**Effective communication in SDLC**

Daily standup Meeting **– Daily**

Sprint Planning Meeting **– Beginning of the Sprint**

Retrospective Meeting **- End to the sprint**

**A brief Summary of Any 5 Software Testing Styles**

**1. System Testing**

* **Definition**:  
  System testing is the process of testing the complete, integrated system to evaluate its compliance with the specified requirements.
* **Purpose**:  
  It ensures that the system works as a whole and behaves as expected in all scenarios.
* **Performed by**:  
  Dedicated testers (not developers).
* **Types included**:  
  Functional testing, usability testing, performance testing, security testing, etc.
* **Example**:  
  Testing an e-commerce website by going through the entire shopping flow — from selecting a product to payment and order confirmation.

**2. Acceptance Testing**

* **Definition**:  
  Acceptance testing is the final level of testing, where the system is tested for acceptability to confirm it meets business requirements.
* **Purpose**:  
  It validates whether the developed product is ready for delivery to the customer.
* **Types**:

**a.Alpha Testing**: Done by internal employees before release.

**b.Beta Testing**: Done by a limited number of external users to gather feedback before a wide release.

* **Performed by**:  
  End users, clients, or a dedicated UAT (User Acceptance Testing) team.
* **Example**:  
  A client tests a banking application to ensure that all banking services (fund transfer, balance check) work as expected before launch.

**3. Regression Testing**

* **Definition**:  
  Regression testing is the process of re-running functional and non-functional tests to ensure that previously developed and tested software still performs correctly after changes (like enhancements or bug fixes).
* **Purpose**:  
  To catch bugs that may have been introduced accidentally due to updates or modifications.
* **Performed by**:  
  Testers, often using automation tools.
* **Example**:  
  After fixing a login bug, testers recheck the login system and also ensure other functions like password reset and sign-up still work properly.

**4. Smoke Testing**

* **Definition**:  
  Smoke testing is a high-level type of testing conducted to check whether the critical functionalities of a software build are working properly.
* **Purpose**:  
  To verify that the major features are stable enough for further, more detailed testing.
* **Performed by**:  
  QA (Quality Assurance) teams, usually after receiving a new software build.
* **Example**:  
  After deploying a new build of a mobile app, testers verify that the app launches, users can log in, and basic navigation works.

**5. API Testing**

API Testing is a type of software testing that focuses on verifying whether Application Programming Interfaces (APIs) work correctly, reliably, and securely. Instead of testing the look and feel of the application (like UI testing), API testing checks the logic, performance, and security of the backend services directly.

**Focus:**Checks the response, functionality, reliability, performance, and security of the API.

**Performed by:**Developers, testers (QA engineers), or automation tools.

**What is Tested:**

Correctness of data returned (response data).

Status codes (like 200 OK, 404 Not Found).

Response time and performance.

API security and authentication (like API keys, OAuth).

Error handling (how the API behaves under invalid requests).

**Common Tools:**Postman, SoapUI, JMeter (for load testing APIs), REST Assured (for automation with Java), and Swagger.

**Example:**

**Imagine a weather application:**When you request today’s weather via an API (/getWeather?city=Hyderabad), API Testing will verify:

Is the response fast?

Is the temperature correctly returned?

Is the status code 200 (success)?

Does it give proper errors when the city name is wrong?