**CAPSTONE PROJECT – 2**

1. **Write Agile Manifesto**

The Agile Manifesto is a foundational document for agile software development. The manifesto outlines four core values and twelve principles that prioritize flexibility, collaboration, and customer satisfaction in software development.

Four Main Values:

* Individuals and interactions over processes and tools
* Working software over comprehensive documentation
* Customer collaboration over contract negotiation
* Responding to change over following a plan

Twelve Principles of Agile Software:

* Satisfy the customer through early and continuous delivery of valuable software.
* Welcome changing requirements, even late in development. Agile processes harness change for the customer’s competitive advantage.
* Deliver working software frequently, from a couple of weeks to couple of months, with a preference to shorter timescale.
* Business people and developers must work together daily throughout the project.
* Build projects around motivated individuals. Give them the environment and support they need and trust them to get the job done.
* The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
* Working software is the primary measure of progress.
* Agile processes promote sustainable development. The sponsors,developers, and users should be able to maintain a constant pace indefinitely.
* Continuous attention to technical excellence and good design enhances agility.
* Simplicity--the art of maximizing the amount of work not done--is essential.
* The best architectures, requirements and design emerge from self-organizing teams.
* At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

1. **Write minimum 40 user stories and their acceptance criteria along with BV and CP**

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| 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:02 | | |
| ACCEPTANCE CRITERIA  Registration Screen  Text boxes for User name,password,Mobile No, Email Address, Phone number.  Click on Register Button.  Send Successful notification to user | | | | |

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| User Story No: 2 | Tasks : 3 | | Priority: Highest |
| As a Customer  I want to search for restaurants  so that I can view their menus | | | |
| BV:400 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Search bar with filters (cuisine, rating, distance). Display a list of restaurants with their names, ratings and delivery time. Click on a restaurant to view its menu | | | | |

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| User Story No: 3 | Tasks : 3 | | Priority: Highest |
| As a Restaurant  I want to register in Scrum Foods  so that I can receive orders | | | |
| BV:450 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Register screen with text boxes for Restaurant name, address, contact info and license details. Click on register button. Send a successful notification to the restaurant | | | | |

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| User Story No: 4 | Tasks : 3 | | Priority: Med |
| As a Customer  I want to track my order in real-time  so that I know its status | | | |
| BV:300 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Display a map with delivery boy’s live location and estimated delivery time. Provide status updates (Preparing, Out for delivery, Delivered) | | | | |

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| User Story No: 5 | Tasks : 2 | | Priority: High |
| As a Delivery boy  I want to view available orders  so that I can accept them | | | |
| BV:350 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Display a list of available orders with details (restaurant name, delivery address, and payment). Click on an order to accept it. | | | | |

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| User Story No: 6 | Tasks : 3 | | Priority: Med |
| As a Customer  I want to pay for my order using multiple payment options | | | |
| BV:300 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Provide payment options (Credit card, debit card, UPI, COD). Display a confirmation screen after successful payment | | | | |

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| User Story No: 7 | Tasks : 2 | | Priority: High |
| As a Restaurant  I want to view incoming orders  so that I can prepare them | | | |
| BV:400 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Display a list of incoming orders with details (Customer name, items and delivery address). Click on an order to make it “preparing”. | | | | |

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| User Story No: 8 | Tasks : 3 | | Priority: Med |
| As a Delivery boy  I want to update order status  so that customers are informed | | | |
| BV:250 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Provide options to update status (Order picked, Out for Delivery, Delivered). Notify the customer after each status update | | | | |

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| User Story No: 9 | Tasks : 2 | | Priority: High |
| As a Customer  I want to cancel my order  so that I can avoid unwanted changes | | | |
| BV:300 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Provide a “Cancel order” button before the order is out for delivery. Display a confirmation screen and notify the restaurant and delivery boy | | | | |

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| User Story No: 10 | Tasks : 3 | | Priority:Med |
| As a Regional admin,  I want to manage delivery boys  so that I can ensure efficiency | | | |
| BV:350 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Display a list of delivery boys with their details (name, contact, and performance metrics). Provide options to add, remove, or update delivery boys. | | | | |

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| User Story No: 11 | Tasks : 2 | | Priority: High |
| As a Customer  I want to provide feedback  so that I can share my experience | | | |
| BV:200 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Provide a feedback form with rating options (1-5 stars) and a comment box. Display a confirmation message after submission. | | | | |

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| User Story No: 12 | Tasks : 3 | | Priority: Med |
| As a Restaurant,  I want to view feedback  so that I can improve my service. | | | |
| BV:250 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Display a list of customer feedback with ratings and comments. Provide an option to respond to feedback. | | | | |

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| User Story No: 13 | Tasks : 2 | | Priority: High |
| As a Delivery Boy,  I want to view my earnings  so that I can track my income. | | | |
| BV:300 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Display a summary of earnings (daily, weekly, monthly) and a detailed breakdown of each delivery. | | | | |

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| User Story No: 14 | Tasks : 3 | | Priority: Med |
| As a Regional Admin,  I want to view regional revenue  so that I can analyze performance. | | | |
| BV:350 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Display a dashboard with revenue metrics (total revenue, restaurant-wise revenue, and delivery boy-wise revenue). Provide export options for reports. | | | | |

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| User Story No: 15 | Tasks : 2 | | Priority: High |
| As a Customer,  I want to log in  so that I can access my account. | | | |
| BV:200 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Provide a login screen with text boxes for email/phone and password. Display an error message for invalid credentials. Redirect to the home page after successful login. | | | | |

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| User Story No: 16 | Tasks : 3 | | Priority: Med |
| As a Restaurant,  I want to update my menu  that customers see the latest items. | | | |
| BV:300 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Provide an option to add, remove, or update menu items. Display a confirmation message after changes are saved. | | | | |

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| User Story No: 17 | Tasks : 2 | | Priority: High |
| As a Delivery Boy,  I want to raise issues  so that I can resolve problems. | | | |
| BV:250 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Provide an option to raise issues (e.g., order not ready, customer unavailable). Notify the regional admin and display a confirmation message. | | | | |

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| User Story No: 18 | Tasks : 3 | | Priority: Med |
| As a Regional Admin,  I want to manage restaurants  so that I can ensure quality. | | | |
| BV:300 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Display a list of restaurants with their details (name, address, and ratings). Provide options to approve, reject, or suspend restaurants. | | | | |

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| User Story No: 19 | Tasks : 2 | | Priority: High |
| As a Customer,  I want to view my order history  so that I can reorder easily. | | | |
| BV:250 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Display a list of past orders with details (restaurant name, items, and date). Provide an option to reorder. | | | | |

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| User Story No: 20 | Tasks : 3 | | Priority: Med |
| As a Business Owner,  I want to view reports  so that I can make informed decisions. | | | |
| BV:400 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Display a dashboard with key metrics (revenue, customer growth, and order volume). Provide export options for detailed reports. | | | | |

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| User Story No: 21 | Tasks : 2 | | Priority: High |
| As a Customer,  I want to log out  so that I can secure my account. | | | |
| BV:100 | | CP:01 | | |
| ACCEPTANCE CRITERIA  Provide a logout button on the home screen. Display a confirmation message and redirect to the login page. | | | | |

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| User Story No: 22 | Tasks : 3 | | Priority: Med |
| As a Delivery Boy,  I want to view my delivery history  so that I can track my performance. | | | |
| BV:250 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Display a list of completed deliveries with details (customer name, address, and earnings). Provide options to filter by date or earnings. | | | | |

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| User Story No: 23 | Tasks : 2 | | Priority: High |
| As a Restaurant,  I want to verify delivery boys  so that I can ensure order safety. | | | |
| BV:300 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Display a list of delivery boys assigned to orders. Provide an option to verify their identity before handing over the order. | | | | |

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| User Story No: 24 | Tasks : 3 | | Priority: Med |
| As a Regional Admin,  I want to handle refunds  so that I can resolve customer issues. | | | |
| BV:350 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Display a list of refund requests with details (order ID, customer name, and reason). Provide options to approve or reject refunds. | | | | |

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| User Story No: 25 | Tasks : 2 | | Priority: High |
| As a Customer,  I want to rate my experience  so that I can share my satisfaction. | | | |
| BV:200 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Provide a rating screen after order delivery with options(1-5 stars) and a comment box. Display a confirmation message after submission. | | | | |

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| User Story No: 26 | Tasks : 3 | | Priority: Med |
| As a Restaurant,  I want to view revenue generated  so that I can track my earnings. | | | |
| BV:300 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Display a summary of earnings (daily, weekly, monthly) and a detailed breakdown of each order. Provide export options for reports. | | | | |

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| User Story No: 27 | Tasks : 2 | | Priority: High |
| As a Delivery Boy,  I want to update my availability  so that I can manage my schedule | | | |
| BV:250 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Provide a toggle button to mark availability (Online/Offline). Notify the system and update the delivery boy's status. | | | | |

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| User Story No: 28 | Tasks : 3 | | Priority: Med |
| As a Regional Admin,  I want to view customer feedback  so that I can improve services. | | | |
| BV:300 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Display a list of customer feedback with ratings and comments. Provide options to filter by restaurant or delivery boy. | | | | |

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| User Story No: 29 | Tasks : 2 | | Priority: High |
| As a Customer,  I want to view restaurant ratings  so that I can choose the best option. | | | |
| BV:250 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Display restaurant ratings (out of 5 stars) alongside their names in the search results. Provide an option to sort restaurants by rating. | | | | |

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| User Story No: 30 | Tasks : 3 | | Priority: Med |
| As a Business Owner,  I want to update payments  so that I can manage finances. | | | |
| BV:400 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Display a list of pending payments for restaurants and delivery boys. Provide options to mark payments as completed. | | | | |

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| User Story No: 31 | Tasks : 2 | | Priority: High |
| As a Delivery Boy,  I want to view my profile  so that I can update my details. | | | |
| BV:200 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Display profile details (name, contact, and earnings). Provide an option to edit and save changes. | | | | |

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| User Story No: 32 | Tasks : 3 | | Priority: High |
| As a Restaurant,  I want to raise issues  so that I can resolve problems. | | | |
| BV:250 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Provide an option to raise issues (e.g., delivery boy delay, payment issues). Notify the regional admin and display a confirmation message. | | | | |

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| User Story No: 33 | Tasks : 2 | | Priority: High |
| As a Customer,  I want to view order details  so that I can verify my purchase. | | | |
| BV:200 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Display order details (restaurant name, items, price, and delivery address). Provide an option to download the invoice. | | | | |

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| User Story No: 34 | Tasks : 3 | | Priority: Med |
| As a Regional Admin,  I want to manage customer accounts  so that I can ensure security. | | | |
| BV:300 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Display a list of customer accounts with details (name, contact, and order history). Provide options to suspend or reactivate accounts. | | | | |

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| User Story No: 35 | Tasks : 2 | | Priority: High |
| As a Delivery Boy,  I want to view my performance metrics  so that I can improve. | | | |
| BV:250 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Display performance metrics (on-time deliveries, customer ratings, and earnings). Provide tips for improvement. | | | | |

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| User Story No: 36 | Tasks : 3 | | Priority: Med |
| As a Restaurant,  I want to manage my profile  so that I can update my information. | | | |
| BV:300 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Display profile details (name, address, and menu). Provide options to edit and save changes. | | | | |

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| User Story No: 37 | Tasks : 2 | | Priority: High |
| As a Customer,  I want to receive notifications  so that I am informed about my order. | | | |
| BV:200 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Send notifications for order confirmation, status updates, and delivery completion. Provide an option to mute notifications. | | | | |

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| User Story No: 38 | Tasks : 3 | | Priority: Med |
| As a Regional Admin,  I want to manage issues  so that I can ensure smooth operations. | | | |
| BV:350 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Display a list of issues raised by customers, restaurants, and delivery boys. Provide options to resolve or escalate issues. | | | | |

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| User Story No: 39 | Tasks : 2 | | Priority: High |
| As a Business Owner,  I want to view business opportunities  so that I can expand | | | |
| BV:400 | | CP:02 | | |
| ACCEPTANCE CRITERIA  Display a dashboard with potential business opportunities (new regions, partnerships, and trends). Provide options to explore further. | | | | |

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| User Story No: 40 | Tasks : 3 | | Priority: Med |
| As a Customer,  I want to use the app 24/7  so that I can order food anytime. | | | |
| BV:300 | | CP:03 | | |
| ACCEPTANCE CRITERIA  Ensure the app is functional 24/7 with no downtime. Provide a maintenance notification in case of scheduled updates. | | | | |

1. **What is epic? Write 2 epics.**

 Epic is a large body of work that can be broken down into smaller tasks called user stories. Epics typically span multiple sprints and are used to group related user stories under a common theme or goal. The 2 epics for given case study are:

Epic 1: **Seamless Customer Experience**

Goal: To provide customers with a seamless and satisfying experience from searching for restaurants to receiving their food delivery.

Description: This epic focuses on ensuring that customers can easily find, order, and track their food deliveries with minimal friction. It includes features like real-time tracking, secure payments, and feedback mechanisms to enhance customer satisfaction.

User stories under this epic:

* As a customer, I want to search for restaurants by location and cuisine so that I can find the food I want quickly.
* As a customer, I want to view detailed menus and restaurant ratings so that I can make an informed decision.
* As a customer, I want to track my order in real-time so that I know when my food will arrive.
* As a customer, I want to provide feedback and ratings after delivery so that I can share my experience.
* As a customer, I want to cancel my order within a specific time frame so that I can avoid charges if I change my mind.

Epic 2: **Efficient Delivery Operations**

Goal: To streamline the delivery process for delivery boys and ensure timely and accurate food delivery.

Description: This epic focuses on optimizing the delivery process, from order assignment to delivery completion. It includes features like order acceptance, status updates, and payment handling for delivery boys.

User stories under this epic:

* As a delivery boy, I want to view available orders near me so that I can accept the most convenient ones.
* As a delivery boy, I want to update the status of an order (picked up, in transit, delivered) so that customers and restaurants are informed.
* As a delivery boy, I want to receive payment for cash-on-delivery orders so that I can complete the transaction.
* As a delivery boy, I want to view my delivery history and earnings so that I can track my performance.
* As a delivery boy, I want to raise issues (e.g., wrong address, restaurant delay) so that I can resolve problems quickly.

1. **What is the difference between BV and CP**

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| **Business Value** | **Complexity Points** |
| Business Value refers to the benefits and advantages that a feature or functionality provides to customers, businesses, or stakeholders. | Complexity refers to the difficulty and effort required to implement, maintain, and scale a feature or functionality. |
| Focuses on customer satisfaction, revenue generation, market positioning, and brand reputation. | Focuses on technical challenges, resource allocation, dependencies, and system performance. |
| Measured in terms of increased customer base, revenue, brand loyalty, user engagement, and competitive advantage. | Measured in terms of development effort, technical feasibility, security concerns, scalability, and system dependencies. |
| - 24/7 availability increases customer trust.  - Real-time tracking enhances user experience.  - Reliable services improve brand image. | - Implementing real-time tracking requires GPS integration, data synchronization, and API management.  - 24/7 availability needs high server uptime, load balancing, and failover mechanisms. |
| High BV features are prioritized for development because they directly contribute to business success and customer satisfaction. | High complexity features require careful planning, resource management, and technical expertise to ensure feasibility. |

1. **Explain about Sprint**

A Sprint is a time-boxed iteration in the Scrum framework, typically lasting between one to four weeks, during which a development team works on a predefined set of tasks to achieve a specific goal. It is a fundamental unit in Agile development, ensuring incremental delivery of the product.

Key Features of a Sprint:

* Fixed Duration: Usually 1-4 weeks, with 2 weeks being the most common.
* Defined Goals: A Sprint begins with a Sprint Planning meeting where the team selects user stories from the Product Backlog.
* Continuous Development: Work is done in an iterative manner, ensuring frequent feedback and improvements.
* Team Collaboration: Developers, testers, and stakeholders work together to deliver value.

Benefits of Sprints:

* Faster delivery of features.
* Continuous feedback and improvements.
* Better collaboration among team members.
* Higher flexibility and adaptability to changes.

1. **Explain Product backlog and sprint back log**

The Product Backlog is a prioritized list of all features, enhancements, bug fixes, technical work, and knowledge acquisition required for a product. It serves as the single source oftruth for what needs to be built.

Key Characteristics

* Owned by the Product Owner.
* Items are listed in priority order, with the most valuable or urgent items at the top.
* Continuously refined and updated based on business needs, user feedback, and market changes.
* Contains all types of work: features, technical debt, bug fixes, etc.

Examples of Product Backlog items

* User authentication system
* Payment gateway integration
* Improve page load performance
* Fix login page error

The Sprint Backlog is a subset of the Product Backlog that contains the tasks the Scrum Team commits to completing in a single Sprint. It consists of:

* Selected Product Backlog Items (PBIs) that will be developed in the sprint.
* Tasks required to complete those PBIs.

Key Characteristics:

* Owned by the Development Team.
* Created during Sprint Planning.
* Items in the Sprint Backlog are not changed during the sprint unless absolutely necessary.
* Provides transparency on what the team is working on.
* Updated daily during the Daily Scrum.

Example of Sprint Backlog Items:

* Create login UI design
* Implement authentication API
* Set up database for user credentials
* Write unit tests for authentication
* Conduct security testing

1. **What is impediments log? write 2 impediments**

An Impediments Log is a document or tool used in Agile and Scrum to track obstacles that prevent the team from progressing efficiently. These impediments can be technical, organizational, or process-related, and they need to be resolved to maintain smooth workflow and productivity.

Example Impediments: 1. Lack of Access to Production Environment

Description: The DevOps team is unable to deploy new changes because they lack necessary access permissions to the production environment.

Impact: Delays in releases and increased downtime for resolving issues.

Resolution Needed: Grant necessary access or involve higher management for expedited approvals.

Ex: 2 Slow Build and Deployment Pipeline

Description: CI/CD pipeline is taking over 30 minutes to build and deploy, slowing down the development and release process.

Impact: Reduced deployment frequency and increased feedback loop time.

Resolution Needed: Optimize build steps, parallelize jobs, or upgrade infrastructure.

1. **Explain Velocity of the Team**

Velocity is a key metric used in Agile development to measure the amount of work a team completes in a given sprint. It is usually expressed in terms of Completed Story Points (CP**)** orCompleted User Stories**.**

Velocity is calculated by summing up the number of completed story points (CP) at the end of a sprint.

For example:

* **Sprint 1:** 30 CP completed
* **Sprint 2:** 25 CP completed
* **Sprint 3:** 28 CP completed

**Average Velocity:** 30+25+28/3=27.6 per sprint

1. **Explain about Product Grooming**

Product grooming, also known as backlog grooming or refinement, is an ongoing process in Agile and Scrum methodologies where the product team reviews, prioritizes, and refines the product backlog. This helps ensure that backlog items (user stories, tasks, or features) are well-defined, estimated, and ready for upcoming sprints.

Product Owner: Leads the grooming session and ensures backlog items align with business needs.

Scrum Master: Facilitates the session and ensures Agile best practices are followed.

Development Team: Provides technical insights, estimates, and feasibility assessments.

Product grooming is essential for maintaining a well-organized and actionable backlog, ensuring that development teams work efficiently and deliver high-quality features aligned with business goals. By refining backlog items continuously, teams can avoid bottlenecks and improve sprint execution.

1. **Explain the roles of Scrum Master and Product Owner**

The Scrum Master is responsible for facilitating the Scrum process, ensuring that the team follows Agile principles and removes obstacles that hinder progress.

Key responsibilities:

* Coach & Guide – Educates the team on Scrum principles and Agile best practices.
* Facilitate Scrum Events – Ensures that Sprint Planning, Daily Stand-ups, Sprint Reviews, and Retrospectives run efficiently.
* Remove Impediments – Identifies and eliminates roadblocks that slow down development.
* Promote Team Collaboration – Encourages open communication and fosters a culture of continuous improvement.
* Shield the Team – Protects the team from external distractions and unnecessary interruptions.
* Work with Stakeholders – Helps the Product Owner and stakeholders understand Agile practices.

The Product Owner represents the customer and business interests, ensuring that the team delivers maximum value.

Key Responsibilities:

* Define Product Vision – Sets the long-term goal and strategy for the product.
* Manage the Product Backlog – Creates, prioritizes, and refines backlog items based on business value.
* Stakeholder Communication – Acts as a bridge between business stakeholders and the development team.
* Clarify Requirements – Ensures the development team understands the business needs behind user stories.
* Approve Work – Reviews completed work and ensures it meets business requirements before release.
* Maximize Value – Ensures the team delivers the most valuable features in each sprint.

1. **Explain all Meetings Conducted in Scrum Project**

In a Scrum project, there are five key meetings (or events) that facilitate collaboration, transparency, and continuous improvement.

1. **Sprint Planning**

When? At the beginning of each sprint

Duration: Up to 4 hours for a 2-week sprint

Participants: Scrum Team (Developers, Scrum Master, Product Owner)

Purpose:

Define the work to be done in the sprint.

Developers select items from the Product Backlog and create a Sprint Backlog.

Establish a Sprint Goal that aligns with the product vision.

Key Outputs:

Sprint Backlog (list of selected Product Backlog Items)

Sprint Goal (a guiding objective for the sprint)

1. **Daily Scrum (Standup)**

When? Every day of the sprint

Duration: 15 minutes

Participants: Developers (Scrum Master & Product Owner may attend but do not lead)

Purpose:

Synchronize work and discuss progress.

Identify blockers or impediments.

Adjust plans if necessary to stay on track.

Outputs:

Clear understanding of team progress

Identified blockers for immediate resolution

1. **Sprint Review**

When? At the end of each sprint

Duration: Up to 2 hours for a 2-week sprint

Participants: Scrum Team + Stakeholders

Purpose:

Demonstrate the work completed in the sprint.

Gather feedback from stakeholders.

Adjust the Product Backlog based on feedback.

Key Outputs:

Stakeholder feedback for future improvements

Updated Product Backlog

1. **Sprint Retrospective**

When? After the Sprint Review, before the next Sprint Planning

Duration: 1–1.5 hours for a 2-week sprint

Participants: Scrum Team

Purpose:

Reflect on the past sprint and discuss what went well, what didn’t, and what can be improved.

Identify actionable improvements for the next sprint.

Key Outputs:

List of improvements for team efficiency

Action items to improve collaboration and delivery

1. **Backlog Refinement (Grooming)**

When? Ongoing (often a weekly meeting)

Duration: 1–2 hours per session

Participants**:** Product Owner, Developers, Scrum Master

Purpose:

Keep the Product Backlog updated and prioritized.

Break down large items into smaller user stories.

Ensure backlog items are clear, feasible, and ready for future sprints.

Key Outputs:

Well-defined and prioritized backlog

Stories estimated and ready for development

1. **Explain Sprint Size and Scrum Size**

Sprint Size refers to the total amount of work that a development team commits to completing within a sprint. It is determined based on factors like team velocity, capacity, and complexity of work.

Key factors in Sprint Size:

* Team Velocity: The average amount of work completed in past sprints (measured in story points or hours).
* Sprint Duration: Typically 1 to 4 weeks.
* Team Capacity: Availability of team members considering leaves, meetings, and other commitments.
* Work Complexity: Size and difficulty of the backlog items.

Scrum Size generally refers to the **size of a Scrum team** or the estimated effort required for user stories in a Scrum project. It can be interpreted in two ways:

* Scrum teams are typically **small and cross-functional** to maintain agility.
* Recommended **Scrum team size** (as per Scrum Guide): **10 or fewer members**, including
* 1 Scrum Master
* 1 Product Owner
* 3-8 Developers
* User stories in Scrum are sized using estimation techniques such as
* Story Points (relative estimation based on effort and complexity).
* Ideal Days (time-based estimation).

1. **Explain DOR and DOD**

DOR (Definition of Ready) :

The Definition of Ready is a set of criteria that a product backlog item (PBI) or user story must meet before the team can begin work on it. It ensures that the story is sufficiently clear, well-defined, and actionable, reducing ambiguity and increasing the likelihood of a successful implementation.

Key points in DOR include:

* Clear Acceptance Criteria: The story must have clear and well-defined acceptance criteria.
* Dependencies Identified**:** Any dependencies must be identified and accounted for.
* Testable: The work must be testable (i.e., the team can validate when the story is complete).
* Estimable: The story must be small enough to be estimated (typically using story points or other estimation techniques).
* No Blockers: There should be no unresolved blockers preventing work from starting.

DOD (Definition of Done):

The Definition of Done is a set of criteria that describes when a product backlog item (PBI), feature, or user story is considered fully complete. It ensures that the work delivered is of high quality, meets the expectations, and is potentially releasable.

Key points in DOD include:

* Code Complete: All coding tasks are finished and peer-reviewed.
* Unit Tests Written: All necessary unit tests are written and pass.
* Functional Tests Passed: All tests related to the functionality have been executed successfully.
* No Critical Bugs: No critical or high-severity bugs exist in the system.
* Integrated with Main Codebase: The feature or story is integrated into the main branch without breaking any existing functionality.
* Documentation Updated**:** Any required documentation has been updated (e.g., API docs, release notes).
* Ready for Deployment: The feature is ready to be deployed to production.

1. **Explain Prioritization Techniques and MVP**

Prioritization Techniques are strategies to help determine which tasks, features, or projects should be tackled first, based on various criteria like value, urgency, or complexity. There are 2 types of prioritization techniques.

MOSCOW Technique:

It is a prioritizing technique which is used in business analysis and software development to reach a common understanding with stakeholders on the importance of each requirement.

* Must have: Critical requirements.
* Should have: Important but not urgent.
* Could have: Nice-to-have features.
* Won't have: Not needed for the current phase.

100$ Test:

It is a prioritization technique used in product management and business strategy to allocate hypothetical dollars to different features, initiatives, or aspects of a product based on their perceived importance or impact. This helps in understanding priorities, resource allocation, and focusing on the most valuable areas.

How It Works:

* List Ideas or Features – Identify the different options or features you want to evaluate.
* Distribute $100 – Each participant or team member is given $100 to allocate across the different options based on perceived value or importance.
* Sum Up the Votes – The total amount assigned to each idea is calculated, showing which features or initiatives are most valued.
* Prioritize Development – The top-rated ideas should be considered first for development or improvement.

Minimum Viable Product:

An MVP (Minimum Viable Product) is the simplest version of a product that allows a business to test key assumptions, gather user feedback, and validate the product idea before investing in full-scale development.

Characteristics of an MVP:

* Core Functionality – It includes only the most essential features needed to solve a problem.
* Quick Development – It is built and released as quickly as possible.
* Feedback-Driven – The goal is to learn from real users and iterate based on feedback.

1. **Difference between Business Analyst n Product Owner**

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| --- | --- | --- |
| **Aspect** | **Business Analyst** | **Product Owner** |
| Primary Focus | Analyzing business needs, processes, and requirements to improve solutions. | Defining and prioritizing product features based on business value. |
| Key Responsibilities | - Elicit and document business requirements.  - Bridge communication between business and technical teams.  - Analyze data and suggest improvements.  - Ensure alignment with business objectives. | - Define product vision and roadmap.  - Prioritize backlog items (user stories, features).  - Work closely with development teams.  - Ensure product delivers maximum value. |
| Stakeholder Interaction | Works with multiple stakeholders (business teams, customers, development teams). | Works mainly with customers, stakeholders, and development teams. |
| Decision making Power | Provides insights and recommendations but does not own final product decisions. | Has the authority to make product decisions and prioritize features. |

|  |  |  |
| --- | --- | --- |
| Agile | Can work in both Agile and non-Agile environments, often supporting a PO. | A key role in Agile frameworks like Scrum, responsible for the Product Backlog. |
| Deliverables | Business Requirement Documents (BRD), Functional Specifications, Process Flows, Data Analysis Reports. | Product Roadmap, Prioritized Backlog, User Stories, Acceptance Criteria. |

1. **Prepare a sample Resume of 3yrs exp Product Owner**

**YOGESH GOWDA**

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**PROFESSIONAL SUMMARY**

Results-driven Product Owner with 3 years of experience in Agile environments, driving product development and aligning business goals with user needs. Adept at backlog management, stakeholder collaboration, and delivering customer-centric solutions. Strong analytical mindset with a passion for continuous improvement and innovation.

**SKILLS**

* Agile & Scrum Methodologies
* Product Roadmap & Strategy
* User Story Creation & Refinement
* Stakeholder Engagement
* Market Research & Competitive Analysis
* Data-Driven Decision Making
* Cross-Functional Team Leadership
* Wireframing & Prototyping

**PROFESSIONAL EXPERIENCE**

**Product Owner**

**ABC Tech Solutions | City, State | Jan 2022 – Present**

* Defined and executed product roadmap, aligning business objectives with customer needs.
* Worked closely with cross-functional teams (engineering, UX, marketing) to deliver high-impact features.
* Managed and refined product backlog, ensuring timely delivery of key milestones.
* Facilitated Agile ceremonies, including sprint planning, daily stand-ups, and retrospectives.
* Analyzed user feedback, KPIs, and market trends to inform product decisions
* Collaborated with stakeholders to set priorities and balance trade-offs between business and technical needs.

**Associate Product Owner**

**XYZ Digital Solutions | City, State | Jun 2020 – Dec 2021**

* Assisted in backlog management, prioritizing user stories and feature development.
* Conducted user research and gathered customer feedback to drive improvements.
* Created wireframes, process flows, and detailed requirements for engineering teams.
* Supported Agile development teams, ensuring clear communication and alignment.
* Worked with QA teams to define acceptance criteria and validate product functionality.

**CERTIFICATIONS**

* Certified Scrum Product Owner (CSPO)
* Professional Scrum Product Owner (PSPO)

**PROJECTS & ACHIEVEMENTS**

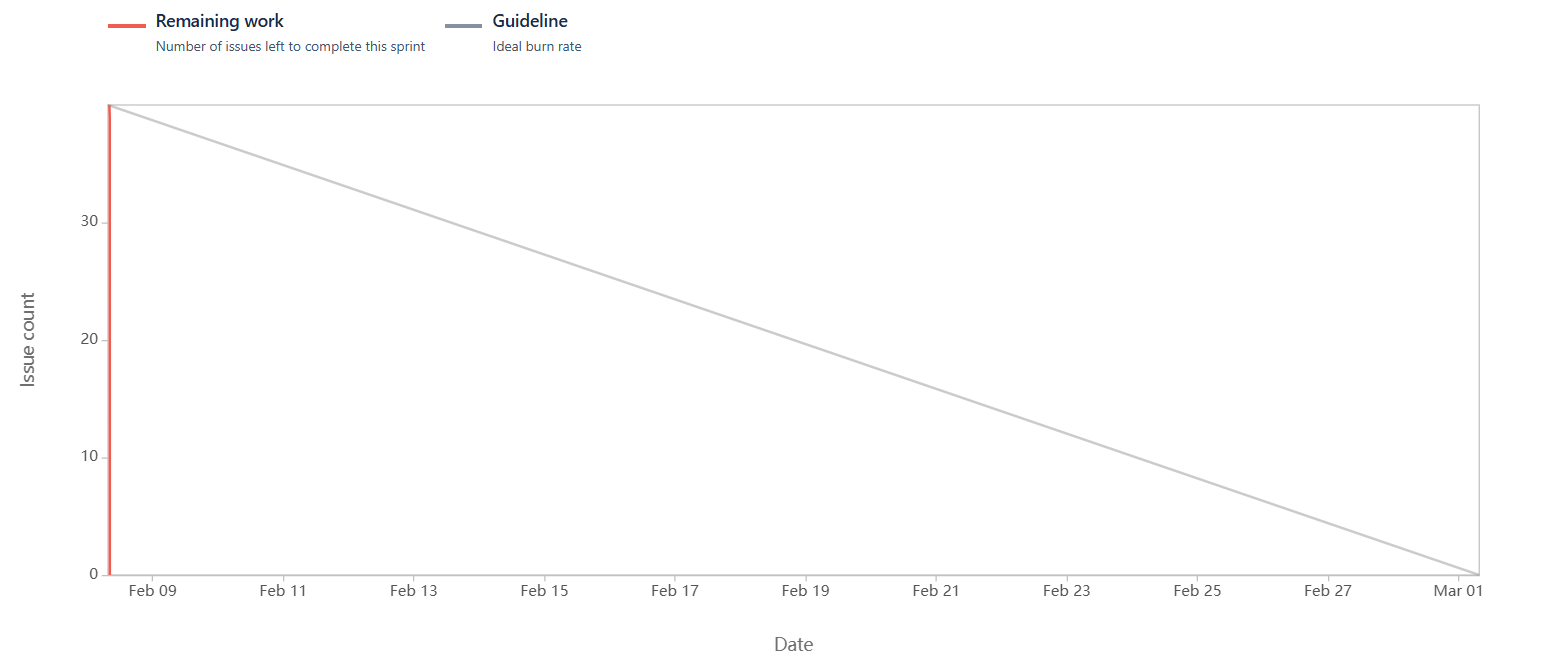
* Led the successful launch of a SaaS-based product, increasing revenue by 20% in the first year.
* Spearheaded an initiative to improve user engagement, leading to a 30% boost in customer retention.
* Optimized backlog grooming process, reducing sprint carryovers by 25%.

1. **Draw Sprint Burn Charts n Product Burn Down Charts**

**Burnup Chart**

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**Burndown Chart**

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