

Capstone Project – Part 2

Question 1 - Write agile Manifesto

Agile manifesto is a foundational document outlines the core values and principles of agile methodologies, emphasizing flexibility, collaboration and customer satisfaction over process and documentation.

Agile Manifesto document built on 4 values and 12 principles for agile software development.

Four Main Values –

1. Individual and interactions over processes and tools
2. Working software over comprehensive documentation
3. Customer collaboration over contract negotiation
4. Responding to change over following a plan.

Twelve principles of Agile Software –

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 customers competitive advantages.
3. Delivery working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
4. Business people and developers must work together daily throughout the process.
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 teams is face to face conversation.
7. Working software is a primary measure of progress.
8. Agile process promotes sustainable development. The sponsor, 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 design emerges from self-organizing teams.
12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behaviour accordingly.

Question 2 – User stories – Acceptance Criteria – BV-CP

User Story No.01	Tasks: Create customer registration portal	Priority: HIGHEST
As A customer /User I Want – Do the registration on the scrum food app SO THAT – I can order food online		
BV:500		CP:03
ACCEPTANCE CRITERIA Should have valid email ID, Send Successful Notification to the users		

User Story No:2	Tasks: Create login page for registered users	Priority: HIGHEST
AS A Customer/User I Want To – Login on the scrum food app So That – I can login on the app		
BV: 500	CP:03	
ACCEPTANCE CRITERIA User Name, Password, Mobile No, Email, Address, Click on Registered Button. Send Successful Notification to the user		

User Story No:03	Tasks: Create list of menu restaurants wise	Priority: MEDIUM
AS A CUSTOMER/USER I WANT – View restaurants as per the veg and non veg category SO That – I can choose the food and can add to cart		
BV: 100	CP: 02	
ACCEPTANCE CRITERIA Should get the list of all the restaurants category wise veg and non veg and both		

User Story No:04	Tasks: Create list of restaurants wise	Priority: HIGHEST
AS A CUSTOMER/USER I WANT – Search and View restaurants SO THAT – I Can Choose the food and can add to cart		
BV:500	CP:03	
ACCEPTANCE CRITERIA Should get the list of all the restaurants category wise veg and non veg both.		

User Story NO:05	Tasks: Create list of menu restaurants wise	Priority: Medium
AS A CUSTOMER/USER I WANT – view restaurants as per the veg and non veg category SO THAT – I can get list of veg and non veg restaurants		
BV: 100	CP:02	
ACCEPTANCE CRITERIA Should get the list of all the restaurants category wise veg and non veg and both		

User Story No:06	Tasks: User wise create the tab to add the address	Priority: HIGHEST
AS A – Online user I Want – Add the address So That – I can get food on my address		
BV:500	CP:03	
ACCEPTANCE CRITERIA Once user want to order the food, it should be delivered to the given address		

User Story No:07	Tasks: Create add to card tab	Priority: HIGHEST
AS A Online User I WANT – I want to add selected item in the cart SO THAT – I can get the selected food		
BV:500	CP:03	
ACCEPTANCE CRITERIA ALL the selected item should get display in the cart		

User Story NO:08	Tasks: Create the payment tab with COD, net banking, UPI and wallet	PRIORITY: HIGHEST
AS A Online user I WANT – Select the payment mode SO THAT – So the I can make the payment of my choice		
BV:500		CP:03
ACCEPTANCE CRITERIA App the payment options should get displayed in the payment mode, COD, net banking-UPI-WALLET		

User Story NO:09	Tasks: Tracking tab should be displayed with map	Priority: HIGHEST
AS A Online user I WANT – track my given order SO THAT – I can be able to view the current state on the map		
BV:500	CP:03	
ACCEPTANCE CRETERIA: App should display the map and the current movements of the order, Display the delivery boy mobile number, Display delivery boy name in tracking field; Display delivery boy picture		

User Story No:10	Tasks: Cancel order tab should be displayed	PRIORITY: HIGHEST
AS A Online user I WANT – Cancel my order SO That – if not required I can be able to cancel the whole order		
BV:500		CP:03
ACCEPTANCE CRETERIA: App should be able to cancel the order within the 10 min of the given order		

User Story No:11	Tasks: Feedback and rating	Priority: HIGHEST
AS A online user I WANT – Cancel my order SO THAT – if not required I can be able to cancel the whole order		
BV:500	CP:03	
ACCEPTANCE CRETERIA: App should be able to share rating and give opinion where user can add review		

User Story No:12	Tasks: Delivery for user creation table to be added	PRIORITY: HIGHEST
AS A Online User I WANT – Registration in the scrum food app SO THAT – I can deliver the food		
BV: 500	CP:03	
ACCEPTANCE CRETERIA Registration Screen, Text boxes for user name, password, superID, Mobile no, Email, Address, Phone Number, Click on register Button. Send Successful Notification to the user.		

User Story No:13	Log out tab should be displayed	PRIORITY: HIGHEST
AS A online user I WANT- Logout from the scrum food app SO THAT – I can logout		
BV:500	CP:03	
ACCEPTANCE CRETERIA Logout button should be displayed (Rule – before logout we need to asked “are you sure you want to logout”.)		

User story No:14	Tasks:2	PRIORITY: HIGHEST
AS A - Restaurant owner I WANT – See all the orders in day/week/month/quarter/year SO THAT – I can view the list of orders		
BV:500	CP:03	
Acceptance Criteria View Order, Display List of orders in the tabular form day/week/month/quarter/year wise		

User Story No:15	Tasks:2	Priority: LOW
AS A - Admin I WANT – See the list of restaurants SO THAT – I can approve the registrations		
BV:50	CP:01	
ACCEPTANCE CRITERIA List of resturants, Select Restaurants, Verify resturants details, approve button, reject button, notification to the restaurants.		

User Story No:16	Task:2	PRIORITY: HIGHEST
AS A RESTAURANT OWNER I WANT – View the revenue report SO THAT – I can view the restaurant revenue		
BV:500		CP:03
ACCEPTANCE CRETERIA -Select reports, Select Revenue reports, select to and from date, Select Region (can select all), Generate Report, Download Report in Excel, Share.		

User Story NO:17	Task:2	PRIORITY: HIGHEST
AS A Admin I WANT- Manage regional restaurants SO THAT- I can track the performance of regional resturants		
BV:500	CP:03	
ACCEPTANCE CRETERIA -Click on performance of resturants; Select data wise report; Click on generate report which include resturants ID – name and revenue; click on download and share button in excel.		

User Story No:18	Task:2	PRIORITY: HIGHEST
AS A- ADMIN I WANT – See the regional revenue report SO THAT – I can view the regional performance		
BV:500	CP:03	
ACCEPTNCE CRETERIA View performance of each rest of that region in tabular from which includes resturants name, revenue, generated – Download in excel or PDF		

User Story No:19	Task:2	PRIORITY: HIGHEST
AS A Regional Admin I WANT – See the refund option SO THAT – I can able track refund given to the users		
BV:500	CP:03	
ACCEPTANCE CRETERIA All should be able to show – Br all mandatory; text box field; display order ID; text box for description; submit; generate issues id, share refund and display successful.		

User Story No:20	Task:2	Priority: HIGHEST
AS A- RESTURANT OWNER I WANT – Check the revenue day wise SO THAT – View revenue generated through scrum food app		
BV:500	CP:03	
ACCEPTANCE CRETERIA Mention the list of order generated in a day, billing done, revenue generated, payment received, fetch in excel.		

User story No:21	Task:2	Priority: HIGHEST
AS A DELIVERY BOY I WANT – Register in scrum foods SO THAT – I can deliver orders		
BV:500	CP:03	
ACCEPTANCE CRETERIA Registration Screen Text Boxes for User Name, Password, Nation ID, Mobile No, Email, Address, Phone Number Click on register Button, Send Successful Notification to the user		

User story No:22	Task:2	Priority: Low
AS A CUSTOMER/USER I WANT – View the price SO THAT – I can order the food		
BV:50	CP:01	
ACCEPTANCE CREATERIA Display price in the list of menu item		

User Story No:23	Task:2	PRIORITY: LOW
AS A CUSTOMER/USER I WANT – To view the contact number of delivery boy SO THAT – I can contact delivery boy for the status		
BV:50	CP:01	
ACCEPTANCE CRETERIA Display delivery boy mobile number Display delivery boy name in tracking field Display delivery boy picture		

User Story No:24	Task:2	Priority: MEDIUM
AS A CUSTOMER/USER I WANT – to provide time slots SO THAT – Customer can check opening and closure hours		
BV:100	CP:02	
ACCEPTANCE CRETERIA Click on restaurant dashboard Add from time to time Click to Submit Displayed updated successfully		

User Story No:25	Task:2	Priority: HIGHEST
AS A CUSTOMER/USER I WANT – To chat with reg admin SO THAT – I Can request for refund		
BV:500	CP:03	
ACCEPTANCE CRETERIA BR- All mandatory, Text box fields, Display order ID,Text box for description, Submmmit Button, generate issues ID, Display Successfully.		

User story No:26	Task:2	PRIORITY: MEDIUM
AS A CUSTOMER/USER I WANT – To find nearby resturants SO THAT – I can get the food delivered to my address		
BV:100	CP:02	
ACCEPTANCE CRETERIA List of resturants, select restaurants, verify restaurants details, approve button, reject button, notification to the resturants.		

User Story No:27	Task:2	PRIORITY: LOW
AS A CUSTOMER/USER I WANT – To filter veg and non veg restaurants SO THAT – I can specific my preferences		
BV:50	CP:01	
ACCEPTANCE CRETERIA List of resturants, select resturants, verify restaurants details		

User Story No:28	Task:2	Priority: HIGHEST
AS A CUSTOMER/USER I WANT – To know the restaurants most recent reviews SO THAT- I have the latest information		
BV:500	CP:03	
ACCEPTANCE CRETERIA Food, Delivery, Payment, Customer, service		

User Story No:29	Task:2	PRIORITY: HIGHEST
AS A OWNER I WANT – To receive reports SO THAT – I Can view the most popular items ordered by the customer		
BV:500	CP:03	
ACCEPTANCE CRETERIA REPORTS.		

User Story No:30	Tasks:2	Priority: MEDIUM
AS A ADMIN I WANT-To review reports SO THAT – I can track delivery boy’s login and logout		
BV:100	CP:02	
ACCEPTANCE CRETERIA Log in, Log out		

User Story No:31	Task:2	PRIORITY: MEDIUM
AS A CUSTOMER/USER I WANT- TO restaurant manager mobile number SO THAT - I can report issues		
BV:100	CP:02	
ACCEPTANCE CRETERIA Mobile Number		

User Story No:32	Task:2	PRIORITY: MEDIUM
AS A RESTAURANT OWNER I WANT – To review reports SO THAT- I Will be able to update information about my restaurants		
BV:100	CP:02	
ACCEPTANCE CRETERIA Reports, Feedback forms		

User Story No:33	Task: 2	Priority: Low
AS A RESTURANT OWNER I WANT – To view reports SO THAT – I will be able to update information about my resturants		
BV:50	CP:01	
ACCEPTANCE CRETERIA Check in offer coupon		

User Story No:34	Task:2	PRIORITY: MEDIUM
AS A CUSTOMER/USER I WANT – To view offer SO THAT – I will get benefit on actual price		
BV:100	CP:02	
ACCEPTANCE CRETERIA Check offer, coupons		

User Story No:35	Task:2	PRIORITY: MEDIUM
AS A BUSY PROFFESIONAL CUSTOMER I WANT – To be able to quickly and easily order food from my favourite restaurants for pickup SO THAT- I don't have to spend time cooking or eating out		
BV:100	CP:02	
ACCEPTANCE CRITERIA Report, Feedback forms		

User Story No:36	Task:2	priority: MEDIUM
AS A CUSTOMER WITH DIETARY RESTRICTION I WANT – To be able to easily filter restaurants and menu item by dietary preference SO THAT – I don't have to spend time cooking or eating out		
BV:100	CP:02	
ACCEPTANCE CRETERIA Check in list of restaurants, food options		

User Story No: 37	Task:2	PRIORITY: MEDIUM
AS A RESTURANT OWNER I WANT – To attract my customer with photos of food and hotels SO THAT – I will get an idea about the food and hotel hygiene		
BV:100	CP:02	
ACCEPTANCE CRETERIA As a user I can upload the photo		

User Story No:38	Task:2	PRIORITY: MEDIUM
AS A CUSTOMER/USER I WANT – To able to see the food or hotel photos SO THAT – I will get an idea about the food and hotel hygiene		
BV:100	CP:02	
ACCEPTANCE CRETERIA View photos by hotel name		

User story No:39	Task: 2	PRIORITY: MEDIUM
AS A LESS HUNGRY CUSTOMER I WANT – To save the food item and restaurant I’m interested in SO THAT – I can order them later		
BV:100	CP:02	
ACCEPTANCE CRETERIA Food restaurant wish list check		

User story No:40	Task:2	PRIORITY: MEDIUM
AS A CUSTOMER I WANT – To find the fastest route to my delivery food SO THAT – I will be able to get my order in minimum time on my destination		
BV:100	CP:02	
ACCEPTANCE CRETERIA Click on near resturants from my location button		

Question 3 – What is Epic? Write 2 Epics.

An EPIC in agile is a body of work that you can break down into specific tasks called user stories. Epics are a helpful way to organize your work hierarchically, based on customer needs and requests. Epics tends to involve multiple teams and can be spread across multiple boards that allow each team to focus on a specific user story.



In agile development, an epic represents a series of user stories that shares a broader strategies objective. When several epics themselves share a common goal, they are grouped together under a still-broader business objective, called as a theme.

Main Benefits of epic in agile project management includes –

1. Improved Organization of Work
2. Clear Strategic Alignment
3. Enhanced Roadmapping and Planning
4. Better Stakeholder Communication
5. Incremental Delivery
6. Prioritization and Focus
7. Tracking Progress and Metrics

How to create epics in agile?

Creating Agile epics is a process that ideally involves the entire team. Some Agile teams utilize the user story template to formulate their epics, while others use short sentences to describe them. Regardless, there are a few important steps to creating epics.

Define the End-user of the Epic.

Clarifying the user persona, in other words, if the epic's goal is to address feedback from existing customers or attract a new audience, will help you to better understand critical project specifications.

Structure the Individual Work Items and Map them in a Single Place.

This will help you better forecast the completion of each epic. In the Scrum framework, for instance, user stories are assigned to a sprint (iteration), creating a roadmap of the project. On the other hand, Kanban is based on the [pull method](#) where the flow of work is “radiated” by Kanban boards and Agile team members pull new work after completing the previous one.

Incorporate Feedback Opportunities.

Encouraging team members to give their suggestions or comments will help you detail or adjust the work items following the requirements and specifications. Making these corrections as you go will ultimately help you complete each epic more efficiently and with greater quality.

Best Practices for Creating Epics

- Writing your epics before always specifying the exact user stories or work items will help you get a high-level overview of the work. This will allow you to see the bigger picture more clearly, while the specific actions to complete each one of your epics would get detailed during the execution.
- Involving all team members to write down epics ensures that everyone understands the project's objective. The collaboration will help you avoid any misunderstandings about the specifications of work items or user stories' requirements.
- Visualizing the progress of epics and their respective user stories allows greater visibility into how work flows through the system, project roadblocks, and improvement

opportunities. One way to achieve such transparency is by mapping all epics and work items on a single or multiple interconnected [Kanban boards](#).

Examples of Agile Epics

Epics in Agile project management can represent the development of a new product feature, addressing a customer request, resolving reported issues, or implementing a business requirement.

Following detailed domain according to IT Domain are below –

Epics for the IT Operations Domain

Company A delivers web hosting services. To ensure a reliable and fast way of addressing its clients' support requests, the company is looking to integrate a third-party CRM solution. The team dedicated to accomplishing the high-level strategy goal will break it down into several epics and multiple individual work items.

Here's how you can break down this particular scenario.

- The greater initiative can be "Incorporate a CRM system to address the customers' requests."
- There could be a number of epics supporting the initiative, such as "Select a CRM platform" and "Implement CRM system."
- The user stories to complete the epic "Select a CRM platform" can be formatted using the user story template.

Initiative	Incorporate a CRM system to address the customers' support requests.
Epic	Select a CRM platform.
User stories	As a project leader, I need to collect the business requirements and technical specifications so that we can select a CRM solution to address our customers' inquiries faster.

Epics for the Agile Development Domain

Company B is developing a SaaS platform for resource management. The organization has set a goal to penetrate the software market for project management (initiative). The development team will have to develop new project management features (epic). The epic or epics should then be broken down into smaller work items (user stories).

Initiative	Penetrate the project management software market.
Epic	Develop a budget management feature in the PM software.
User stories	As a project leader, I want to be able to record spending information on my projects, so that I can track what financial resources I have left.

Question 4. What is the difference between BV and CP

Business Value: It refers to the perceived benefits or worth that a product or service provides to a business or its stakeholders.

Complexity points: It is a relative measure of efforts, risk, and uncertainty associated with completing a user story or task.

In agile and product management, Business value and complexity points are two key metrics used to prioritize and evaluate work< but they measure different aspects.

Difference Between Business Value and Complexity Points

Definition - BV - Measures the expected benefit to the business (revenue, customer satisfaction, risk reduction, etc.).

CP - Estimates the effort, difficulty, or time required to complete a task (often using Story Points, T-shirt sizes, or hours).

Purpose – BV – Helps prioritize work based on ROI (Return on Investment).

CP - Helps estimate workload, capacity, and sprint planning. |

Who Decides? – BV - Product Owner / Business Stakeholders.

CP- Development Team (based on technical challenges).

Measurement Scale – BV - Often rated on a scale (e.g., 1-10, High/Medium/Low).

CP - Typically uses Story Points (sequence: 1, 2, 3, 5, 8, 13...).

Example

BV - A feature that increases customer retention = High Business Value.

CP - A feature requiring complex backend changes = High Complexity Points.

Key Differences:

1. Focus:
 - Business Value = Why do we do this? (Impact on business goals).
 - Complexity Points = How hard is it to do? (Effort, risk, unknowns).
2. *Who Influences Each?
 - Business Value* is driven by market needs, customer demands, and strategic goals.
 - Complexity Points* are determined by technical debt, dependencies, and team skills.

Question 5: Explain about sprint

Sprint –

sprint is a time-boxed period (usually 1 to 4 weeks) during which a specific set of work is completed and made ready for review. The term is most commonly used in Agile methodologies, especially Scrum.

A sprint involves the collaboration of business analysts (BAs), developers, testers, and product owners to deliver functional increments of a product.

Key Characteristics of a Sprint

- Time-boxed: Fixed duration (e.g., 2 weeks)
- Goal-oriented: Delivers a working product increment.
- Collaborative: Encourages ongoing communication between team members.
- Iterative: Feedback from one sprint feeds into the next.

What is sprint Duration: 2 Weeks - Your sprint Value ____ 2 weeks ____ (Sprint are limited to one calendar month / do days or less)

Scrum is a subunit of Sprint.

What is scrum Duration: 1 day – Your scrum Value ____ 1 days ____

PBI: Product Backlog Item - Contain list of all the user stories and Epic created by Product owner

Task: Unit of Work done by 1 Developer in 1 Scrum-

During sprint palling meeting - So in every user story will be divided in to sub task and will be allotted / Picked up by the developers in that sprint

WIP: Work In Progress- work in process – the features that are in the production process / Phase but not yet the finished product. WIP therefore refers to all the task that are at various stages of the production process

Sprint Backlog - List of committed user stories by dev and QA team for that particular sprint will be added in the sprint backlog.

Question: 6 - Explain Product backlog and sprint back log

In business analysis, especially within Agile and Scrum frameworks, the Product Backlog and Sprint Backlog are key tools used to manage work. They are often used by Business Analysts (BAs) to organize, prioritize, and refine requirements.

Product Backlog –

The Product Backlog is a master list of all features, enhancements, bug fixes, and requirements that might be needed in the product. It represents the entire scope of the product.

A product backlog is a prioritized list of work for the development team that is derived from the roadmap and its requirements. The most important items are shown at the top of the product backlog so the team knows what to deliver first

Sprint Backlog –

The Sprint Backlog is a subset of the Product Backlog. It includes only the items the team commits to completing in the current sprint.

It is the subset of product backlog. A sprint backlog is the set of items that a cross-functional product team selects from its product backlog to work on during the upcoming sprint. Typically, the team will agree on these items during its sprint planning session. In fact, the sprint backlog represents the primary output of sprint planning.

Question:7 - What is impediments log? write 2 impediments

An Impediments Log is a tracking tool used to record and manage obstacles (called impediments) that are blocking or slowing down progress in a project—especially in Agile and Scrum environments.

An Agile impediment log is used to record, track and resolve a list of obstacles, challenges that delay the team's performance

An Impediment is anything that keeps the Team from getting work Done and that slows Velocity.

- Ex- sick team member, a missing resource, lack of management support Business or customer issues; Unresolved dependencies

- Organizational Impediments – issues that are dependent on others to solve. These issues include but are not limited to:
 - Slow internet
 - Issues with obtaining input from other teams or divisions
 - Lack of training

Question 8: Explain Velocity of the Team

Velocity is a measure of the amount of work a Team can tackle during a single Sprint and is the key metric in Scrum. Velocity is calculated at the end of the Sprint by totaling the Points for all fully completed User Stories. Estimated time for this course: 5 minutes.

Actual velocity is calculated by dividing the total Story Points completed by the team by the number of Sprints. For instance, if the Scrum Team has finished a total of 80 points over 4 Sprints, then the actual velocity of the team would be 20 points per Sprint

$$80 / 4 = 20$$

Question 9: Draw Sprint Burn Charts and Product Burn Down Charts

A product burndown chart shows how much work remains for the entire project, whereas a sprint burndown chart shows how much work remains in a specific iteration.

A sprint burndown chart includes:

- X-axis- The horizontal axis of the graph represents the remaining amount of time to complete the project usually depicted in days. Sprints
- Y-axis- The vertical axis of the graph represents the effort needed to complete the project. Story Pt

Actual work line - This represents the actual number of tasks remaining. It might be straight in some cases; however, it often changes due to unforeseen issues in the project or an increase in the number of tasks.

Date - January 23rd, 2025 - January 24th, 2025



SCRUM Sprint 1

Issue count

Date - January 23rd, 2025 - January 24th, 2025



Question 10: Explain about product grooming

Grooming is an open discussion between the development team and product owner. The user stories are discussed to help the team gain a better understanding of the functionality that is needed to fulfill a story. This includes design considerations, integrations, and expected user interactions.

Product Backlog grooming is a regular session where backlog items are discussed, reviewed, and prioritized by product managers, product owners, and the rest of the team. The primary goal of backlog grooming is to keep the backlog up-to-date and ensure that backlog items are prepared for upcoming sprints.

Why It's Important:

- Ensures the team understands what to build next
- Helps the Product Owner (PO) prioritize based on value
- Saves time during Sprint Planning
- Prevents vague or incomplete stories from entering a sprint

Question 11: Explain the roles of Scrum Master and Product Owner

The Scrum Master popularly known as a coach, motivator and leader of an Agile team. The role of a Scrum Master is to educate the team on Agile processes and help team members follow Scrum practices religiously. Facilitation scrum event as and when it is required.

The Scrum Master collaborates both with the Product Owner (PO) who focuses on building the right product, and the development team that focuses on building the product right. A Scrum Master's job is essentially to help everyone understand and imbibe Scrum values, principles, and practices and get the best product out to the customer

The Product Owner takes the lead in many aspects of a product's development. As a member of the Scrum Team, the Product Owner provides clarity to the team about a product's vision and goal. All work is derived and prioritized based on the Product Goal in order to deliver value to all stakeholders including those within their organization and all users both inside and out. Product Owners identify, measure and maximize value throughout the entire product's lifecycle.

- Defining the vision
- Prioritizing the product backlog
- Taking an overview of development stages
- Handling communications
- Knowing what the client needs
- Evaluating progress

Key Responsibilities of Scrum Master

1. Facilitates Scrum Events: Ensures daily stand-ups, sprint planning, sprint review, and retrospectives happen effectively.
2. Removes Impediments: Identifies and eliminates obstacles that hinder the team's progress.
3. Coaches the Team: Helps team members understand Agile and Scrum and supports continuous improvement.
4. Shields the Team: Protects the team from external interruptions during the sprint.
5. Serves the Product Owner & Organization: Helps the Product Owner with backlog management and works with the organization to improve Agile adoption.

Key Responsibilities of Product Owner

1. Manages the Product Backlog: Clearly defines and prioritizes the backlog items based on business value.
2. Defines the Product Vision: Shares the product roadmap and vision with the team.
3. Engages with Stakeholders: Acts as a bridge between stakeholders (customers, business) and the Scrum Team.
4. Clarifies Requirements: Ensures the team understands the "what" and "why" of each user story.
5. Accepts Work Results: Reviews and approves the work done at the end of each sprint.

Question 12: Explain all meeting Conducted in Scrum Project

- **Sprint planning meeting**: - Before your team begins a Scrum sprint, you need to know where you're going. In the Scrum agile framework, a sprint planning meeting is an event that establishes the product development goal and plan for the upcoming sprint, based on the team's review of its product backlog.

Key Activities:

- Product Owner presents prioritized Product Backlog
 - Team selects Sprint Backlog items they can commit to
 - Team defines the Sprint Goal
 - Tasks are broken down and estimated
- Participants: Product Owner, Scrum Master, Development Team

- **Daily standup meeting**: - The daily stand-up is a short, daily meeting to discuss progress and identify blockers. The reason it's called a "stand-up" is because if attendees participate while standing, the meeting should be kept short.

Each member answers 3 questions:

1. What did I do yesterday?
2. What will I do today?
3. Are there any impediments?

Participants: Development Team (Scrum Master and Product Owner may attend, but only team speaks)

- **Sprint review meeting:** - The Sprint Review is a working meeting where the Scrum Team presents their completed work to stakeholders and asks for feedback. The Scrum Team and stakeholders discuss the progress made toward the Product Goal, emerging changes in the business or technical climate and collaborate on what to do next.

Key Activities:

- Team showcases the Increment (working product)
- Product Owner accepts or rejects work items
- Stakeholders give feedback
- Product Backlog may be updated

Participants: Scrum Team + Stakeholders

- **Sprint retrospective meeting:** - The Sprint Retrospective is the last event in the Sprint. Unlike other Scrum Events where the focus is on inspecting and adapting ways to improve the product, the Sprint Retrospective is a place for the Scrum Team to inspect and adapt their working practices.

Key Questions:

- What went well?
- What didn't go well?
- What can we improve?

Participants: Scrum Master, Product Owner, Development Team

Question 13: Explain Sprint Size and Scrum Size

sprint Size- Sprints are the soul of Scrum methodology within Agile Project Management.

A Sprint is a time-boxed event of weeks in which your Scrum team focuses only on a sprint goal. The goal is typically a product increment or iteration, often an updated, improved version of your product or software. Normally a sprint happens for two weeks.

Scrum Size- The optimum size for the scrum team is around 10 members with varying skill sets and large enough to accomplish the tasks comfortably and share, communicate, and collaborate effectively. A Scrum team will have 1 Scrum Master, 1 Product Owner and 8 to 10 Scrum Developers.

Question 14: Explain DOR and DOD?

Definition of Ready: means the stories must be immediately actionable. The team must be able to determine what needs to be done and amount of work required to complete the User Story or Product Backlog Item.

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 likelihood of misunderstandings or delays during the sprint.

- The user story has a clear and concise description, including the expected behavior or functionality.
- The acceptance criteria for the user story are well-defined and agreed upon 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 or other relevant units.
- Any dependencies or external resources needed for the user story are identified and accessible.

Definition of Done: The definition of done is an agreed upon set of items that must be completed before a project or user story can be considered complete.

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.

- 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.

Difference between DOR and DOD

The definition of ready covers the requirements coming into the sprint and definition of done covers the product coming out of the sprint.

Question 15: Explain Prioritization Techniques and MVP

Agile Prioritization Factors

- ❑ The financial value of the requirements is a major factor to be considered in prioritizing requirements. The value could be expressed as new revenue, incremental revenue, or as operational efficiency.
- ❑ The cost of developing the requirements is another essential factor to be considered by the product owner. Value and cost together indicate the RoI for the requirements.
- ❑ The next factor to be considered in prioritization is the amount and significance of knowledge and capabilities that the team will gain while working on the requirements.
- ❑ Understanding the level of risks involved in introducing the new features is essential in the process of prioritization.

8 Popular Prioritization Techniques

1. MoSCoW prioritization – popularized by the DSDM methodology
2. Kano model – introduced by Prof. Noriaki Kano
3. The relative weighting method – by Karl Wiegers
4. Opportunity Scoring
5. Stack Ranking
6. Priority Poker
7. Cost of Delay
8. 100 Dollar Test

MoSCoW Agile Prioritization Technique

MoSCoW Prioritization in Agile: In the DSDM methodology, the priorities are expressed as per the MoSCoW model:

- Must– The must requirements are given the topmost priority
- Should– Next priority is given to the requirements that are highly desirable, though not mandatory
- Could– The next priority is given to the requirement that is nice to have
- Won't– And the final consideration is given to the requirements which will not work in the process at that point of time

Kano Model of Prioritization in Agile

Professor Noriaki Kano propagated Kano Model of Prioritization. This prioritization technique involves three levels that include considering customer satisfaction from disappointment to not happy to immediate happiness to get delighted. Two important factors that create an impact on the satisfaction level during this prioritization are the existence of features and the degree of implementation. The level of satisfaction is achieved along with full implementation. Some features

lead to a basic level of satisfaction while others create more – the higher the implementation, the greater the level of satisfaction.

Relative Weighting Prioritization Technique

The relative weighting scheme is a simple model where prioritization is done based upon all the factors mentioned above. The major factors considered in relative weighing prioritization technique are:

- The value of a feature and the negative impact that might be caused by the absence of the feature
- Based on the expert judgment made by the product owner and supported by the agile team in ranking the score of features in the following way (a scoreboard from 1 to 9 is usually used)
- Benefit from having the feature
- Penalty for not having the feature
- Cost of producing the feature
- The risk incurred in producing the feature
- The priority and rank are then determined by dividing the value score as below:
 - $(\text{Benefit score} + \text{Penalty score}) / (\text{Cost score} + \text{Risk score})$

Opportunity Scoring

In relative weighting prioritization, if the results come out in numerical value, it becomes easier for the product owner to arrive at a faster prioritizing decision.

Opportunity Scoring is a beneficial prioritization method used by organizations to develop agile products. This prioritization model uses data from market research to help determine what the users expect from your product or service. It allows organizations to create the schedule according to their target audience's wants and needs.

The model also helps companies modify or readjust their schedules and budgets to accommodate their customer's expectations. They can also highlight priority features that their customers are interested in, and weed out features that they would have instead spent money and time on.

Stack Ranking

Stack Ranking is one of the most popular forms of prioritization techniques that is currently used by a lot of software companies. It is also one of the easiest techniques that allow prioritization based on the user story.

The technique considers each user story and then places it in an order of priority, ranking each task from the most important placed on the top of the stack to the least important placed on the bottom. This gives the company a setlist of priorities focusing on the most important feature to the least.

Priority Poker

This agile priority technique is based on similar rules as actual poker played with cards. When playing poker, prioritization is done in a calculative manner, with big wins being the ultimate goal. Similarly, in agile priority poker, items that will yield the highest results in specific target markets are given priority.

How are high priority items determined? Well, the project manager gathers all stakeholders of the project, which can also sometimes include end-users. The stakeholders are then asked to assign priority to each task or feature that is scheduled. The answers are then moderated and the list of priorities are compiled based on the rankings of the stakeholders.

Cost of Delay

The objective of this prioritization technique is to understand how much money would the organization lose if a certain feature is not available. This prioritization focuses on monetary loss to understand which features are the most important and the list is created accordingly. It is a proactive approach to ensure the manager fight fires and deal with emergencies that can result in losses.

By determining how much money the company loses each day by delaying a feature or task, the manager can determine the urgency of the task. This can easily help create the schedule and budget for each feature. This technique is financially motivated and does not account for user experience or customer satisfaction.

100 Dollar Test

This technique is also known as Cumulative Voting and is a straightforward process. It is similar to the poker technique but each stakeholder is given 100 points or dollars to assign to each feature or task.

The stakeholders divide their 100 dollars by assigning a spending amount to each feature. Once all the 100 dollars are spent, the moderator then tallies all the points and the feature with the most dollars assigned is given the highest priority, followed by tasks with the next highest amounts.

This is one of the easiest and the most effective techniques to ensure that all the stakeholders are in agreement with the priority list.

Question 16: Difference between Business Analyst and Product Owner

Product Owner role

In many organizations, the Product Owner also has a Product Manager title and is responsible for making decisions about the product, for managing the product's strategic roadmap and for communicating that roadmap. If there are cross-product impacts, then coordination of feature prioritization with other product POs is necessary - because certainly those in the C-suite are going to want to see a consolidated view of all product priorities.

Business Analyst role

Similar to the PO, the BA plays a critical role in working with the scrum team to execute the product vision by defining needs and recommend solutions that deliver value. The BA goes a bit deeper by breaking down high level product features into user stories, with the appropriate amount of detail. This may result in other BA artifacts –some of the most common examples I've experienced are capabilities gap analysis and process flow diagrams.

Parameter	Business Analyst	Product Owner
Strategizing	Provides strategies that are relevant to the product's requirements.	Provides business related strategies for developing the product
Stages of Project	It focuses more on the technical aspects of the product.	It focuses on customer-related aspects of a product.
Analysing the product	Create non-functional requirements of the product.	They conduct a competitive analysis of their product.
Creating	They can help us to break down the stories into useful tasks.	Explain the story development process from the customer's perspective.
Perspectives	Their goal is to ensure that a technically correct product gets developed.	Their goal is to make sure that the product sells well and has a high business value.
End Goal	They will correct any technical issues during product development or delivery.	They assess the market to estimate the product's market value and suggest the necessary changes.
Making Changes	They ensure that the technical side of the software function properly.	They manage the product's business side and ensure that it perform well on the market.

Question 17: Sample resume of 3yrs experience Product Owner

WAFI ADEL

ASSOCIATE PRODUCT OWNER



Contact

janicewillis@email.com

(123) 456- 7890

Addison, TX

Linkedin

Education

B.A

Business Administration

University of Texas

September 2016- June 2020

Austin in, TX

SKILLS

Accounting

Business Management

Communication

Public Speaking

Writing Business Cases

CAREER OBJECTIVE

Proven associate product owner with a detailed working knowledge of how users interact with solution, users interact with solution, user stories are created, and functional specification are leveraged to support and enhance user workflow, seeking continued growth as an associate product owner at an established and goal -ambitious company like TriTech.

Experience

Associate Product Owner

Adra

January 2025- current / Addison, TX

- Worked with 10+ R&D teams to redesign user interactions
- Performed 50+ competitive assessments and implementation of product features to keep merchandise competitive in key market segments.
- Validated 300+ user test cases test cases (from user stories) to verify features worked as designed.
- Maintained regulatory and legal compliance within 30+ product while adhering to local guidelines.
- Assisted with internal training and 10+ roll-out activities
- Ensured infrastructure readiness for upward of 1000 product launches
- Served as an escalation point for team of 12 supporting and handling customer-related issues

Associate Product Owner Intern

Brightstar Crop.

January 2022- February 2023/ Southlake, TX

- Created 100+ product plans and product backlogs that established development priorities for each release
- Worked with Engineering to drive product development by representing the customer, using 1000+ user stories
- Assisted with the prioritization of 20+ product enhancement and new product cataloging to improve usability and maximize customer retention
- Created 100+ user stories to support business solution definition and meet company requirements
- Created 25+ business process flow diagram as the basis for designing new product features.

