User stories are a fundamental tool in Agile software development for capturing the requirements or features from the perspective of an end user. They typically follow a specific template:

"As a [type of user], I want [some goal] so that [some reason]."

Here's a more detailed breakdown of each part:

As a [type of user]: This specifies who the user is. It could be a role within the system (e.g., "As a customer," "As an admin") or a broader category of users (e.g., "As a first-time visitor," "As a power user").

I want [some goal]: This describes the desired functionality or behavior. It should be specific and focused on what the user needs to accomplish.

So that [some reason]: This explains the purpose or benefit of the requested feature. It provides context for why the user wants to achieve the specified goal.

User stories are often written on index cards or digitally and are used as part of the Agile development process to guide discussions, prioritize work, and ensure that development efforts align with user needs. They are typically part of a backlog of work items that the development team works through during iterations or sprints

In Agile methodologies, an Epic is a large body of work that can be broken down into smaller tasks or stories. It is essentially a large user story that encapsulates a significant requirement or feature. Here's a breakdown of what an Epic is and how it fits into Agile stories:

Definition: An Epic is a placeholder for a large piece of work that cannot be completed within a single iteration or sprint. It represents a high-level requirement or feature that may span multiple sprints.

Size: Epics are typically too large to be completed in a single iteration and often require further decomposition into smaller, more manageable user stories.

Scope: Epics can encompass multiple related user stories, tasks, or features that together deliver significant business value. They are often used to capture overarching themes or initiatives within a project.

Prioritization: Epics are prioritized along with other backlog items, such as user stories and defects. They help stakeholders and teams understand the overall scope and priority of work within a project.

Breaking Down: Once an Epic is prioritized and selected for implementation, it is broken down into smaller, more manageable user stories during backlog refinement or sprint planning sessions. These user stories represent the specific tasks or features that need to be implemented to fulfill the Epic.

Iterations: User stories derived from an Epic are then scheduled for implementation across multiple iterations or sprints. The goal is to incrementally deliver value to the customer with each iteration while gradually completing the Epic over time.

Alignment: Epics help align the development team and stakeholders around common goals and objectives. They provide a shared understanding of the overall scope of work and allow for better

planning and coordination.

Adaptation: As work progresses and new information becomes available, Epics may be re-evaluated, reprioritized, or even split into smaller Epics or user stories. This flexibility allows Agile teams to adapt to changing requirements and priorities.

Overall, Epics serve as a useful tool for managing large-scale initiatives within Agile projects, providing a framework for breaking down complex requirements into manageable pieces and delivering value incrementally.

Acceptance criteria in user stories are the conditions that a software product must meet to be accepted by the stakeholders or customers. They define the boundaries of a user story and help ensure that the development team understands what needs to be done to satisfy the requirements. Acceptance criteria are usually written in collaboration with stakeholders during the early stages of development and are used as guidelines for testing and validation.

Acceptance criteria typically address the following aspects:

Functionality: Describes the specific actions or tasks that the software must be able to perform.

User Interface: Specifies how the user interface should look and behave.

Performance: Defines any performance requirements, such as response times or throughput.

Data: Specifies any requirements related to data handling, storage, or processing.

Integration: Describes how the software should interact with other systems or components.

Security: Specifies any security requirements or constraints.

Usability: Describes how user-friendly the software should be.

Scalability: Defines how the software should handle increasing loads or data volumes.

Regulatory Compliance: Specifies any legal or regulatory requirements that the software must meet.

Epic: User Registration and Authentication

As a <u>new user</u>, I want to be able to register for a Flipkart account so that I can access the platform.

User Story: As a new user, I should be able to sign up using my email address and create a password.

Acceptance Criteria:

User should receive a confirmation email upon successful registration.

Password should meet the minimum-security requirements.

User should be able to log in with the registered credentials.

Epic: Browsing and Searching Products

As a customer, I want to be able to easily find products on Flipkart so that I can make purchases efficiently.

User Story: As a user, I want to search for products by entering keywords in the search bar.

Acceptance Criteria:

Search results should be relevant to the entered keywords.

Users should be able to filter search results by various parameters such as price, brand, and ratings. Search should be fast and responsive, even during peak traffic times.

Epic: Adding Items to Cart and Checkout

As a shopper, I want to be able to add items to my cart and complete the purchase process seamlessly.

User Story: As a user, I want to add items to my cart with a single click.

Acceptance Criteria:

Users should be able to view their cart and update quantities or remove items easily.

Cart total should be updated dynamically as items are added or removed.

Checkout process should be intuitive and require minimal steps.

Epic: Order Tracking and Status Updates

As a customer, I want to be able to track the status of my orders and receive updates on their delivery. **User Story:** As a user, I want to receive notifications when my order is confirmed, shipped, and delivered.

Acceptance Criteria:

Users should receive email and/or SMS notifications at each stage of the order process.

Order status should be updated in real-time on the website and mobile app.

Users should be able to track their orders using a tracking number or order ID.

Epic: Customer Support and Feedback

As a user, I want to have access to customer support and provide feedback on my shopping experience.

User Story: As a user, I want to be able to contact customer support via live chat or phone for assistance.

Acceptance Criteria:

Customer support should be available 24/7 through multiple channels.

Users should receive timely responses to their inquiries and issues.

Users should be prompted to provide feedback after completing a purchase, with options to rate their experience and leave comments.

These user stories cover various aspects of the Flipkart platform, from user registration to postpurchase support, and are written in a format that includes the perspective of the user, the desired functionality, and acceptance criteria for validation.

INVEST

In the context of user stories in agile software development, "INVEST" is an acronym that represents the characteristics or attributes of well-formed user stories. Each letter in the acronym stands for a different attribute:

- I Independent: User stories should be independent of each other, meaning they can be developed and delivered separately without depending on other stories. This allows for greater flexibility and prioritization.
- N Negotiable: User stories should be negotiable, meaning they are open to discussion and can be refined or adjusted based on feedback from stakeholders. This encourages collaboration and ensures that the final solution meets the needs of the users.

- V Valuable: User stories should provide value to the end-users or stakeholders. They should address a specific need or deliver a tangible benefit to the users. This ensures that development efforts are focused on delivering meaningful outcomes.
- E Estimable: User stories should be estimable, meaning that the team can reasonably estimate the effort required to implement them. This helps in planning and prioritizing work, as well as in allocating resources effectively.
- S Small: User stories should be small enough to be completed within a single iteration or sprint. They should represent incremental steps towards delivering the overall project or feature. This allows for faster feedback and iteration cycles.
- T Testable: User stories should be testable, meaning that they should have clear acceptance criteria that can be used to verify when the story is complete. This ensures that the team and stakeholders have a shared understanding of what constitutes a successful implementation

SCRUM

Scrum is a widely used framework within Agile software development methodology. It provides a structured framework for teams to work collaboratively on complex projects while delivering high-value products iteratively. Here are the key components of Scrum:

Scrum Team: A small, self-organizing team consisting of typically 5-9 individuals who collectively possess all the skills necessary to deliver a potentially shippable product increment.

Product Owner: The person responsible for maximizing the value of the product and managing the product backlog. They prioritize the backlog based on input from stakeholders and guide the team on what needs to be built.

Scrum Master: The servant-leader of the Scrum Team, responsible for facilitating Scrum events, removing impediments, and ensuring that the team adheres to Scrum principles and practices.

Product Backlog: A prioritized list of all desired features, enhancements, bug fixes, and other work items that need to be completed for the product. The Product Owner manages the backlog, regularly refining and reprioritizing it based on feedback and changes in requirements.

Sprint: A time-boxed iteration, usually lasting 2-4 weeks, during which a potentially releasable product increment is created. Sprints provide a predictable cadence for development and help manage risk by allowing frequent inspection and adaptation.

Sprint Planning: A meeting held at the beginning of each sprint where the Scrum Team collaboratively selects items from the product backlog and defines the tasks required to complete them.

Daily Scrum (Stand-up): A short, time-boxed daily meeting where team members synchronize their activities, discuss progress, identify impediments, and plan the day's work.

Sprint Review: A meeting held at the end of each sprint where the Scrum Team presents the completed work to stakeholders and gathers feedback. The Product Owner reviews the product

backlog and may adjust priorities based on stakeholder input.

Sprint Retrospective: A meeting held at the end of each sprint where the Scrum Team reflects on its performance, identifies what went well and what could be improved, and makes adjustments to its processes and practices.

Scrum promotes transparency, inspection, and adaptation, allowing teams to respond quickly to changes and deliver high-quality products that meet customer needs. It fosters collaboration, communication, and a focus on delivering value incrementally, thereby reducing risks and increasing customer satisfaction.

3 C's in Agile:

The "3 C's" in Agile development stand for Card, Conversation, and Confirmation. They represent the three key elements of a user story, which is a concise description of a feature told from the perspective of the end-user. Here's what each C entails:

Card: This refers to the physical or digital card where the user story is written. It serves as a placeholder for the conversation that will take place around the story.

Conversation: This is the discussion that takes place between the product owner, stakeholders, and development team to clarify the details of the user story. The conversation helps ensure that everyone understands the user story and its acceptance criteria.

Confirmation: This refers to the acceptance criteria for the user story. It defines the conditions that must be met for the story to be considered complete. The confirmation criteria are used to verify that the story meets the requirements and is functioning as intended.