# Question 1 – write Agile Manifesto – 8 Marks

Agile manifesto is basically document that consist of 4 basic values of agile and 12 principles of agile.

## 4 Basic Values of Agile:

### Individuals and interactions over processes and tools

Focus on collaboration, communication, and teamwork rather than rigidly adhering to tools or processes.

### Working software over comprehensive documentation

Prioritize delivering functional software that meets user needs over creating excessive or non-essential documentation.

### Customer collaboration over contract negotiation

Emphasize close collaboration with customers to adapt to changing requirements rather than rigidly following contracts.

### Responding to change over following a plan

Adapt and respond to changes quickly, rather than sticking to a fixed plan.

## 12 Agile principle:

### Customer satisfaction

Deliver valuable software early and continuously to keep customers happy.

### Adoption to change

Welcome changing requirements, even late in development, to provide the customer with a competitive advantage.

### Frequent delivery

Deliver working software regularly, with a preference for shorter timescales.

### Face-to-face communication

The most effective way to convey information within a development team is through face-to-face conversations.

### Measure of work deliver/in progress

The primary measure of progress is working software.

### Self-organized teams

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

### Technical excellence

Continuous attention to technical excellence and good design enhances agility.

### Simple design

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

### Time-bound (iteration cycles)

Agile promotes time-boxed development cycles, ensuring steady delivery and feedback.

### Sustainable progress (same pace)

Agile processes promote sustainable development, where the team maintains a constant, sustainable pace.

### Continuous integration and delivery

Frequent integration ensures early detection of issues and fosters faster feedback cycles.

### Continuous reflection and improvement

At regular intervals, the team reflects on its performance and adjusts its behavior to become more effective.

# Question 2 – User Stories- Acceptance Criteria-BV-CP – 40 Marks

## User Stories

A User Story is a short and simple description of a feature or requirement written from the user's perspective. It tells what the user wants and why. It is an smallest part of epic. A user story usually follows this format:

**Who :** user

**What:** to be able to…

**Why:** to get achieve the business goal

## Acceptance Criteria

acceptance criteria refer to a set of predefined requirements that must be met to mark a user story complete. Acceptance criteria are also sometimes called the “definition of done” because they determine the scope and requirements that must be executed by developers to consider the user story finished.

## Business Value (BV) and Complexity Points (CP)

In Agile project management, Business Value (BV) and Complexity Points (CP) are two key factors that help teams prioritize and estimate user stories effectively. BV is given by the client to show how important a feature is, while CP is estimated by the development team using the Fibonacci series to measure complexity. It helps Agile teams make good decisions about what to build first.

### **Business Value (BV)**

BV represents how important a user story is to the business. It is given by the client or product owner based on how much impact the feature will have on business goals. BV helps prioritize features based on customer needs and market demand. BV can be assigned using numbers (e.g., 1-10, 1-100) or categories (High, Medium, Low).

|  |  |
| --- | --- |
| **User Story** | **Business Value (BV)** |
| "As a farmer, I want to search for pesticides online so that I can find the best one easily." | 10 (High priority) |
| "As a farmer, I want to change my profile picture." | 3 (Low priority) |

### **Complexity Points (CP)**

CP (also called Story Points) represents the effort and difficulty involved in developing a user story. CP helps the team plan their workload and determine how much work they can complete in a sprint.

The development team estimates CP using the Fibonacci series (1, 2, 3, 5, 8, 13, 21, etc.), where:

1, 2 = Very simple tasks

3, 5 = Moderately complex

8, 13, 21+ Very complex with high uncertainty

|  |  |
| --- | --- |
| **User Story** | **Complexity Points (CP)** |
| "As a farmer, I want to search for pesticides online so that I can find the best one easily." | 5 (Moderate effort) |
| "As a farmer, I want to change my profile picture." | 1 (Very easy) |
| "As an admin, I want to generate reports for all sales data of the last 5 years." | 13 (Very complex) |



# Question 3– What is epic? Write 2 epics – 5 Marks

an epic is a large user story or a collection of related user stories that represents a significant feature or functionality. Epics are high-level, often spanning multiple sprints or iterations, and they provide a way to organize and prioritize work in a product backlog.

## Epic 1: Restaurant rating and review

As a user I want view the rating and reviews for the restaurant on food express app, So that I can make informed decision about where to order food from.

As a user, I want to provide rating and review for restaurant on food express, So that I can share my experience with other user.

## Epic 2: Schedule order

As a user I want to schedule food order in advance on food express so that I can plan meals ahead of time and avoid last minutes rush.

As a user I want to have the flexibility to choose specific delivery time slot for schedule order on food express.

# Question 4 –What is the difference between BV and CP

|  |  |
| --- | --- |
| **Business Value (BV)** | **Complexity Points (CP)** |
| BV represents the importance of a user story to the business. It is assigned by the client or product owner. | CP represents the effort and complexity required to develop a user story. It is estimated by the development team. |
| BV assigned by client, Business Owner, or Product Owner | Assigned by development Team (using Fibonacci series) |
| BV helps prioritize user stories based on business impact. | CP helps estimate effort and plan sprint capacity. |
| BV measure on number scale (1-10, 1-100) or categories (High, Medium, Low). | CP Uses Fibonacci series (1, 2, 3, 5, 8, 13, 21…) to estimate complexity. |
| High value of BV means more important to the business. Needs to be delivered sooner. | High value of CP means more difficult to develop. Requires more time and effort. |
| Less value of BV means less important to the business. Can be delayed or skipped. | Less value of CP measn easier to develop. Requires less effort. |

# Question 5 –Explain about Sprint– 5 Marks

A Sprint is a short, time-boxed iteration in Scrum, typically lasting 1 to 4 weeks, where the team works to deliver a usable product increment. Each Sprint has a Defined Goal, ensuring that the work aligns with business priorities. The process begins with Sprint Planning, where the Scrum Team selects tasks from the Product Backlog and defines the Sprint Goal. Throughout the Sprint, the team holds Daily Stand-up Meetings to discuss progress and resolve blockers. Development and Testing happen iteratively to ensure high-quality output. The team follows Incremental Delivery, ensuring each Sprint produces a functional feature. At the end, a Sprint Review is conducted to demonstrate the work to stakeholders, followed by a Sprint Retrospective to identify improvements for future Sprints. Additionally, Backlog Refinement is an ongoing process where the Product Backlog is updated, prioritized, and clarified for upcoming Sprints

1.Time-boxed Duration – A Sprint is a fixed period, usually 1 to 4 weeks (commonly 2 weeks), where a Scrum Team completes a set of prioritized tasks.

2.Defined Goal – Each Sprint has a clear objective that aligns with business needs, ensuring valuable product increments.

3.Sprint Planning – A meeting where the Scrum Team selects work from the Product Backlog, defining the Sprint Goal and tasks.

4️.Daily Stand-up Meetings – A 15-minute daily check-in where team members discuss progress, challenges, and next steps.

5️.Development and Testing – The team works on building, coding, and testing the product to ensure quality before delivery.

6️.Incremental Delivery – At the end of the Sprint, a working product increment is delivered, adding value with each iteration.

7️.Sprint Review and Retrospective – The Sprint Review showcases completed work to stakeholders for feedback, while the Retrospective helps the team reflect on improvements.

8️.Backlog Refinement – Continuous process of updating, prioritizing, and improving the Product Backlog to prepare for future Sprints.

|  |  |  |  |
| --- | --- | --- | --- |
| **PBI (Product Backlog Item)** | **Tasks (Unit of Work)** | **WIP (Work In Progress)** | **Done (Completed Tasks)** |
| PBI 1 | Task 1 | yes | No |
| PBI 1 | Task 2 | yes | No |
| PBI 2 | Task 3 | No | Yes |
| PBI 3 | Task 4 | Yes | No |
| PBI 3 | Task 5 | No | Yes |

# Question 6 – Explain Product backlog and sprint back log– 5 Marks

### **Product backlog**

Document owned by product owner product backlog has a list of all the requirement irrespective of sprints, All the US are mention in product backlog. It is owned by the Product Owner and continuously refined throughout the project lifecycle. It contains high-level requirements (user stories) that evolve based on business needs.

### **Sprint back log**

It is an what you have in the sprint goal. Development team owns the sprint backlog. It is an subset of product back log as here we are only pulling few US for the current sprint. These user stories are moved from the Product Backlog to the Sprint Backlog. The team also considers feedback from the Sprint Retrospective meeting to improve planning.

|  |  |  |
| --- | --- | --- |
| **S. No** | **Product Backlog** | **Sprint Backlog** |
| 1 | Anything needed to accomplish the project vision | Anything needed to fulfill the sprint goal |
| 2 | Product Owner owns | Development team owns |
| 3 | Contains requirements, defects, tasks | A subset of product backlog items defined as a priority by the Product Owner |
| 4 | Everyone contributes to the product backlog | Only the development team contributes to the sprint backlog |
| 5 | Product backlog refinement meeting is to refine the product backlog | Sprint Planning meeting is to refine the sprint backlog items |
| 6 | Product backlog evolves and changes will be done by the PO through the product lifecycle | No changes are allowed to the sprint backlog once the sprint has started |
| 7 | Release burndown metric is used | Sprint burndown metric is used |
| 8 | Estimation is done at a user story level | Estimation is done at the activity or task level |
| 9 | Daily Stand-up meeting does not discuss product backlog items | Daily Stand-up meeting discusses the sprint backlog in accordance with sprint goal |

# Question 7 – What is impediments log? write 2 impediments – 5 Marks

An impediment log is a record used in Scrum, to track any obstacles or issues that hold the team's progress. These impediments could be anything that slows down or prevents the team from completing their work effectively, such as technical challenges, resource limitations, external dependencies, or communication barriers.

|  |  |
| --- | --- |
| **Field** | **Log ID 001** |
| **Description** | Issue with real-time tracking of delivery causing delays in customer updates. |
| **Impact** | Customers are receiving delayed information, leading to dissatisfaction and complaints. |
| **Priority** | High |
| **Assigned To** | Rakesh (Developer) |
| **Status** | In Progress |
| **Action Taken** | Analyzing the tracking API integration. |
| **Resolution** | In progress, expecting resolution with system updates. |

|  |  |
| --- | --- |
| **Field** | **Log ID 002** |
| **Description** | Restaurant menu not updating in the app after changes made in the backend. |
| **Impact** | Customers may see outdated menu items, leading to order mistakes and dissatisfaction. |
| **Priority** | Medium |
| **Assigned To** | Yogender (Developer) |
| **Status** | Pending |
| **Action Taken** | Reviewing backend syncing mechanism with the front-end. |
| **Resolution** | Issue with API, currently under investigation for fix. |

### **Prepare Tasks from PBI**

Below are the PBI and is divided into **2 tasks.**

|  |  |  |
| --- | --- | --- |
| **PBI** | **Task ID** | **Task Description** |
| 1 | T1.1 | Design UI for login page |
| T1.2 | Implement login functionality |
| 2 | T2.1 | Create product catalog page UI |
| T2.2 | Fetch product data from backend API |
| 3 | T3.1 | Design cart page UI |
| T3.2 | Implement add/remove item from cart |
| 4 | T4.1 | Create payment page UI |
| T4.2 | Integrate payment gateway |
| 5 | T5.1 | Create order confirmation page UI |
| T5.2 | Implement order confirmation logic |
| 6 | T6.1 | Create profile page UI |
| T6.2 | Implement update profile functionality |
| 7 | T7.1 | Set up user authentication logic |
| T7.2 | Integrate session management |
| 8 | T8.1 | Design order history page UI |
| T8.2 | Fetch order history data from API |
| 9 | T9.1 | Design feedback page UI |
| T9.2 | Implement feedback submission functionality |
| 10 | T10.1 | Create navigation bar UI |
| T10.2 | Implement navigation logic |

### **Allocate Tasks to Developers**

|  |  |  |
| --- | --- | --- |
| **Task ID** | **Task Description** | **Assigned To** |
| T1.1 | Design UI for login page | Linesh Vegad |
| T1.2 | Implement login functionality | Yogender |
| T2.1 | Create product catalog page UI | Madhuri |
| T2.2 | Fetch product data from backend API | Gowri |
| T3.1 | Design cart page UI | Varun |
| T3.2 | Implement add/remove item from cart | Rajesh |
| T4.1 | Create payment page UI | A. Lakshmikala |
| T4.2 | Integrate payment gateway | Rakesh |
| T5.1 | Create order confirmation page UI | Gowri |
| T5.2 | Implement order confirmation logic | Rajesh |
| T6.1 | Create profile page UI | Yogender |
| T6.2 | Implement update profile functionality | Varun |
| T7.1 | Set up user authentication logic | A. Lakshmikala |
| T7.2 | Integrate session management | Madhuri |
| T8.1 | Design order history page UI | Rakesh |
| T8.2 | Fetch order history data from API | Rajesh |
| T9.1 | Design feedback page UI | Varun |
| T9.2 | Implement feedback submission functionality | Gowri |
| T10.1 | Create navigation bar UI | Yogender |
| T10.2 | Implement navigation logic | Linesh Vegad |

### **Below are the 4 scrum, we will have in this sprint**

#### Scrum 1:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Start Time** | **End Time** | **Duration** |  |  |
| 11:00 AM | 11:15 AM | 15 minutes |  |  |
| **Developer** | **Task Worked On** | **Next Task** | **Challenges/Impediments** | **Expected Completion** |
| Linesh Vegad | T1.1 (Design UI for login page) | T10.1 (Create navigation bar UI) | No challenges | End of today |
| Yogender | T1.2 (Implement login functionality) | T2.1 (Create product catalog page UI) | Minor issue with API integration, now resolved | End of today |
| Gowri | T2.2 (Fetch product data from API) | T3.1 (Design cart page UI) | Backend API took longer than expected | End of tomorrow |
| Madhuri | T3.1 (Design cart page UI) | T4.1 (Create payment page UI) | No challenges | End of tomorrow |
| Varun | T3.2 (Implement add/remove item from cart) | T5.1 (Create order confirmation page UI) | No challenges | End of today |

#### Scrum 2:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Start Time** | **End Time** | **Duration** |  |  |
| 2:00 PM | 2:15 PM | 15 minutes |  |  |
| **Developer** | **Task Worked On** | **Next Task** | **Challenges/Impediments** | **Expected Completion** |
| Rajesh | T4.2 (Integrate payment gateway) | T6.1 (Create profile page UI) | Payment gateway integration was tricky, but resolved | End of tomorrow |
| A. Lakshmikala | T5.2 (Implement order confirmation logic) | T7.1 (Set up user authentication logic) | No challenges | End of today |
| Rakesh | T6.1 (Create profile page UI) | T7.2 (Integrate session management) | Minor design inconsistencies, resolved | End of tomorrow |
| Yogender | T7.1 (Set up user authentication logic) | T8.1 (Design order history page UI) | No challenges | End of today |

#### Scrum 3:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Start Time** | **End Time** | **Duration** |  |  |
| 10:30 AM | 10:45 AM | 15 minutes |  |  |
| **Developer** | **Task Worked On** | **Next Task** | **Challenges/Impediments** | **Expected Completion** |
| Varun | T8.1 (Design order history page UI) | T9.1 (Design feedback page UI) | No challenges | End of today |
| Madhuri | T9.2 (Implement feedback submission functionality) | T10.1 (Create navigation bar UI) | No challenges | End of today |
| Rajesh | T10.2 (Implement navigation logic) | T4.2 (Integrate payment gateway) | Some delay in integrating payment gateway | End of today |

#### Scrum 4:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Start Time** | **End Time** | **Duration** |  |  |
| 3:00 PM | 3:15 PM | 15 minutes |  |  |
| **Developer** | **Task Worked On** | **Next Task** | **Challenges/Impediments** | **Expected Completion** |
| Gowri | T2.2 (Fetch product data from backend API) | T7.2 (Integrate session management) | Minor delay in fetching the product data | End of today |
| Varun | T9.1 (Design feedback page UI) | T5.1 (Create order confirmation page UI) | No challenges | End of today |
| A. Lakshmikala | T7.1 (Set up user authentication logic) | T8.1 (Design order history page UI) | No challenges | End of tomorrow |
| Rajesh | T4.1 (Create payment page UI) | T10.1 (Create navigation bar UI) | No challenges | End of tomorrow |

# Question 8 – Explain Velocity of the Team – 1 Marks

### **Velocity of the team**

Velocity refers to the measure of the amount of work a development team can complete during a sprint.

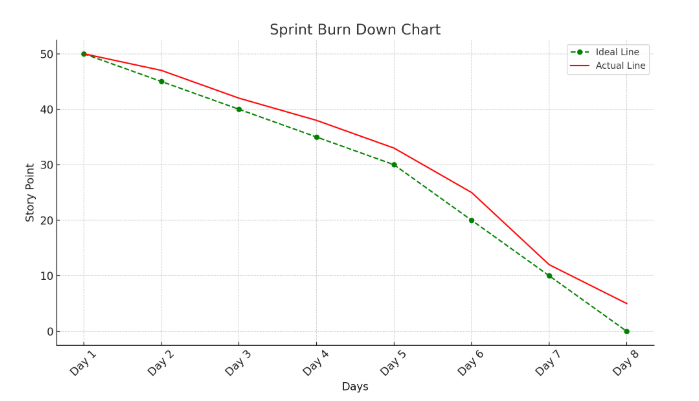
The calculation of velocity is performed by the development team itself, as they are responsible for estimating the effort required to complete each user story or backlog item.

* How is it calculated
* Story Point Estimation
* Tracking Completed Work
* Summing Story Points
* Average Velocity

# Question 9 – Draw Sprint Burn down Charts n Product Burn Down Charts– 3 Marks

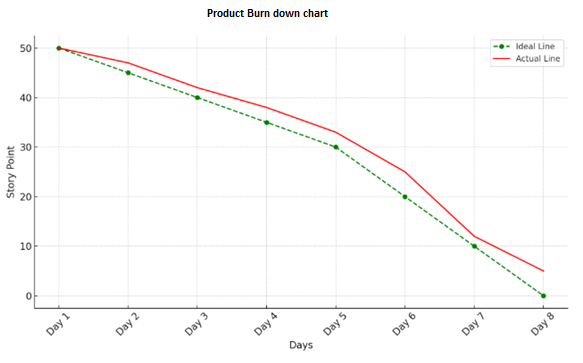
### **Sprint burn down**

A Sprint Burn Down Chart is a graphical representation of the work completed versus the work remaining in a Sprint. It tracks the progress of the team in completing the Sprint tasks, showing how much work is left as time passes. The chart helps the team monitor their progress towards the Sprint Goal and identify if they are on track to complete the tasks by the end of the Sprint.



### **Product Burn Down Chart**

A Product Burn Down Chart is used in Agile Scrum to track the progress of a product's development over time. It visually represents the amount of work remaining in the product backlog against the time remaining for the project.



# Question 10 – Explain about Product Grooming – 2 Marks

Product grooming, also known as backlog grooming or refinement, is an important activity in Agile software development that involves reviewing, prioritizing, and refining items in the product backlog. The goal of product grooming is to ensure that the backlog is well- prepared, organized, and ready for implementation in upcoming sprints. It is typically a collaborative effort involving the product owner, development team, and other relevant stakeholders.

This process typically involves the product owner, scrum master, and development team. During grooming, user stories are clarified, estimated, and prioritized, ensuring that the backlog remains aligned with the product’s goals and is ready for future sprints.

# Question 11 – Explain the roles of Scrum Master and Product Owner – 3 Marks

## Scrum Master

Role: The Scrum Master serves as a facilitator and coach for the Scrum team. They are responsible for ensuring that the team adheres to Scrum principles and practices, removing obstacles (impediments) that hinder the team’s progress, and ensuring smooth communication between the development team and other stakeholders.

## Product Owner

Role: The Product Owner is the voice of the customer and represents the business perspective. They are responsible for creating and managing the product backlog, ensuring the team works on the most valuable items, and making decisions regarding product features and priorities.

|  |  |  |
| --- | --- | --- |
| **Aspect** | **Scrum Master** | **Product Owner** |
| **Nature of Work** | Focuses on facilitating Scrum processes, coaching, and supporting the team. | Focuses on defining and prioritizing the product backlog, ensuring the team works on high-value features. |
| **Responsibilities** | - Facilitates Scrum ceremonies (e.g., Daily Stand-ups, Sprint Planning). | - Defines and manages the product backlog. |
| - Removes impediments. | - Prioritizes backlog items based on business goals. |
| - Coaches the team on Scrum practices. | - Makes decisions on product features and accepts/rejects work. |
| - Works with the organization to promote Scrum adoption. | - Communicates product vision and goals. |
| **Accountability** | Accountable for ensuring Scrum practices are followed and improving the team’s processes. | Accountable for the product’s success and delivering value aligned with business objectives. |
| **Reporting** | - Reports on Scrum process adherence and team performance. | - Reports on product progress, backlog status, and alignment with business goals. |
| - Provides updates on impediments and improvements. | - Provides updates on priorities and stakeholder feedback. |
| **Qualities** | - Strong facilitation skills. | - Strong communication skills. |
| - Problem-solving abilities. | - Decision-making ability. |
| - Coaching mindset. | - Customer and business focus. |
| - Patience and empathy. | - Ability to balance stakeholder needs and team capabilities. |

# Question 12 – Explain all Meetings Conducted in Scrum Project

### **Sprint Planning:**

This meeting occurs at the beginning of each sprint and involves the entire Scrum team. The product owner shares the prioritized product backlog items, and the development team collaborates to select the items they will work on during the sprint. The team also defines the sprint goal and creates a sprint backlog, which outlines the specific tasks required to complete the selected backlog items.

### **Daily Stand-up (Daily Scrum):**

This short daily meeting, typically lasting 15 minutes, involves the development team. Each team member shares their progress since the last stand-up, discusses any impediments or challenges they are facing, and communicates their plan for the day. The focus is on coordination, transparency, and identifying any potential roadblocks.

### **Sprint Review:**

At the end of each sprint, the sprint review meeting takes place. The development team presents the work completed during the sprint to the stakeholders, including the product owner and possibly customers or users. The team demonstrates the functionality or features implemented and gathers feedback. The purpose is to assess progress, gather input, and determine potential adjustments to the product backlog.

### **Sprint Retrospective:**

Immediately following the sprint review, the sprint retrospective occurs. It is a dedicated session for the Scrum team to reflect on the sprint, identify what went well and areas for improvement, and discuss potential adjustments to their processes. The focus is on continuous learning, adaptation, and enhancing team effectiveness.

### **Optional or as-needed meetings in Scrum**

### **Backlog Grooming (Refinement):**

This meeting involves the product owner and development team and focuses on reviewing, refining, and estimating backlog items for upcoming sprints. It ensures that the backlog is well- prepared and ready for implementation.

### **Release Planning:**

This meeting occurs at the start of a project or major release and involves the product owner, development team, and stakeholders. It aims to discuss and plan the high-level scope, timeline, and goals for the project or release.

### **Ad hoc meetings:**

These meetings may be scheduled as needed to address specific topics or issues, such as resolving impediments, discussing technical challenges, or conducting additional planning or collaboration sessions.

# Question 13 – Explain Sprint Size and Scrum Size– 2 Marks

## Sprint Size

The sprint size refers to the length or duration of a sprint in Scrum. A sprint is a time boxed period during which the development team works to deliver a potentially shippable product increment. The sprint size is determined during the project planning phase and typically ranges from one to four weeks. The most common sprint duration is two weeks, but it can vary depending on the project's needs, complexity, and team dynamics.

## Scrum Team Size

The Scrum team size refers to the number of individuals who collaborate together to deliver the product increment in Scrum. The Scrum team is self-organizing and cross-functional, typically consisting of a product owner, a Scrum Master, and the development team. The recommended Scrum team size is small, ideally between five to nine members, to enable effective communication, collaboration, and flexibility. However, there are no strict rules regarding team size, and it may vary depending on the specific project requirements and organization.

# Question 14 – Explain DOR and DOD – 2 Marks

## Definition of ready-DOR

The Definition of Ready defines the criteria that a user story must meet before it is considered ready to be included in a sprint. It ensures that the team has sufficient information and clarity about the user story, reducing the risk of misunderstandings or delays during the sprint.

It is an checklist which decides the US is ready now by developer.

It is more functional which focus on readiness for the feature.

* The user story has a clear description, including the expected behavior or functionality.
* The acceptance criteria for the user story are well-defined and agreed by the product owner and the development team.
* Any necessary design or wireframes related to the user story are available.
* The user story is appropriately sized or estimated in story points.
* Any dependencies or external resources needed for the user story are identified and accessible.

## Definition of Done-DoD

The Definition of Done outlines the criteria that a user story or any other backlog item must meet to be considered complete and ready for release. It establishes a shared understanding of what it means for work to be considered "done" and ensures that all necessary aspects, such as quality, testing, and documentation, are addressed.

It is more technical, Which focus on the business

* The code for the user story is implemented, reviewed, and merged into the main codebase.
* Automated tests are created and passing, ensuring that the implemented functionality functions correctly and does not introduce regressions.
* The user story is thoroughly tested and validated against the defined acceptance criteria.
* The user interface (UI) or user experience (UX) aspects related to the user story are implemented and reviewed.
* The user story is documented, including any relevant instructions, guides, or release notes.
* The product owner has reviewed and accepted the user story as meeting the expected requirements.

# Question 15 – Explain Prioritization Techniques and MVP – 3 Marks

Prioritization techniques help Product Owners and teams decide which features or tasks should be developed first based on business value, user needs, and effort required.

## MoSCoW Method

Must-Have: Critical features without which the product cannot function.

Should-Have: Important but not essential; can be delivered in later releases.

Could-Have: Nice-to-have features that enhance user experience but are not critical.

Won't-Have: Features that are not planned for now but may be considered later

# Minimum Viable Product (MVP)

MVP is the smallest version of a product that delivers enough value to attract early adopters and validate a product idea with minimal effort. Prioritization techniques help determine what goes into the MVP, ensuring that only the most impactful and necessary features are included in the first release.

### **Key Characteristics of MVP:**

Minimal but functional: Contains only essential features.

Testable: Allows user feedback to refine the product.

Fast to develop: Avoids unnecessary features to launch quickly.

Focuses on learning: Helps validate assumptions before full-scale development.

### **Benefits of MVP:**

Reduces risk: Helps avoid wasting resources on unwanted features.

Speeds up time-to-market: Gets a working product in users' hands faster.

Improves decision-making: Feedback from real users informs product evolution.

Optimizes resources: Prioritizes core features and prevents unnecessary spending.

# Question 16 – Difference between Business Analyst n Product Owner – 3 Marks

A Business Analyst focuses on gathering and analyzing requirements, ensuring they align with business needs.

A Product Owner makes product-related decisions, prioritizes the backlog, and ensures the team builds features that maximize business value.

|  |  |  |
| --- | --- | --- |
| **Aspect** | **Business Analyst (BA)** | **Product Owner (PO)** |
| **Nature of Work** | Focuses on gathering, analyzing, and documenting business requirements. | Focuses on defining product vision, prioritizing backlog, and ensuring business value delivery. |
| **Responsibilities** | - Elicits and documents requirements. | - Owns the product backlog. |
| - Analyzes business processes. | - Prioritizes features based on business value. |
| - Works with stakeholders to refine needs. | - Defines and communicates product vision. |
| - Supports the team with functional clarifications. | - Works closely with stakeholders and development teams. |
| - Helps in writing acceptance criteria. | - Accepts or rejects sprint deliverables. |
| **Focus Area** | Business processes, stakeholder needs, functional requirements. | Product development, feature prioritization, and maximizing business value. |
| **Accountability** | Accountable for gathering and clarifying business requirements. | Accountable for delivering a valuable product that meets business needs. |
| **Decision-Making** | Provides data and insights to support decision-making but does not have final authority over product priorities. | Has final authority over what features are prioritized and included in the product. |
| **Reporting To** | Typically reports to project managers, business stakeholders, or product managers. | Reports to senior management, business stakeholders, or a Product Manager (if applicable). |
| **Stakeholder Interaction** | Works closely with internal business teams, end-users, and IT teams to understand requirements. | Works with all stakeholders, including customers, business leaders, and development teams, to make product decisions. |
| **Backlog Ownership** | Assists in defining user stories and acceptance criteria but does not own the backlog. | Owns and manages the product backlog, ensuring alignment with business goals. |
| **Delivery Involvement** | Involved in requirement gathering, process improvement, and business analysis throughout the project. | Directly involved in Agile/Scrum delivery, working with teams to refine and deliver features. |
| **Qualities Required** | - Analytical thinking. | - Decision-making ability. |
| - Strong communication skills. | - Business and user focus. |
| - Documentation and modeling skills. | - Prioritization skills. |
| - Problem-solving. | - Strong leadership and communication. |

# Question 17 – Prepare a sample Resume of 3yrs exp Product Owner – 3 Marks

# John Doe

Phone: +91 7758986847 | Email: ketanfulbandhe11@gmail.com | LinkedIn: linkedin.com/in/KetanFulbandhe | Location: [Pune, India]

# Summary

A results-driven and customer-focused Product Owner with 3 years of experience in managing and delivering high-quality software products. Proven ability to collaborate with cross-functional teams, define clear product visions, and prioritize features based on business and customer needs. Adept at Agile methodologies (Scrum), and skilled in writing user stories, managing backlogs, and ensuring product alignment with business goals.

# Key Skills

* Product Roadmap Development
* Agile & Scrum Methodologies
* Stakeholder Management
* Backlog Prioritization
* User Story Mapping & Requirement Gathering
* Sprint Planning & Execution
* Cross-functional Team Collaboration
* Data Analysis & Reporting
* Jira, Confluence, Trello, Asana
* A/B Testing & Product Optimization
* Communication & Presentation Skills

# Professional Experience

### **Product Owner**

**COEPD pvt ltd – [Pune, India]**

*March 2023 – Present*

* Led product development for an **Online Agriculture Store**, collaborating with stakeholders and cross-functional teams to define product vision, strategy, and roadmap for an e-commerce platform aimed at helping farmers access agricultural products.
* Managed and prioritized product backlog, ensuring features were developed and delivered on time, in alignment with business goals and customer needs.
* Conducted user research to understand farmer needs, and worked closely with the development and design teams to optimize the user experience.
* Improved platform performance, contributing to a 20% increase in user engagement and purchase frequency.
* Facilitated sprint planning, reviews, and retrospectives with cross-functional teams to ensure alignment with business priorities.
* Collaborated with marketing, sales, and customer support to ensure successful product launches and customer adoption.

### **Associate Product Owner** SOONY pvt ltd – [Pune, India] *January 2021 – February 2023*

* Assisted in the development of **Food Express App**, a mobile app for on-demand food delivery, working with the product team to define feature requests, user stories, and backlog items.
* Coordinated with stakeholders, including restaurant partners, customers, and delivery teams, to ensure the app addressed user needs and business objectives.
* Monitored product KPIs and gathered customer feedback to drive continuous product improvements, resulting in a 15% increase in customer retention.
* Worked closely with UX/UI teams to refine the app’s design and improve user experience, ensuring customer satisfaction.
* Supported Sprint activities, including backlog grooming, user story refinement, and daily standups, to ensure smooth team operations.

# Education

### **Bachelor of Engineering in Computer science and engineering**

* Amravati University – [Amravati, India]
* Graduated: 2018

### **PG CDAC in Development of advance computing**

* Mumbai University – [Mumbai University]

# Certifications

* Certified Scrum Product Owner (CSPO) – Scrum Alliance, 2022
* Agile Product Management – Coursera, 2021

# Technical Skills

* Jira, Trello, Asana, Confluence
* SQL (Basic)
* MS Office (Excel, Word, PowerPoint)
* Google Analytics
* Figma, Axure RP, MS Visio, Balsamiq (for wireframing)

# Projects

## Online Agriculture Store

Led the development of an e-commerce platform tailored for farmers to purchase agricultural products such as fertilizers, seeds, and pesticides, resulting in increased market access for rural areas.

## Food Express App

Managed feature development for a mobile app that provides real-time food delivery, ensuring smooth customer and restaurant interactions, reducing delivery times by 25%, and boosting customer satisfaction.

# Languages

English (Fluent)

Marathi (Fluent)