**Agile Model/Architect**

**\*\* What is Agile model?**

= 1. It is a module driven methodology. (It means here we do Module wise delivery of the product)

2. And also value driven methodology. (Customer is high priority in it. Here we do customer oriented things.)

3. In agile model customer can request for change at any stage of software development life cycle without paying extra amount.

4. Standard Sprint duration (time duration) for agile model is One Month.

5. Agile methodology used in serviced based companies.

**\*\* Agile Architecture –**

1. **Stake Holder**

--- It is a Customer/User.

--- It is the top most body of the company.

--- Customer can request for change at any stage of software development life cycle without paying extra amount.

--- They have bunch of requirements in terms of User Stories (Requirements are Nothing but User Stories).

1. **Project Owner/Product Owner** (सोप्या भाषेत He is a BA पण BA म्हणायचं नाही)

--- Project owner/Product owner gather all the requirement (User Stories) from the Stake Holder and create Product Backlog.

1. **Product Backlog**

--- Project/Product Backlogs are the total requirements for the whole project. Means it includes all the requirements of all module.

1. **Sprint Planning**

--- In agile we do module wise delivery of the product.

--- Sprint planning is the Process of Sorting User Stories To Development of the Module. Here we select those user stories which we will be developing in next sprint.

**Involvement In Sprint Planning Meeting-**

1. Scrum Master (Chair Person, In simple way he is a Leader of an agile team)
2. Project Owner/Product Owner
3. Development Team
4. Testing Team.

**Agenda Of Spring Planning Meeting :-** Selection of user stories for the next Sprint.

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* Factors for selection of user stories :-

1. Knowledge

– Team should have domain knowledge.

1. Effort

– How many Resources / People are involve in project.

1. Complexity

– Estimation of time, Cost, Resources. (yaat aapn Project la kiti kharch lagnar ahe he sangto)

1. **Sprint Backlog**

--- It is created by Project Owner / Product Owner.

--- It contains sorted user stories which we decided in sprint planning meeting. Having detailed information about particular User Story / Sprint.

* User Stories :-

--- It is Requirement of customer, which is sorted in sprint planning meeting.

* Description Criteria :-

--- Means as a customer what he/she want to do. (What user exactly want)

* Acceptance Criteria :- it is nothing but scenario

--- When the scenario is correct the system generate correct output, Otherwise it shows failure msg.

1. **Test Case Design (इथ आपन Testing सुरु कर्नार आहोत)**

1) Test Scenario = What to test?

2) Test Case = How to test?

\* Test Case depends upon Test Scenario.

Once Sprint backlog ready then Project owner sends it to Development Team and Testing Team.

-Then Developer starts their coding work and same time tester start test case design.

-Test cases means multiple steps involved while testing

-Test cases are mapped with sorted user stories.

And tester is responsible for test case design.

* **Advantages of Agile Methodology**

1. **Check Point**

(It is as an essential part of the testing process, Here we check whether the tested application functions work properly or not)

Sinup page 🡺 Login page 🡺 Main page 🡺 Logout page=====🡺 FB app.

-Example: Consider there are four module developed M1, M2, M3, and M4... -Then Check point will be added between the two module means Between M1 and M2, Between M2 and M3...same for M3 and M4 –

If at the time production or after production error occurred in application or Module then tester do not need to test all modules instead of that tester can first just test Check point provided between Module M1 and M2 if error not present then test other check point provided between M2 and M3.

-If tester found issue between M2 and M3 then tester will raise the same check point to Developer.

-Then developer just finds out root cause for Check point where issue occurred and fixed issue.

But in V-Model Developer need to check all modules codes that called Post Mortem Testing. It is very time consuming Process.

-For testing Check point Tester Used "AVAS" Tool.

-Check point save time of both Tester and Developer.

1. **Scrum Meeting**

* It is a daily standup meeting.
* Its duration is 15 to 20 minutes on daily basis.
* Involvement --- Scrum Master, Product / Project Owner, Development Team, Testing Team.
* Scrum master is chairperson for this meeting.

Scrum master asks 3 things in this meeting—

1. What we did yesterday?
2. What we are going to do today?
3. What are the road block or any issue while working on project.

1. **Implementation Of Automation**

* We can implement Automation in Agile Methodology.
* Automation is time saving technic.
* Advantages of Automation :-

1. Less resources required
2. Less resources means less cost
3. High accuracy
4. Less human errors
5. Time saving testing method
6. Sprint wise delivery

* **Scrum Framework:**

It is a framework used to implementation of the agile software development methodology.

Scum is used where project requirement continuously changing.

In scrum framework Project is divided into small no. of requirements means sprints, by using scrum framework sprint wise delivery possible.