality product to be delivered to the customer. Moreover, you will concentrate on the cost and budget of the management while using man-hours.

Instead of that, one can use story points, as it provides the complete idea about both the complexity of work and required efforts

**Q #27) Name three other Agile frameworks?**

**Answer:** Test Driven Development, Feature Driven Development, and Kanban.

**Q #28) Should scrum master remove impediments on behalf of the scrum team?**

**Answer:** Scrum master can do that, but he should not. The scrum master should neither over-rule nor pamper his/her team. Initially, there may be chances of failure, unplanned excursions or dead-end where the team can trap, here scrum master should support them and show the proper way of getting out of it. A scrum team should be independent to take its own decision.

**Q #29) How does agile testing (development) methodology differ from other testing (development) methodologies?**

**Answer:** In agile testing methodology, the entire testing process is broken into a small segment of codes and in each step, these codes are tested. There are several processes or plans involved in this methodology like communication with the team, short strategical changes to get the optimal result, etc.

**Q #30) How would master recommend following-up on action items?**

**Answer:** The best way of doing that is by setting a follow-up of the task/list to be done by the member pick at team retrospective. The scrum master should collect the information or status of the action items from the previous retrospective before moving further with the new one and if any of the action items remain uncovered or untreated, the cause or the reason should be known to avoid it's further happening.

**Q #31) Which are the top agile matrices?**

**Answer:**

- 1) **Velocity:** – Tracking your velocity gives you a clear idea about your progress, capacity, etc. Measurement can be done by the sum of all approved estimates of the stories.
- 2) **Work category allocation:** – This factor provides us a clear idea about where we are investing our time or where to set priority.
- 3) **Defect removal awareness:** – Quality product can be delivered by active members and their awareness
- 4) **Cumulative flow diagram:** – With the help of this flow diagram, the uniform workflow can be checked, where X-axis shows time and Y-axis shows no. of efforts.
- 5) **Sprint burndown matrix:** – Tracking on the completion of work along with the sprint is done.
- 6) **A business value delivered:** -Business value delivered is an entity that shows the team's working efficiency. This method is used to measure, in which around 100 points are associated with each project. Business objectives are given value from 1,2,3,5 and so on according to complexity, urgency, and ROI.
- 7) **Defect resolution time:** – It's a process where team member detects the bug and priority intention by the removal of the error.

**A series of process is involved in fixing bug:**

- Clearing the picture of a bug
- Schedule fix
- Fixation of Defect is done
- Report of resolution is handed

8) **Time coverage:-** Amount of time given to code in question in testing. It is measured by the ratio of no. of the line of code called by test suite by total no. of the relative lines of code (in percentage)