# Capstone Project 2 PART 1

# 

**QUES1) Write Agile Manifesto.**

**ANS)**

\*Four Main Values-

* Individuals & interactions over processes and tools.
* Working softwares over comprehensive documentations.
* Customer collaboration over contract negotiations.
* Responding to change over following a plan.

\*Twelve principles of Agile softwares-

1. Satisfy the customer through early and continuous delivery of valuable software.

2. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

3. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference for a shorter timescale.

4. Business people and developers must work together daily throughout the project.

5. Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.

6. The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

7. Working software is the primary measure of progress.

8. Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

9. Continuous attention to technical excellence and good design enhances agility.

10. Simplicity — the art of maximizing the amount of work not done — is essential.

11. The best architectures, requirements, and designs emerge from self-organizing teams.

12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

**QUES 2) User Stories- Acceptance Criteria-BV-CP.**

ANS)

|  |  |
| --- | --- |
| **User Story No:** | **1** |
| **Tasks:** | 2 |
| **Priority:** | Highest |
| **As a** | Delivery Boy |
| **I want to** | Register in Scrum Foods |
| **So that I can** | Deliver orders |
| **BV:** | 500 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1. **Registration screen  2) Text boxes for User Name, Password, Nation ID, Mobile No, Email, Address, Phone Number  3) Click on Register Button  4) Send successful notification to the user** |
| **User Story No:** | **2** |
| **Tasks:** | 2 |
| **Priority:** | Highest |
| **As a** | Restaurant Owner |
| **I want to** | View orders |
| **So that I can** | View the list of orders |
| **BV:** | 500 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) View orders  2) Display list of orders in tabular form |
| **User Story No:** | **3** |
| **Tasks:** | 2 |
| **Priority:** | Highest |
| **As a** | Customer |
| **I want to** | Add the address |
| **So that I can** | Get the order to my address |
| **BV:** | 500 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Text box to enter address  2) Business rule: Within the radius of 5 km |
| **User Story No:** | **4** |
| **Tasks:** | 2 |
| **Priority:** | Highest |
| **As a** | Customer |
| **I want to** | Select the payment mode |
| **So that I can** | Make payment of my choice |
| **BV:** | 500 |
| **CP:** | 3 |
| **Acceptance Criteria:** | 1) Display payment modes  2) Radio buttons to select payment modes  3) Payment button  4) Business rule: Can select only one payment mode |
| **User Story No:** | **5** |
| **Tasks:** | 2 |
| **Priority:** | Highest |
| **As a** | Admin |
| **I want to** | View the restaurants |
| **So that I can** | Approve their registration |
| **BV:** | 500 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) List of restaurants  2) Select restaurants  3) Verify restaurant details  4) Approve button  5) Reject button  6) Notification to the restaurant |
| **User Story No:** | **6** |
| **Tasks:** | 2 |
| **Priority:** | Low |
| **As a** | Customer |
| **I want to** | View the price |
| **So that I can** | Order the food |
| **BV:** | 50 |
| **CP:** | 1 |
| **Acceptance Criteria:** | 1) Display price in the list of menu items |
| **User Story No:** | **7** |
| **Tasks:** | 2 |
| **Priority:** | Low |
| **As a** | Customer |
| **I want to** | View the contact number of the delivery boy |
| **So that I can** | Contact the delivery boy for the status |
| **BV:** | 50 |
| **CP:** | 1 |
| **Acceptance Criteria:** | 1) Display delivery boy mobile number  2) Display delivery boy name in tracking field  3) Display delivery boy picture |
| **User Story No:** | **8** |
| **Tasks:** | 2 |
| **Priority:** | Medium |
| **As a** | Restaurant Owner |
| **I want to** | Provide time slots |
| **So that** | Customer can check opening and closing hours |
| **BV:** | 100 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Click on restaurant dashboard  2) Add from time to time  3) Click on submit  4) Display "Updated successfully" |
| **User Story No:** | **9** |
| **Tasks:** | 2 |
| **Priority:** | High |
| **As a** | Business Owner |
| **I want to** | View restaurant revenue report |
| **So that I can** | View the restaurant’s revenue |
| **BV:** | 200 |
| **CP:** | 3 |
| **Acceptance Criteria:** | 1) Select reports  2) Select revenue reports  3) Select to and from date  4) Select region (can select all)  5) Generate report  6) Download report in Excel |
| **User Story No:** | **10** |
| **Tasks:** | 3 |
| **Priority:** | High |
| **As a** | Regional Admin |
| **I want to** | Manage regional restaurants |
| **So that I can** | Track the performance of regional restaurants |
| **BV:** | 200 |
| **CP:** | 3 |
| **Acceptance Criteria:** | 1) Click on "Performance of Restaurants"  2) Select from date to date  3) Click on "Generate Report" which includes restaurant ID, name, revenue  4) Click on "Download Report" (should be in Excel) |
| **User Story No:** | **11** |
| **Tasks:** | 2 |
| **Priority:** | Medium |
| **As a** | Admin |
| **I want to** | See the regional revenue reports |
| **So that I can** | View the regional performance |
| **BV:** | 100 |
| **CP:** | 3 |
| **Acceptance Criteria:** | 1) Select regional dropdown  2) View performance of each restaurant in that region in tabular form, including restaurant name, revenue generated  3) Download in Excel or PDF |
| **User Story No:** | **12** |
| **Tasks:** | 2 |
| **Priority:** | High |
| **As a** | Customer |
| **I want to** | Chat with regional admin |
| **So that I can** | Request a refund |
| **BV:** | 200 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) BR: All mandatory  2) Text box fields  3) Display order ID  4) Text box for description  5) Submit button  6) Generate issue ID  7) Display "Successful" |
| **User Story No:** | **13** |
| **Tasks:** | 2 |
| **Priority:** | Medium |
| **As a** | Customer |
| **I want to** | Search for restaurants |
| **So that I can** | Find restaurants that match my preferences |
| **BV:** | 300 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Text box for entering search criteria (e.g., restaurant name, cuisine type)  2) Search button  3) Display results in a list with restaurant names, ratings, and distance |
| **User Story No:** | **14** |
| **Tasks:** | 2 |
| **Priority:** | Medium |
| **As a** | Delivery Boy |
| **I want to** | View assigned orders |
| **So that I can** | See what orders I need to deliver |
| **BV:** | 250 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Display a list of assigned orders  2) Include order details like customer name, address, order items, and delivery time |
| **User Story No:** | **15** |
| **Tasks:** | 2 |
| **Priority:** | Medium |
| **As a** | Restaurant Owner |
| **I want to** | Update menu items |
| **So that I can** | Keep the menu current with available items and prices |
| **BV:** | 150 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Click on "Edit Menu" in the restaurant dashboard |
| **User Story No:** | **16** |
| **Tasks:** | 2 |
| **Priority:** | Low |
| **As a** | Customer |
| **I want to** | Track my order |
| **So that I can** | Know the current status of my delivery |
| **BV:** | 100 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Display real-time order status (e.g., order received, being prepared, out for delivery)  2) Show delivery boy’s location on a map  3) Show estimated delivery time |
| **User Story No:** | **17** |
| **Tasks:** | 2 |
| **Priority:** | High |
| **As a** | Admin |
| **I want to** | Manage customer feedback |
| **So that I can** | Address customer issues and improve service quality |
| **BV:** | 400 |
| **CP:** | 3 |
| **Acceptance Criteria:** | 1) Display a list of customer feedback  2) Include customer name, feedback details, and rating  3) Options to respond, resolve, or escalate feedback |
| **User Story No:** | **18** |
| **Tasks:** | 3 |
| **Priority:** | Medium |
| **As a** | Customer |
| **I want to** | Add items to my favorite list |
| **So that I can** | Quickly reorder my preferred meals |
| **BV:** | 150 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Add a "Favorite" button next to menu items  2) Click to add item to favorite list  3) Display "Item added to favorites" message  4) Favorite list accessible from the user dashboard |
| **User Story No:** | **19** |
| **Tasks:** | 2 |
| **Priority:** | Low |
| **As a** | Delivery Boy |
| **I want to** | Update my status (e.g., Available, On a break, Offline) |
| **So that** | The system knows when I am ready to accept new orders |
| **BV:** | 50 |
| **CP:** | 1 |
| **Acceptance Criteria:** | 1) Status dropdown with options: Available, On a break, Offline  2) Click on "Update Status" button  3) Display "Status updated successfully" |
| **User Story No:** | **20** |
| **Tasks:** | 2 |
| **Priority:** | Medium |
| **As a** | Restaurant Owner |
| **I want to** | View customer feedback for my restaurant |
| **So that I can** | Improve food quality and service |
| **BV:** | 300 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Display a list of feedback related to the restaurant  2) Include customer name, feedback, and rating  3) Option to reply to feedback |
| **User Story No:** | **21** |
| **Tasks:** | 2 |
| **Priority:** | Medium |
| **As a** | Customer |
| **I want to** | Filter search results by cuisine type |
| **So that I can** | Find restaurants that serve the food I want |
| **BV:** | 200 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Filter options: Cuisine type dropdown  2) Apply filter to search results  3) Display only restaurants that match the selected cuisine type |
| **User Story No:** | **22** |
| **Tasks:** | 3 |
| **Priority:** | Medium |
| **As a** | Admin |
| **I want to** | Manage restaurant approvals |
| **So that I can** | Approve or reject new restaurants on the platform |
| **BV:** | 250 |
| **CP:** | 3 |
| **Acceptance Criteria:** | 1) Display a list of restaurants pending approval  2) Include restaurant details like name, location, and documents  3) Approve or reject button  4) Send notification to restaurant owner about the decision |
| **User Story No:** | **23** |
| **Tasks:** | 2 |
| **Priority:** | Medium |
| **As a** | Business Owner |
| **I want to** | Analyze customer order patterns |
| **So that I can** | Adjust business strategies to increase sales |
| **BV:** | 300 |
| **CP:** | 3 |
| **Acceptance Criteria:** | 1) Generate report on order patterns (e.g., popular times, frequently ordered items)  2) Download report in Excel or PDF format |
| **User Story No:** | **24** |
| **Tasks:** | 2 |
| **Priority:** | Low |
| **As a** | Customer |
| **I want to** | Receive notifications about order status updates |
| **So that I can** | Stay informed about my delivery |
| **BV:** | 100 |
| **CP:** | 1 |
| **Acceptance Criteria:** | 1) Display push notifications for each status update (e.g., order confirmed, out for delivery)  2) Include order details in the notification |
| **User Story No:** | **25** |
| **Tasks:** | 2 |
| **Priority:** | Medium |
| **As a** | Delivery Boy |
| **I want to** | Raise an issue related to an order |
| **So that I can** | Get support to resolve the issue quickly |
| **BV:** | 150 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Text box to describe the issue  2) Submit button  3) Generate issue ID  4) Display "Issue submitted successfully" message |
| **User Story No:** | **26** |
| **Tasks:** | 2 |
| **Priority:** | High |
| **As a** | Admin |
| **I want to** | Monitor the performance of delivery boys |
| **So that I can** | Ensure timely deliveries and good service |
| **BV:** | 350 |
| **CP:** | 3 |
| **Acceptance Criteria:** | 1) Display a list of delivery boys  2) Include performance metrics like delivery time, customer ratings  3) Generate a performance report  4) Option to provide feedback or take action based on performance |
| **User Story No:** | **27** |
| **Tasks:** | 2 |
| **Priority:** | Low |
| **As a** | Customer |
| **I want to** | Schedule an order for a later time |
| **So that I can** | Receive my food at a specific time |
| **BV:** | 200 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Option to select a delivery time during checkout  2) Validate the selected time  3) Display "Order scheduled successfully" message |
| **User Story No:** | **28** |
| **Tasks:** | 2 |
| **Priority:** | Medium |
| **As a** | Restaurant Owner |
| **I want to** | Set special offers and discounts |
| **So that I can** | Attract more customers |
| **BV:** | 250 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Option to add special offers/discounts from the dashboard  2) Enter offer details (e.g., discount percentage, validity period)  3) Display "Offer added successfully" message |
| **User Story No:** | **29** |
| **Tasks:** | 2 |
| **Priority:** | Medium |
| **As a** | Admin |
| **I want to** | Handle customer complaints |
| **So that I can** | Resolve issues and maintain service quality |
| **BV:** | 400 |
| **CP:** | 3 |
| **Acceptance Criteria:** | 1) Display a list of complaints with details (e.g., customer name, complaint description)  2) Option to respond, resolve, or escalate complaints  3) Generate a complaint resolution report |
| **User Story No:** | **30** |
| **Tasks:** | 3 |
| **Priority:** | High |
| **As a** | Customer |
| **I want to** | Receive a refund for a cancelled order |
| **So that I can** | Get my money back if the order was not fulfilled |
| **BV:** | 300 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Option to request a refund from the order history page  2) Validate refund eligibility based on business rules  3) Display "Refund processed successfully" message  4) Notification of refund to the customer |
| **User Story No:** | **31** |
| **Tasks:** | 3 |
| **Priority:** | Medium |
| **As a** | Delivery Boy |
| **I want to** | Update order delivery status |
| **So that** | Customers and admins are informed about the delivery |
| **BV:** | 200 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Select order from the assigned list  2) Update status to "Delivered"  3) Display "Order status updated successfully" message |
| **User Story No:** | **32** |
| **Tasks:** | 3 |
| **Priority:** | High |
| **As a** | Admin |
| **I want to** | Manage customer loyalty points |
| **So that I can** | Reward frequent customers and encourage repeat business |
| **BV:** | 400 |
| **CP:** | 3 |
| **Acceptance Criteria:** | 1) Display customer details with current loyalty points  2) Option to add or deduct points  3) Generate a loyalty points report |
| **User Story No:** | **33** |
| **Tasks:** | 2 |
| **Priority:** | Medium |
| **As a** | Customer |
| **I want to** | Apply promo codes to my order |
| **So that I can** | Get a discount on my purchase |
| **BV:** | 250 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Text box to enter promo code during checkout  2) Apply button  3) Validate promo code  4) Display "Promo code applied successfully" message with discount amount |
| **User Story No:** | **34** |
| **Tasks:** | 2 |
| **Priority:** | Medium |
| **As a** | Restaurant Owner |
| **I want to** | View customer orders history |
| **So that I can** | Analyze which items are most popular |
| **BV:** | 300 |
| **CP:** | 3 |
| **Acceptance Criteria:** | 1) Display list of customer orders with details like order date, items ordered, and total amount  2) Generate a report of most popular items |
| **User Story No:** | **35** |
| **Tasks:** | 2 |
| **Priority:** | Low |
| **As a** | Customer |
| **I want to** | View my loyalty points balance |
| **So that I can** | Track my rewards and use them on future orders |
| **BV:** | 100 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Display loyalty points balance in the customer dashboard  2) Option to redeem points during checkout  3) Display "Points redeemed successfully" message |
| **User Story No:** | **36** |
| **Tasks:** | 2 |
| **Priority:** | High |
| **As a** | Admin |
| **I want to** | Monitor restaurant ratings |
| **So that I can** | Ensure restaurants maintain a high standard of quality |
| **BV:** | 400 |
| **CP:** | 3 |
| **Acceptance Criteria:** | 1) Display a list of restaurant ratings with details (e.g., restaurant name, average rating)  2) Generate a report of ratings trends over time  3) Option to take action on consistently low-rated restaurants |
| **User Story No:** | **37** |
| **Tasks:** | 2 |
| **Priority:** | Medium |
| **As a** | Customer |
| **I want to** | Set dietary preferences (e.g., vegetarian, vegan) |
| **So that I can** | See only menu items that match my preferences |
| **BV:** | 200 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Option to set dietary preferences in profile settings  2) Filter menu items based on selected preferences  3) Display only matching items in the menu |
| **User Story No:** | **38** |
| **Tasks:** | 3 |
| **Priority:** | High |
| **As a** | Restaurant Owner |
| **I want to** | View my restaurant's sales trends |
| **So that I can** | Make data-driven decisions to improve business |
| **BV:** | 400 |
| **CP:** | 3 |
| **Acceptance Criteria:** | 1) Generate sales trends report with graphs/charts  2) Filter by date range  3) Download report in Excel or PDF format |
| **User Story No:** | **39** |
| **Tasks:** | 2 |
| **Priority:** | Medium |
| **As a** | Customer |
| **I want to** | Add a tip for the delivery boy |
| **So that** | I can appreciate good service |
| **BV:** | 150 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Option to add a tip during checkout  2) Tip amount textbox  3) Display "Tip added successfully" message |
| **User Story No:** | **40** |
| **Tasks:** | 2 |
| **Priority:** | Low |
| **As a** | Delivery Boy |
| **I want to** | View my earnings |
| **So that I can** | Track how much I have earned over time |
| **BV:** | 200 |
| **CP:** | 2 |
| **Acceptance Criteria:** | 1) Display earnings summary on dashboard  2) Option to view earnings by day, week, or month  3) Generate earnings report |

**QUES 3**) What is epic? Write 2 epics.

ANS)

 An epic is simply a collection of user stories. These stories are related to one another and combine to form one large story. Epics can work across different teams and projects, but they will be united under a broad banner label, known as a theme.

**Epics for the Food Delivery Application**

**Epic 1: "End-to-End Order Management"**

* **Description:** This epic involves the complete lifecycle of an order, from placing the order to its delivery. It includes functionalities for customers to browse menus, place orders, track delivery status, and provide feedback, as well as features for restaurant owners to manage orders and for delivery boys to update delivery statuses.
* **Associated User Stories:**
  + User Story 1: "Browse restaurant menus"
  + User Story 2: "Place an order"
  + User Story 9: "Track my order"
  + User Story 12: "Update order delivery status"
  + User Story 13: "Raise an issue related to an order"
  + User Story 14: "Request a refund for a cancelled order"
  + User Story 15: "Receive notifications about order status updates"
* **Business Value (BV):** 1500
* **Complexity Points (CP):** 20

**Epic 2: "Comprehensive Feedback and Rating System"**

* **Description:** This epic covers all aspects of collecting, managing, and utilizing feedback and ratings from customers and monitoring restaurant performance based on these ratings. It ensures that customers have a seamless experience providing feedback and that businesses can use this data to improve their services.
* **Associated User Stories:**
  + User Story 4: "Submit feedback for an order"
  + User Story 16: "Manage customer feedback"
  + User Story 17: "View customer feedback for my restaurant"
  + User Story 27: "Monitor restaurant ratings"
  + User Story 28: "Handle customer complaints"
  + User Story 32: "Monitor the performance of delivery boys"
* **Business Value (BV):** 1800
* **Complexity Points (CP):** 22

**QUES4)** **What is the difference between BV and CP.**

ANS)

**Business Value (BV)** and **Complexity Points (CP)** are two distinct metrics used in agile project management to evaluate and prioritize user stories and tasks.

**Business Value (BV):**

* **Definition:** BV represents the importance or value of a particular feature or user story to the business or stakeholders. It reflects how much impact the feature will have on achieving business goals, such as increasing revenue, improving customer satisfaction, or gaining a competitive advantage.
* **Purpose:** BV is used to prioritize features based on their potential return on investment or contribution to the overall success of the project.
* **Determined By:** BV is typically assigned by the stakeholders, product owner, or business team. They decide how valuable each user story is based on their understanding of the business needs and goals.
* **Scale:** BV is often expressed in terms of currency or a relative scale (e.g., 10, 50, 100, 500). Higher BV indicates higher importance.

**Complexity Points (CP):**

* **Definition:** CP, also known as Story Points, measure the effort, complexity, and time required by the development team to complete a user story. It reflects the difficulty of implementing a feature, considering factors like technical challenges, uncertainties, and dependencies.
* **Purpose:** CP helps the development team estimate the amount of work involved in delivering a feature, allowing for better sprint planning and workload distribution.
* **Determined By:** CP is typically estimated by the development team through techniques like planning poker. Developers assess the complexity and effort required based on their technical expertise and experience.
* **Scale:** CP is usually expressed in a Fibonacci-like sequence (e.g., 1, 2, 3, 5, 8, 13, 20). Higher CP indicates greater complexity and effort.

**Key Differences:**

1. **Focus:**
   * **BV** focuses on the value and importance of a feature to the business.
   * **CP** focuses on the technical effort and complexity required to implement the feature.
2. **Decision-Makers:**
   * **BV** is determined by stakeholders or business owners.
   * **CP** is determined by the development team.
3. **Use in Prioritization:**
   * **BV** helps prioritize features that are most valuable to the business.
   * **CP** helps in planning how much work can be completed within a sprint and in assessing the team's capacity.
4. **Measurement:**
   * **BV** is typically measured in terms of business impact or return on investment.
   * **CP** is measured in terms of effort, complexity, and time required to complete the task.

**QUES 5) Explain about Sprint.**

ANS)

A **Sprint** is a fundamental concept in the Scrum framework, which is widely used in agile project management. It is a time-boxed period during which a specific set of work is completed and made ready for review. Sprints provide a structured approach to delivering incremental value to the customer through continuous improvement and regular feedback.

**Key Characteristics of a Sprint:**

1. **Time-Boxed Duration:**
   * Sprints have a fixed duration, typically ranging from one to four weeks. The duration is consistent throughout the project, allowing the team to establish a predictable rhythm.
   * A sprint should be long enough to complete meaningful work but short enough to allow for frequent feedback and adaptation.
2. **Sprint Goal:**
   * Each sprint has a clear objective or goal that the team aims to achieve by the end of the sprint. The goal is usually related to the delivery of a specific feature or increment of the product.
   * The sprint goal helps keep the team focused on the most important outcomes for that period.
3. **Sprint Planning:**
   * Before a sprint begins, the team holds a **Sprint Planning** meeting to define what work will be done during the sprint. The Product Owner presents the prioritized Product Backlog, and the team selects the items they can commit to delivering.
   * The team then breaks down the selected items into smaller tasks and estimates the effort required to complete them.
4. **Sprint Backlog:**
   * The Sprint Backlog is a list of tasks and user stories that the team commits to completing during the sprint. It is a subset of the Product Backlog, specifically selected for the current sprint.
   * The Sprint Backlog is dynamic, meaning that the team can adjust it as needed throughout the sprint, but the sprint goal should remain stable.
5. **Daily Scrum (Stand-up) Meetings:**
   * Every day during the sprint, the team holds a short, time-boxed meeting called the **Daily Scrum** (or stand-up). This meeting usually lasts 15 minutes and allows team members to synchronize their work.
   * During the Daily Scrum, each team member answers three questions:
     1. What did I do yesterday?
     2. What will I do today?
     3. Are there any impediments blocking my progress?
6. **Increment:**
   * By the end of the sprint, the team should produce a "Potentially Shippable Product Increment." This is a working version of the product that includes the new features or improvements completed during the sprint.
   * The increment must meet the **Definition of Done** (a shared understanding of what it means for work to be complete) and be potentially releasable.
7. **Sprint Review:**
   * After the sprint ends, the team holds a **Sprint Review** meeting to demonstrate the work completed during the sprint to stakeholders. This is an opportunity to gather feedback and discuss the next steps.
   * The Product Owner reviews the increment and decides whether it meets the sprint goal and is ready for release.
8. **Sprint Retrospective:**
   * The sprint concludes with a **Sprint Retrospective** meeting, where the team reflects on the sprint process. The focus is on identifying what went well, what didn’t, and how the team can improve in the next sprint.
   * The goal of the retrospective is continuous improvement, allowing the team to refine their practices and increase efficiency in future sprints.

**Importance of Sprints:**

* **Incremental Delivery:** Sprints allow the team to deliver the product incrementally, ensuring that value is delivered to the customer early and often.
* **Adaptability:** The short duration of sprints means the team can quickly adapt to changes in requirements, market conditions, or customer feedback.
* **Transparency:** Regular sprint reviews and retrospectives foster transparency with stakeholders and within the team, ensuring that everyone is aligned on goals and progress.
* **Predictability:** With consistent sprint durations, teams can develop a predictable cadence of work, making it easier to estimate timelines and manage expectations.

**QUES 6) Explain Product backlog and sprint back log.**

ANS)

In Scrum, **Product Backlog** and **Sprint Backlog** are two essential elements that help organize and manage the work that needs to be done in a project. While both backlogs contain tasks and requirements, they serve different purposes and are used at different stages of the project.

### ****Product Backlog:****

#### ****Definition:****

* The **Product Backlog** is an ordered list of all the work that needs to be done for a product. It includes features, enhancements, bug fixes, technical debt, and other tasks necessary to deliver a successful product.

#### ****Key Characteristics:****

1. **Owned by the Product Owner:**
   * The Product Owner is responsible for maintaining and prioritizing the Product Backlog. They decide what items are most important and should be worked on next.
2. **Dynamic and Evolving:**
   * The Product Backlog is a living document that evolves over time as new requirements emerge, priorities change, and feedback is received. Items can be added, removed, or reprioritized as needed.
3. **Ordered by Priority:**
   * Items in the Product Backlog are ordered based on their importance to the business. The highest-priority items are placed at the top, ensuring that the team works on the most valuable features first.
4. **Comprehensive:**
   * The Product Backlog contains all potential work for the product, including user stories, technical tasks, and non-functional requirements. It represents everything that needs to be done to deliver the product.
5. **Refinement (Grooming):**
   * The Product Backlog is regularly refined or "groomed" to ensure that items are well-defined, estimated, and ready for selection in upcoming sprints. This process involves breaking down large items (epics) into smaller, more manageable user stories.

### ****Sprint Backlog:****

#### ****Definition:****

* The **Sprint Backlog** is a subset of the Product Backlog that contains the work the Scrum team commits to completing during a specific sprint. It includes selected user stories, tasks, and any additional work required to achieve the sprint goal.

#### ****Key Characteristics:****

1. **Owned by the Scrum Team:**
   * The Sprint Backlog is created and owned by the Scrum team. During the Sprint Planning meeting, the team selects items from the Product Backlog and determines the tasks needed to complete them within the sprint.
2. **Fixed for the Sprint Duration:**
   * Once the Sprint Backlog is established at the beginning of the sprint, it should remain relatively stable. The team commits to completing the selected items by the end of the sprint, though minor adjustments can be made if necessary.
3. **Detailed and Specific:**
   * The Sprint Backlog contains detailed tasks and user stories that are specific to the current sprint. Each item in the Sprint Backlog should be well-understood and small enough to be completed within the sprint.
4. **Task Breakdown:**
   * The team breaks down the selected Product Backlog items into smaller tasks during Sprint Planning. These tasks are then estimated and assigned to team members, forming the basis of the Sprint Backlog.
5. **Visible and Transparent:**
   * The Sprint Backlog is often displayed on a physical or digital task board, where the team can track progress throughout the sprint. This transparency helps the team stay focused and aligned on the sprint goal.
6. **Updated Daily:**
   * The Sprint Backlog is updated daily, usually during the Daily Scrum meeting, to reflect the progress made and any obstacles encountered. This ensures that the team stays on track to meet the sprint goal.

### ****Key Differences:****

1. **Scope:**
   * **Product Backlog:** Encompasses the entire scope of the product, containing all potential work items.
   * **Sprint Backlog:** Focuses only on the work selected for the current sprint, representing a subset of the Product Backlog.
2. **Ownership:**
   * **Product Backlog:** Managed by the Product Owner, who prioritizes and refines it based on business needs.
   * **Sprint Backlog:** Managed by the Scrum team, who selects and commits to the work during the sprint.
3. **Flexibility:**
   * **Product Backlog:** Continuously evolves and can change as new information becomes available.
   * **Sprint Backlog:** Fixed for the duration of the sprint, with only minor adjustments allowed.
4. **Purpose:**
   * **Product Backlog:** Provides a long-term view of the work needed to deliver the product.
   * **Sprint Backlog:** Provides a short-term, actionable plan for achieving the sprint goal.

**QUES 7) What is impediments log? write 2 impediments.**

### ANS) ****Impediments Log:****

An **Impediments Log** is a tool used in Scrum to track and manage obstacles or issues that hinder the progress of the Scrum team during a sprint. Impediments are anything that prevents the team from achieving its sprint goals, reducing its efficiency, or slowing down development. The Scrum Master is primarily responsible for identifying and removing these impediments, but the team can also contribute to identifying them.

The Impediments Log is a visible and transparent list, ensuring that the team is aware of what obstacles exist, what actions are being taken to remove them, and who is responsible for resolving them. It helps in maintaining a smooth workflow and ensures continuous progress.

### ****Common Types of Impediments:****

* Lack of resources (e.g., software tools, hardware)
* Dependencies on other teams or departments
* Technical issues or bugs
* Delays in decision-making
* Miscommunications between team members or stakeholders

### ****Examples of Impediments:****

#### ****Impediment 1: Dependency on External Team for API Integration****

* **Description:** The development team cannot proceed with integrating a critical API because the external team responsible for providing it is delayed in delivering the API documentation.
* **Impact:** The team cannot complete a key feature within the sprint, blocking progress on other dependent tasks.
* **Resolution Plan:** The Scrum Master contacts the external team to expedite the delivery of the API documentation and explores alternative solutions to keep progress moving, such as mocking the API temporarily.

#### ****Impediment 2: Insufficient Hardware for Testing****

* **Description:** The team is experiencing delays in testing the mobile app across different devices due to a lack of sufficient hardware (e.g., specific smartphones or tablets) needed for testing.
* **Impact:** The team cannot perform thorough testing, delaying quality assurance and potentially impacting the sprint goal.
* **Resolution Plan:** The Scrum Master works with the IT department to procure the required devices and explores options like using device emulators temporarily for testing purposes.

### ****Managing the Impediments Log:****

The Impediments Log should be regularly reviewed, especially during the **Daily Scrum**, where team members can bring up new impediments or provide updates on existing ones. By keeping this log transparent, the team ensures that roadblocks are promptly addressed, and progress toward sprint goals is maintained.

**QUES 8) Explain Velocity of the Team.**

### ANS)Velocity of the Team:

**Velocity** is a key metric used in Scrum to measure the amount of work a team can complete during a single sprint. It is typically calculated by summing up the **Story Points** (or other estimation units) associated with the user stories or tasks that the team has completed in that sprint. Velocity helps in understanding the team’s capacity for work, making it a valuable tool for planning and forecasting future sprints.

**Key Characteristics:**

1. **Measurement of Work Completed:**
   * Velocity measures only the work that has been fully completed and accepted by the Product Owner at the end of the sprint. Partially completed work does not contribute to the velocity.
2. **Unit of Measurement:**
   * Velocity is often expressed in terms of Story Points, but some teams might use other units like hours or tasks completed. Story Points are commonly used because they account for both the complexity and effort of the work.
3. **Historical Average:**
   * The velocity of a team is best understood as an average over several sprints. By tracking velocity over time, the team can get a sense of its typical capacity, which is useful for making more accurate sprint planning and project forecasts.
4. **Predictability and Planning:**
   * Velocity helps in predicting how much work the team can handle in future sprints. For example, if a team has a consistent velocity of 30 Story Points per sprint, they can plan future sprints based on this capacity, ensuring they don’t overcommit.
5. **Team-Specific Metric:**
   * Velocity is unique to each team. Different teams might estimate and work at different paces, so comparing velocities across teams is not usually meaningful.

**How Velocity is Calculated:**

1. **Sprint 1:**
   * The team completes 5 user stories with a total of 25 Story Points.
   * **Velocity:** 25 Story Points.
2. **Sprint 2:**
   * The team completes 6 user stories with a total of 30 Story Points.
   * **Velocity:** 30 Story Points.
3. **Sprint 3:**
   * The team completes 4 user stories with a total of 20 Story Points.
   * **Velocity:** 20 Story Points.

If you average these over the three sprints:

* + **Average Velocity:** (25 + 30 + 20) / 3 = 25 Story Points per sprint.

**Using Velocity in Sprint Planning:**

1. **Capacity Planning:**
   * During sprint planning, the team uses its velocity to decide how many user stories or tasks they can realistically complete. If the team’s average velocity is 25 Story Points, they will aim to commit to a similar amount of work in the next sprint.
2. **Forecasting:**
   * Velocity allows the team to forecast how many sprints it will take to complete the remaining work in the Product Backlog. For example, if there are 100 Story Points remaining and the team’s velocity is 25, they can estimate that they will need approximately 4 more sprints to complete the project.
3. **Adjustment:**
   * If the team’s velocity changes significantly over time, they might need to reassess their sprint goals, capacity, and even the overall project timeline.

**Importance of Velocity:**

* **Improves Planning:** Velocity helps teams plan more effectively by providing a data-driven basis for how much work they can take on in a sprint.
* **Increases Predictability:** It allows stakeholders to make more informed decisions about timelines, release dates, and scope.
* **Tracks Progress:** Velocity offers insight into the team’s progress over time, helping identify trends such as improvement in efficiency or the need for adjustments in process or scope.
* **Encourages Focus:** By understanding their capacity, teams can avoid overcommitting, which reduces the risk of burnout and helps maintain sustainable development pace.

**Limitations of Velocity:**

* **Not a Productivity Measure:** Velocity is not a measure of productivity; it’s simply a reflection of how much work a team has completed. It should not be used to compare teams or pressure teams to increase their velocity.
* **Fluctuations:** Velocity can fluctuate due to various factors such as team composition, the complexity of tasks, and external dependencies, so it should be viewed as a guide rather than a strict rule.

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**QUES 9) Draw Sprint Burn Charts n Product Burn Down Charts.**

### ANS) Sprint Burn Down Chart:

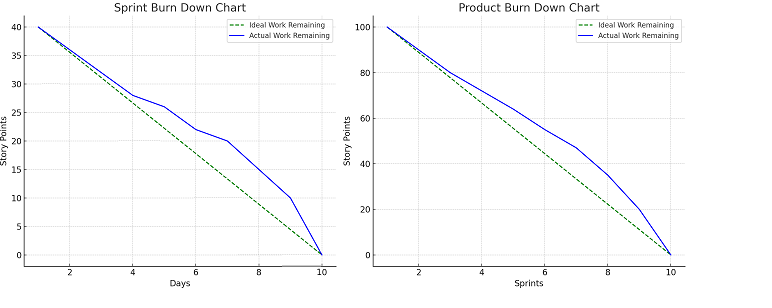
This chart tracks the remaining work in a sprint over time. It helps the team monitor daily progress toward completing the sprint goal.

* **X-Axis:** Days of the sprint.
* **Y-Axis:** Remaining work (e.g., Story Points).

**Product Burn Down Chart:**

This chart tracks the remaining work across the entire project, helping to monitor progress toward the overall project completion.

* **X-Axis:** Sprints.
* **Y-Axis:** Remaining work (e.g., Story Points).

****

Here are the **Sprint Burn Down Chart** and **Product Burn Down Chart**:

* **Sprint Burn Down Chart:** This chart shows the remaining work (in story points) over the days of a sprint, comparing the ideal and actual progress.
* **Product Burn Down Chart:** This chart tracks the remaining work (in story points) over multiple sprints, showing the team's progress towards completing the entire product backlog.

These charts are essential tools in Scrum for visualizing progress and identifying any deviations from the plan.

**QUES 10) Explain about Product Grooming.**

### ANS) ****Product Grooming (Backlog Refinement)****

**Product Grooming**, also known as **Backlog Refinement**, is an ongoing process in Scrum where the Product Owner and the Scrum team review and prioritize items in the **Product Backlog**. The goal is to ensure that the backlog is well-organized, clear, and contains items that are ready to be worked on in future sprints.

#### ****Key Aspects of Product Grooming:****

1. **Clarification of User Stories:**
   * During grooming sessions, the team discusses each item in the backlog to ensure that everyone has a clear understanding of the requirements, goals, and acceptance criteria.
   * Ambiguities and uncertainties in user stories are resolved, making it easier for developers to estimate the effort needed.
2. **Prioritization:**
   * The Product Owner prioritizes the backlog items based on factors such as business value, customer needs, market conditions, and technical dependencies.
   * High-priority items are placed at the top of the backlog so that they are ready for selection in the upcoming sprint.
3. **Estimation:**
   * The team estimates the effort required to complete each backlog item using story points or other estimation techniques.
   * This helps in understanding the complexity and workload, facilitating better sprint planning.
4. **Splitting Large User Stories:**
   * Large or complex user stories, often referred to as **epics**, are broken down into smaller, more manageable stories that can be completed within a single sprint.
   * This ensures that each item in the backlog is granular enough for the team to handle effectively.
5. **Adding New User Stories:**
   * New ideas, features, or changes are added to the backlog during grooming sessions. These could be based on stakeholder feedback, market changes, or technical needs identified by the team.
   * The newly added items are then prioritized and refined just like the existing ones.
6. **Removing or Modifying Backlog Items:**
   * As the project evolves, some items in the backlog may become obsolete, less important, or require changes. These items are either removed, modified, or deprioritized during grooming sessions.
   * This keeps the backlog relevant and focused on delivering value.
7. **Preparation for Sprint Planning:**
   * By the end of a grooming session, the top items in the backlog should be well-defined, properly estimated, and prioritized, making them ready for selection during the next Sprint Planning meeting.
   * This preparation helps ensure a smooth transition into sprint planning and reduces the chances of delays or misunderstandings.

#### ****Benefits of Product Grooming:****

* **Improved Quality:** Ensures that user stories are well-understood, reducing the likelihood of errors or rework.
* **Efficient Sprint Planning:** Makes sprint planning more effective by having a well-prepared and prioritized backlog.
* **Flexibility:** Allows the team to adapt to changes by regularly updating the backlog to reflect new information or shifting priorities.
* **Increased Transparency:** Provides the team and stakeholders with a clear view of what is in the pipeline and the rationale behind the prioritization of items.

#### ****Frequency of Grooming:****

* Product grooming is typically conducted once or twice per sprint, though the frequency can vary depending on the team's needs and the project's complexity. It's a collaborative activity that involves the Product Owner, Scrum Master, and development team.

**QUES 11) Explain the roles of Scrum Master and Product Owner.**

ANS) In Scrum, the **Scrum Master** and **Product Owner** are two key roles that work closely with the Scrum team to ensure the successful delivery of a project. Each has distinct responsibilities and focuses, contributing to the overall effectiveness of the Scrum framework.

### ****Scrum Master****

#### ****Role and Responsibilities:****

1. **Facilitator:**
   * The Scrum Master facilitates all Scrum ceremonies (Sprint Planning, Daily Stand-ups, Sprint Review, Sprint Retrospective) to ensure they are productive and focused.
   * They guide the team through the Scrum process, ensuring adherence to Scrum principles and practices.
2. **Servant Leader:**
   * Acts as a servant leader to the Scrum team, removing impediments that might hinder the team’s progress.
   * Supports the team by providing what they need to perform their tasks efficiently, such as resources or tools.
3. **Coach and Mentor:**
   * Coaches the team on self-organization, cross-functionality, and continuous improvement.
   * Helps the team understand the values and principles of Agile and Scrum, fostering an Agile mindset.
4. **Mediator:**
   * Helps resolve conflicts within the team and facilitates communication between the Product Owner and the development team.
   * Ensures that the team remains focused on the sprint goals and does not get sidetracked by external interruptions or distractions.
5. **Shield for the Team:**
   * Protects the team from external pressures and disruptions, allowing them to focus on delivering the sprint increment.
   * Ensures that the team is not overloaded with work by managing expectations from stakeholders.
6. **Change Agent:**
   * Works to create and sustain a culture of continuous improvement within the team and organization.
   * Promotes and implements Agile practices beyond the team, influencing the wider organization to adopt Agile methodologies.

### ****Product Owner****

#### ****Role and Responsibilities:****

1. **Visionary and Decision-Maker:**
   * The Product Owner is responsible for defining the product vision and strategy, ensuring that the team builds the right product to meet business objectives.
   * They make key decisions about what features will be developed and when, based on customer needs, market trends, and business goals.
2. **Backlog Management:**
   * Owns and manages the **Product Backlog**, prioritizing items based on business value, urgency, and stakeholder input.
   * Ensures that the backlog is well-groomed, with items that are clearly defined, estimated, and ready for development in upcoming sprints.
3. **Customer and Stakeholder Representative:**
   * Acts as the primary liaison between the Scrum team and stakeholders (customers, business owners, etc.).
   * Represents the interests of the stakeholders by ensuring the product delivers maximum value and meets user needs.
4. **Acceptance Criteria and Validation:**
   * Defines clear acceptance criteria for each user story, ensuring that the development team understands what is required.
   * Reviews and accepts or rejects work completed by the team during the sprint, ensuring it meets the defined acceptance criteria and the overall product vision.
5. **Maximizing ROI:**
   * Focuses on delivering the most valuable features first, maximizing the return on investment (ROI) for the product.
   * Continuously re-evaluates priorities based on feedback, market conditions, and business needs to ensure the product remains competitive and relevant.
6. **Sprint Planning Participation:**
   * Actively participates in Sprint Planning to help define sprint goals and clarify the most important backlog items for the upcoming sprint.
   * Works with the Scrum team to break down high-priority backlog items into actionable tasks.

### ****Key Differences Between the Scrum Master and Product Owner:****

* **Focus:**
  + The **Scrum Master** is focused on the process and team efficiency, ensuring that Scrum practices are followed and that the team works effectively.
  + The **Product Owner** is focused on the product and business value, ensuring that the team builds the right product features at the right time.
* **Authority:**
  + The **Scrum Master** does not have authority over the team’s decisions regarding what to build; instead, they guide the team in how to work.
  + The **Product Owner** has the authority to make decisions about the product backlog, priorities, and the acceptance of completed work.
* **Role Interaction:**
  + The **Scrum Master** supports the **Product Owner** by facilitating Scrum events and helping the team understand product backlog items.
  + The **Product Owner** works with the **Scrum Master** to ensure that the team has everything they need to understand and deliver valuable increments.

Top of Form

**QUES 12) Explain all Meetings Conducted in Scrum Project.**

**ANS)** In Scrum, several key meetings (often referred to as **ceremonies**) are conducted to ensure smooth communication, planning, execution, and review throughout the project. These meetings help the Scrum team stay aligned with the project goals and continuously improve their processes. Below are the primary meetings in a Scrum project:

**1. Sprint Planning Meeting**

**Purpose:**

* To plan the work to be done during the upcoming sprint.

**Participants:**

* Scrum Master, Product Owner, Development Team

**Duration:**

* Typically 2-4 hours for a two-week sprint (adjusted proportionally for other sprint durations).

**Key Activities:**

* **Define Sprint Goal:** The Product Owner and team agree on a clear sprint goal that aligns with the overall product vision.
* **Select Backlog Items:** The Product Owner presents the prioritized Product Backlog items (user stories) to the team. The team discusses these items and selects those they can commit to completing in the sprint.
* **Task Breakdown:** The team breaks down selected user stories into tasks, estimates the effort required for each task, and creates a Sprint Backlog.
* **Capacity Planning:** The team considers its capacity (e.g., availability, velocity) to ensure the selected work is achievable.

**2. Daily Scrum (Daily Stand-up)**

**Purpose:**

* To synchronize activities and plan the next 24 hours.

**Participants:**

* Development Team, Scrum Master (optional), Product Owner (optional)

**Duration:**

* 15 minutes

**Key Activities:**

* **Three Key Questions:** Each team member answers three questions:
  1. What did I do yesterday to help achieve the sprint goal?
  2. What will I do today to help achieve the sprint goal?
  3. Are there any impediments blocking my progress?
* **Impediment Identification:** If any blockers are mentioned, the Scrum Master takes note and works to resolve them.
* **Coordination:** Team members coordinate their efforts, identify dependencies, and adjust their plans as necessary.

**3. Sprint Review Meeting**

**Purpose:**

* To inspect the product increment and adapt the Product Backlog if necessary.

**Participants:**

* Scrum Master, Product Owner, Development Team, Stakeholders

**Duration:**

* Typically 1-2 hours for a two-week sprint (adjusted proportionally for other sprint durations).

**Key Activities:**

* **Demonstration of Increment:** The Development Team demonstrates the work they have completed during the sprint (the increment).
* **Feedback Collection:** Stakeholders and the Product Owner provide feedback on the increment, which may lead to adjustments in the Product Backlog.
* **Backlog Update:** The Product Owner may update the Product Backlog based on feedback and new insights, reprioritizing items for future sprints.
* **Celebrate Success:** Recognizing the team’s accomplishments helps maintain motivation.

**4. Sprint Retrospective Meeting**

**Purpose:**

* To reflect on the past sprint and identify ways to improve.

**Participants:**

* Scrum Master, Development Team, Product Owner (optional)

**Duration:**

* Typically 1-1.5 hours for a two-week sprint (adjusted proportionally for other sprint durations).

**Key Activities:**

* **Reflection:** The team discusses what went well, what didn’t go well, and what could be improved in the next sprint.
* **Identify Improvements:** The team identifies actionable items or process improvements to implement in the next sprint.
* **Plan for Improvement:** The team agrees on specific actions they will take to improve their process, team dynamics, or tools.
* **Continuous Improvement:** This meeting is crucial for fostering a culture of continuous improvement and self-organization within the team.

**5. Product Backlog Refinement (Grooming) Meeting**

**Purpose:**

* To keep the Product Backlog up-to-date and ensure that it contains refined items ready for future sprints.

**Participants:**

* Product Owner, Scrum Master, Development Team

**Duration:**

* Typically 1-2 hours per week (can vary depending on the team's needs).

**Key Activities:**

* **Review Backlog Items:** The team reviews the Product Backlog to ensure that items are well-defined and prioritized.
* **Clarify Requirements:** The team and Product Owner discuss and clarify the details of upcoming backlog items, ensuring they are understood and actionable.
* **Estimate Effort:** The team estimates the complexity and effort required for backlog items using story points or other estimation techniques.
* **Prioritize:** The Product Owner prioritizes the items based on business value, stakeholder input, and team capacity.
* **Prepare for Sprint Planning:** Refining the backlog helps ensure that the top items are ready for selection in the next sprint planning meeting.

**6. Sprint Review & Retrospective Combined Meeting (Optional)**

**Purpose:**

* Sometimes, organizations combine the Sprint Review and Retrospective into a single meeting to streamline processes.

**Participants:**

* Scrum Master, Product Owner, Development Team, Stakeholders

**Duration:**

* Varies, typically slightly longer than a standard Sprint Review or Retrospective meeting.

**Key Activities:**

* **Increment Demonstration:** The team demonstrates the work completed in the sprint.
* **Feedback:** Stakeholders provide feedback on the increment.
* **Reflection:** The team discusses the sprint's successes and challenges.
* **Improvements:** The team identifies and agrees on specific improvements for the next sprint.

**QUES 13)** **Explain Sprint Size and Scrum Size.**

### ANS) Sprint Size

**Sprint Size** refers to the total amount of work the team commits to completing within a single sprint. It's usually measured in terms of story points, complexity points (CP), or sometimes in hours. The sprint size is directly tied to the team's capacity, which includes the number of available team members, their skill levels, and their availability during the sprint.

**Key Points:**

* **Determination:** Sprint size is determined during Sprint Planning. The team selects a certain number of Product Backlog Items (PBIs) based on their estimated effort and the team's capacity.
* **Consistency:** Over time, the team’s sprint size should become more consistent as the team stabilizes its velocity (the average amount of work completed in a sprint).
* **Adaptability:** The sprint size can vary depending on the complexity of tasks, team availability, and any interruptions or impediments anticipated during the sprint.

**Example:**

* If a team has a velocity of 30 story points per sprint and they plan to work on three user stories with 10 story points each, the sprint size would be 30 story points.

**Scrum Size**

**Scrum Size** typically refers to the number of participants involved in the Scrum framework, particularly focusing on the team size. Scrum teams are designed to be small and cross-functional, usually consisting of 5-9 members, including the Product Owner, Scrum Master, and Development Team.

**Key Points:**

* **Team Composition:** The Scrum team size is crucial for effective collaboration and communication. A team that's too large may face challenges in coordination, while a team that's too small might struggle with completing the work within a sprint.
* **Roles Included:** Scrum size encompasses all the roles in a Scrum team:
  + **Product Owner**: Manages the Product Backlog and prioritizes work.
  + **Scrum Master**: Facilitates Scrum practices and removes impediments.
  + **Development Team**: Consists of developers, designers, testers, and any other necessary roles needed to deliver a potentially shippable product increment.

**Example:**

* A typical Scrum team might include 1 Product Owner, 1 Scrum Master, and 6 Developers, making the total Scrum size 8 members.

In summary, **Sprint Size** is about the amount of work committed to within a sprint, while **Scrum Size** refers to the number of people on the Scrum team. Both are essential factors in determining how much work can be accomplished effectively within the Scrum framework.

**QUES 14)** **Explain DOR and DOD.**

**ANS)** In Scrum, **Definition of Ready (DoR)** and **Definition of Done (DoD)** are essential concepts that help ensure the quality and clarity of work before it begins and after it is completed.

**Definition of Ready (DoR)**

**Definition of Ready (DoR)** is a set of criteria that a Product Backlog Item (PBI) must meet before the Scrum team can consider it for a sprint. It ensures that the work is well-defined, clear, and actionable, reducing the likelihood of misunderstandings or rework during the sprint.

**Key Points:**

* **Clarity:** The user story or task must be clearly understood by the team, with no ambiguity.
* **Acceptance Criteria:** The PBI must have well-defined acceptance criteria, outlining what needs to be done for the work to be considered complete.
* **Dependencies Resolved:** Any dependencies or blockers should be identified and resolved, or a clear plan should be in place to address them.
* **Estimation:** The item should be small enough to be estimated and completed within a single sprint. If it's too large, it might need to be broken down into smaller tasks.
* **Prioritization:** The item should be prioritized by the Product Owner and should align with the sprint goal.

**Example of DoR:**

* The user story has a clear description.
* Acceptance criteria are defined and agreed upon.
* Dependencies on other tasks are resolved or planned for.
* The item is estimated and small enough to fit into one sprint.

**Definition of Done (DoD)**

**Definition of Done (DoD)** is a shared understanding among the Scrum team of what it means for a product increment to be considered "done." It ensures that all aspects of quality are met before the work is considered complete and potentially shippable.

**Key Points:**

* **Completed Work:** The feature or task is fully implemented and meets all requirements.
* **Testing:** The work has been thoroughly tested (unit tests, integration tests, etc.), and all tests pass.
* **Documentation:** Any necessary documentation (user manuals, comments in code, etc.) is completed.
* **Code Review:** The code has been reviewed by team members and meets the team's coding standards.
* **Deployment Ready:** The increment is ready to be deployed to production or the next stage of the pipeline, with no additional work needed.

**Example of DoD:**

* All code is written, peer-reviewed, and merged into the main branch.
* Unit tests and integration tests have been written and passed.
* The feature has been tested in a staging environment.
* The documentation has been updated.
* The Product Owner has reviewed and accepted the feature.

**Comparison of DoR and DoD**

* **DoR (Definition of Ready)** ensures that the team does not start work on a task until it is fully prepared and clear.
* **DoD (Definition of Done)** ensures that the team does not consider a task complete until it meets all quality and completion criteria.

**Summary:**

* **DoR** is about being prepared to start the work: It’s a checklist that ensures the team has everything they need to begin a task or user story.
* **DoD** is about ensuring the work is completed to a high standard: It’s a checklist that ensures the feature or increment is fully completed and meets all required quality standards.

**QUES 15)** **Explain Prioritization Techniques and MVP.**

**ANS)** Prioritization techniques help in deciding which tasks or features to tackle first based on various factors like impact, effort, or urgency. Here’s a quick rundown of some common techniques:

1. **Eisenhower Matrix**: This divides tasks into four categories—urgent and important, important but not urgent, urgent but not important, and neither urgent nor important. It helps in focusing on what’s truly significant.
2. **MoSCoW Method**: This technique categorizes tasks into four groups—Must have, Should have, Could have, and Won't have this time. It helps in distinguishing between essential features and those that are nice to have.
3. **Weighted Scoring**: This method assigns weights to different criteria (like cost, benefit, risk) and scores each task or feature accordingly. It helps in evaluating options quantitatively.
4. **Kano Model**: This technique evaluates features based on how they impact customer satisfaction, dividing them into basic needs, performance needs, and excitement needs.
5. **Value vs. Effort Matrix**: This matrix plots tasks on a graph with value on one axis and effort on the other. It helps in identifying high-value, low-effort tasks that should be prioritized.

**Minimum Viable Product (MVP)** refers to a version of a new product that includes only the core features necessary to solve the core problem for early adopters. The goal is to release a product quickly, gather user feedback, and iterate based on that feedback to improve the product. The MVP approach helps in validating ideas with minimal resources and reducing the risk of building something that users don’t want.

**QUES 16)** **Difference between Business Analyst n Product Owner.**

**ANS)** While both Business Analysts and Product Owners play crucial roles in the development of products, their responsibilities and focus areas differ:

**Business Analyst**

**Focus**: Understanding and documenting business needs and requirements.

**Responsibilities**:

* **Requirements Gathering**: Collecting and documenting detailed business requirements from stakeholders.
* **Analysis**: Analyzing business processes, workflows, and systems to identify areas for improvement.
* **Documentation**: Creating detailed functional and technical specifications, use cases, and process maps.
* **Communication**: Acting as a liaison between stakeholders and the development team to ensure requirements are clearly understood.
* **Validation**: Ensuring the final product meets the business requirements and objectives.

**Skills**: Strong analytical skills, proficiency in documenting requirements, excellent communication and interpersonal skills, and understanding of business processes.

**Product Owner**

**Focus**: Maximizing the value of the product and managing the product backlog.

**Responsibilities**:

* **Vision and Strategy**: Defining and communicating the product vision, strategy, and roadmap.
* **Backlog Management**: Creating, prioritizing, and maintaining the product backlog, ensuring that the development team is working on the most valuable features.
* **Stakeholder Engagement**: Engaging with stakeholders to gather feedback and ensure their needs are being addressed in the product.
* **Decision Making**: Making decisions about feature scope, trade-offs, and priorities based on business value and user needs.
* **Acceptance Criteria**: Defining and accepting or rejecting work based on the acceptance criteria.

**Skills**: Strong understanding of the product and market, strategic thinking, decision-making skills, and ability to prioritize and manage a product backlog effectively.

Hence, a Business Analyst focuses on understanding and documenting business needs and processes, while a Product Owner focuses on delivering value through managing the product backlog and making strategic decisions about the product.

**QUES 17)** **Prepare a sample Resume of 3yrs exp Product Owner.**

**ANS)**

**Jenny Rogers**  
[Email Address] | [Phone Number] | [LinkedIn Profile] | [Portfolio/Website]

**Professional Summary**

Experienced Product Owner with 3 years in the food delivery app industry, driving the development and optimization of customer-centric products. Skilled in managing the end-to-end product lifecycle, from ideation to launch, with a focus on enhancing user experience, increasing engagement, and improving operational efficiency. Proven ability to align product strategy with business goals and market demands.

**Professional Experience**

**Product Owner**  
Delish Deliveries, PUNE, INDIA  
June 2021 – Present

* Led the development and launch of a new in-app feature that personalized user recommendations, resulting in a 25% increase in order frequency and a 15% boost in average order value.
* Managed a backlog of 100+ features and improvements, prioritizing tasks based on customer feedback, business value, and competitive analysis.
* Collaborated closely with UX/UI designers, engineers, and data scientists to develop features that enhanced user experience, such as real-time order tracking and push notifications for promotions.
* Conducted extensive user research and data analysis to identify pain points and opportunities for feature enhancements, leading to a 20% reduction in cart abandonment rates.
* Facilitated Agile ceremonies including sprint planning, daily stand-ups, and retrospectives, ensuring continuous delivery of high-quality features.

**Associate Product Owner**  
FastBite Technologies, PUNE, INDIA  
July 2019 – May 2021

* Assisted in the successful rollout of a loyalty program within the app, driving a 30% increase in repeat customer orders within the first six months.
* Supported the Product Owner in maintaining the product backlog and defining sprint goals, ensuring that the development team delivered features that met business objectives.
* Coordinated cross-functional teams, including marketing and customer support, to ensure smooth product launches and cohesive communication strategies.
* Analyzed customer behavior and feedback to optimize the user interface and improve the overall customer journey, contributing to a 15% increase in user retention.
* Played a key role in the introduction of an AI-powered delivery time prediction feature, enhancing customer satisfaction and reducing delivery-related inquiries by 10%.

**Education**

**Bachelor of Business Administration**  
*University of PUNE, INDIA*  
*Graduated: May 2019*

**Skills**

* **Product Management**: Product backlog management, roadmap planning, user story creation
* **Agile Methodologies**: Scrum, Kanban, sprint planning
* **Stakeholder Management**: Requirement gathering, stakeholder communication, feedback integration
* **Analytical Skills**: Data analysis, user research, A/B testing
* **Technical Skills**: JIRA, MS VISIO, Microsoft Office Suite, AXURE, BALSAMIQ, Confluence

**Certifications**

* **Certified Scrum Product Owner (CSPO)**, Scrum Alliance, 2021
* **Agile Certified Practitioner (PMI-ACP)**, Project Management Institute, 2022

**Projects**

* **Personalized Recommendation Engine**: Spearheaded the development of a personalized recommendation feature that increased order frequency and average order value.
* **Loyalty Program Launch**: Contributed to the successful launch of a loyalty program, significantly boosting repeat orders and customer retention.

**Professional Affiliations**

* Member, Scrum Alliance
* Member, Product Management Association