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CAPSTONE PREP 2 ANSWERS

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Q1 Write Agile Manifesto
Ans AGILE MANIFESTO
There are 4 main rules :
- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

In 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 customer's competitive advantage.
3. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
4. Build projects around motivated need and trust them to get the job done.
5. Business people and developers must work together daily throughout the project. individuals. Give them the environment and support they
6. The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
7. Working software is the primary measure of progress.
8. Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
9. Continuous attention to technical excellence and good design enhances agility.
10. Simplicity--the art of maximizing the amount of work not done-is essential. (Backlog)
11. The best architectures, requirements, and designs emerge from self-organizing teams.
12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

Q2 Write minimum 40 User stories and their Acceptance Criteria along with their BV and CP
Ans User stories are part of the Product Backlog, prioritized by the Product Owner, and refined collaboratively by the Scrum Team. They help in breaking down complex requirements into manageable pieces, encouraging user-centric development, and serving as the basis for planning, discussion, and implementation during sprints. Each user story is further detailed with acceptance criteria to define the conditions for its successful completion.

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USER STORIES

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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, Nation ID, Mobile No, Email,
Address, Phone Number.
Click on Register Button.
Send Successful Notification to the user

User Story No: 02	Tasks: 2	Priority: HIGHEST
AS A RESTAURANT OWNER I WANT TO VIEW ORDERS SO THAT I CAN VIEW THE LIST OF ORDERS		
BV: 500	CP: 2	
Acceptance Criteria : View Order, Display List of orders in the tabular Form		

User Story No: 3	Tasks:2	Priority: HIGHEST
AS A CUSTOMER I WANT TO ADD THE ADDRESS SO THAT I CAN GET THE ORDER TO MY ADDRESS		
BV: 500	CP: 2	
Acceptance Criteria : Text Box to enter. Business Rules: Within the radius of 5 km		

User Story No: 4	Tasks:2	Priority: HIGHEST
AS A CUSTOMER I WANT TO SELECT THE PAYMENT MODE SO THAT I CAN MAKE PAYMENT OF MY CHOICE		
BV: 500	CP: 3	
Acceptance Criteria : Display payment modes, radio buttons to select payment modes, payments button. Business Rule. Can select only one payment mode		

User Story No: 5	Tasks:2	Priority: HIGHEST

AS AN ADMIN
I WANT TO VIEW THE RESTAURANTS
SO THAT I CAN APPROVE THEIR REGISTRATION

BV: 500	CP: 2

ACCEPTANCE CRITERIA
List of restaurant, select Restaurants, verify restaurant details, approve button, reject button, notification to the restaurant.

User Story No: 6	Tasks:2	Priority: LOW

AS ACUSTOMER
I WANT TO VIEW THE PRICE
SO THAT I CAN ORDER THE FOOD

BV: 50	CP: 1

Acceptance Criteria :
Display price in the list of menu items

User Story No:7	Tasks:2	Priority: LOW

AS A CUSTOMER
I WANT TO VIEW THE CONTACT NUMBER OF DELIVERY BOY SO THAT I CAN CONTACT DELIVERY BOY FOR THE STATUS

BV: 50	CP: 1

Acceptance Criteria :
Display delivery boy mobile number
Display delivery boy name in tracking field
Display delivery boy picture

User Story No: 8	Tasks:2	Priority: MEDIUM

AS A RESTAURANT OWNER
I WANT TO PROVIDE TIME SLOTS
SO THAT CUSTOMER CAN CHECK OPENING AND CLOSING HOURS

BV: 100	CP: 2

Acceptance Criteria :
Click on restaurant dashboard
Add from time to time
Click on submit
Display updated successfully

User Story No: 9	Tasks:2	Priority: HIGH
AS A Business OWNER I WANT TO VIEW RESTAURANT REVENUE REPORT SO THAT I CAN VIEW THE RESTAURANT'S REVENUE		
BV: 200	CP: 3	
Acceptance Criteria Select Reports Select Revenue Reports Select to and from date Select Region (can select all) Generate Report Download Report in EXCEL		

User Story No: 10	Tasks: 03	Priority: High
AS A REG ADMIN I WANT TO MANAGE REGIONAL RESTAURANTS, SO THAT, I CAN TRACK THE PERFORMANCE OF REGIONAL RESTAURANTS.		
BV: 200	CP: 03	
Acceptance Criteria : CLICK ON PERFORMANCE OF RESTAURANTS SELECT FROM DATE TO DATE CLINCK ON GENERATE REPORT WHICH INCLUSES RESTAURANTS ID, NAME, REVENUE CLICK ON DOWNLOAD REPORT SHOULD BE IN EXCEL		

User Story No: 11	Tasks: 02	Priority: Medium
AS ADMIN I WANT TO SEE THE REGIONAL REVENUE REPORTS, SO THAT I CAN VIEW THE REGIONAL PERFORMANCE		

BV: 100	CP: 03

Acceptance Criteria :
Select regional dropdown
View performance of each rest of that region in tabular form which includes rest name, revenue, generated
Download in excel or PDF

User Story No: 12	Tasks: 02	Priority: High

AS A CUSTOMER
I WANT TO CHAT WITH REG ADMIN SO THAT I CAN REQUEST FOR REFUND

BV: 200	CP: 02

Acceptance Criteria :
BR-ALL MANDATORY
TEXT BOX FIELDS
DISPLAY ORDER ID
TEXT BOX,FOR DESCRIPTION
SUBMIT BUTTON
GENERATE ISSUE ID
DISPLAY SUCCESSFUL

User Story No: 13	Tasks: 02	Priority: High

AS A HUNGRY USER
I WANT TO BROWSE NEARBY RESTAURANTS
SO THAT I CAN ORDER THE FOOD

BV: 200	CP: 02

ACCEPTANCE CRITERIA
1) Each restaurant entry displays its name, cuisine type, and rating
2)This list can be sorted by distance or rating

User Story No: 14	Tasks: 02	Priority: High

AS A CUSTOMER
I WANT TO BROWSE DIFFERENT RESTAURANTS AND MENUS
SO THAT I CAN FIND A PLACE TO ORDER FOOD

BV: 200	CP: 02

Acceptance Criteria :
1)The menu includes dishes, prices and descriptions
2)Show the restaurant is open or closed

User Story No: 15	Tasks: 01	Priority: High
AS A CUSTOMER I WANT TO BROWSE FOR SPECIFIC DISHES AND CUISINES SO THAT I CAN FIND A PLACE TO ORDER FOOD		
BV: 200	CP: 02	
Acceptance Criteria : 1)App displays relevant restaurant and dishes matching the query		

User Story No: 16	Tasks: 01	Priority: High
AS A CUSTOMER WANT TO FILTER RESTAURANTS SO THAT I CAN FIND A PLACE TO ORDER FOOD		
BV: 200	CP: 02	
Acceptance Criteria : 1)Filter restaurants by cuisine type and dietary options(vegan, veg, nonveg, egg)		

User Story No: 17	Tasks: 02	Priority: High
AS A CUSTOMER I WANT TO TRACK MY ORDER SO THAT I KNOW THE TIME OF DELIVERY		
BV: 200	CP: 02	

Acceptance Criteria :
  1)App shows real time update on the order status
  2)Display estimated delivery time		

User Story No: 18	Tasks: 01	Priority: High

AS A USER
I WANT TO RATE AND REVIEW RESTAURANTS
SO THAT I CAN RATE AND REVIEW THE RESTAURANTS I HAVE VISITED

BV: 200	CP: 02

Acceptance Criteria :
 1)Can see reviews from other users to help me make
dining decisions.

User Story No: 19	Tasks: 01	Priority: High

AS A USER
I WANT TO VIEW PAST ORDER HISTORY
SO THAT I CAN ORDER AGAIN

BV: 200	CP: 02

Acceptance Criteria :
 1) Can see the details such as order items, total cost and order date

User Story No: 20	Tasks: 03	Priority: High

AS A USER
I WANT TO RECEIVE NOTIFICATIONS
SO THAT I CAN RECEIVE UPDATES

BV: 200	CP: 02

Acceptance Criteria :
 1)Notifications for order confirmation
 2)Notification for dispatch
 3)Notification for delivery

User Story No: 21	Tasks: 01	Priority: Medium

AS A CUSTOMER
 WANT TO CONTACT CUSTOMER SUPPORT TEAM
SO THAT I CAN SUBMIT QUERIES OR ISSUES

BV: 200	CP: 02

Acceptance Criteria :
1) Customer support section with contact information

User Story No: 22	Tasks: 02	Priority: High
AS A RESTAURANT OWNER I WANT TO RECEIVE AND MANAGE ORDERS SO THAT I CAN UPDATE ORDER STATUS		
BV: 200	CP: 02	
Acceptance Criteria : 1)Manage order status 2)Notify restaurants about incoming orders		

User Story No: 23	Tasks: 02	Priority: High
AS A RESTAURANT OWNER I WANT TO ACCESS TO CUSTOMER REVIEWS SO THAT I CAN VIEW AND RESPOND TO CUSTOMER REVIEWS		
BV: 200	CP: 02	
Acceptance Criteria : 1) Owners can address feedback 2)Owners can improve their services		

User Story No: 24	Tasks: 01	Priority: Medium
AS A CUSTOMER I WANT TO APPLY PROMOCODES AND DISCOUNTS SO THAT I CAN ORDER AT LOWER PRICE		
BV: 100	CP: 04	
Acceptance Criteria : 1)Active Promocodes		

User Story No: 25	Tasks: 07	Priority: High

AS A DELIVERY BOY
I WANT TO VIEW THE ORDERS
SO THAT I ACCEPT THE ORDER

BV: 100	CP: 04

Acceptance Criteria :
 1)Order visibility
 2)Real-time updates
 3)Order details
 4)Order filtering and sorting
 5)Order map view
 6)Order navigation
7)Order completion and confirmation

User Story No: 26	Tasks: 01	Priority: High

AS A USER
I WANT TO SAVE FAVOURITE RESTAURANTS AND DISHES
SO THAT I CAN ORDER FROM MY FAVOURITES

BV: 200	CP: 02

Acceptance Criteria :
 1)Access my list of favourites easily for future orders

User Story No: 27	Tasks: 5	Priority: HIGH

 AS A DELIVERY BOY
 I WANT TO LOGIN SO THAT I CAN ACCEPT THE ORDER

BV: 200	CP: 4

Acceptance Criteria :
1) User Authentication
2) Error Handling
3) Password security
4) Multi-factor Authentication
5) Compatibility and Usability

User Story No: 28	Tasks: 5	Priority: MEDIUM

AS A DELIVERY BOY
I WANT TO VEIW FEEDBACK SO THAT I CAN KNOW THE CUSTOMER
FEEDBACK

BV: 200	CP: 4

Acceptance Criteria :
1) Access to feedback system
 2) Feedback Visibility
3) Feedback sorting and filtering
 4) Response Mechanism
 5) User Support

User Story No: 29	Tasks: 5	Priority: MEDIUM

AS A ADMIN
I WANT TO VEIW FEECBACK SO THAT I CAN KNOW THE CUSTOMERS
FEEDBACK

BV: 200	CP: 4

Acceptance Criteria :
1) Access to feedback system
 2) Feedback Visibility
3) Feedback sorting and filtering
 4) Response Mechanism
 5) User Support

User Story No: 30	Tasks: 5	Priority: MEDIUM

AS A RESTAURANT OWNER
I WANT TO VEIW FEECBACK SO THAT I CAN KNOW THE CUSTOMERS
FEEDBACK

BV: 200	CP: 4

Acceptance Criteria :
1) Access to feedback system
 2) Feedback Visibility
3) Feedback sorting and filtering
 4) Response Mechanism
 5) User Support

User Story No: 31	Tasks: 3	Priority: HIGH
AS A ADMIN I WANT TO KNOW THE ISSUES SO THAT I CAN RESOLVE THEM		
BV: 100	CP: 3	
Acceptance Criteria : 1) Display issue section 2) Sorting and filtering of issues list 3) Editing and modifying the issues		

User Story No: 32	Tasks: 3	Priority: HIGH
AS A REGIONAL ADMIN I WANT TO KNOW THE ISSUES SO THAT I CAN RESOLVE THEM		
BV: 200	CP: 4	
Acceptance Criteria : 1) Display issue section 2) Sorting and filtering of issues list 3) Editing and modifying the issues		

User Story No: 33	Tasks: 6	Priority: HIGH
AS A RESTAURANT OWNER I WANT TO VIEW REVENUE GENERATED SO THAT I CAN VIEW RESTAURANTS REVENUE		
BV: 200	CP: 4	
Acceptance Criteria : Select Reports Select Revenue Reports Select to and from date Select Region (can select all) Generate Report Download Report in EXCEL		

User Story No: 34	Tasks: 2	Priority: HIGH

AS A RESTAURANT OWNER
I WANT TO KNOW DELIVERY BOY SO THAT I CAN VERIFY THE DELIVERY BOY

BV: 200	CP: 4

Acceptance Criteria :
ID proof
Punctuality and reliability

User Story No: 35	Tasks: 2	Priority: LOW

AS A CUSTOMER
I WANT TO VIEW THE CONTACT NUMBER OF DELIVERY BOY SO THAT I CAN CONTACT DELIVERY BOY FOR THE STATUS

BV: 50	CP: 1

Acceptance Criteria :
1. Display delivery boy mobile number
2. Display delivery boy name in tracking field
3. Display delivery boy picture

User Story No: 36	Tasks: 2	Priority: MEDIUM

AS A RESTAURANT OWNER
I WANT TO PROVIDE TIME SLOTS SO THAT CUSTOMER CAN CHECK OPENING AND CLOSING HOURS

BV: 100	CP: 2

Acceptance Criteria :
1. Click on restaurant dashboard
2. Add from time to time
3. Click on submit
4. Display updated successfully

User Story No: 37	Tasks: 3	Priority: HIGH

AS A USER
I WANT TO RECEIVE NOTIFICATIONS SO THAT I CAN RECEIVE UPDATES

BV: 200	CP: 2

Acceptance Criteria :
1) Notifications for order confirmation
2) Notification for dispatch
3) Notification for delivery

User Story No: 38	Tasks: 1	Priority: MEDIUM
AS A CUSTOMER I WANT TO CONTACT CUSTOMER SUPPORT SO THAT I CAN SUBMIT QUERIES OR ISSUES		
BV: 200	CP: 2	
Acceptance Criteria : 1) Customer support section with contact information		

User Story No: 39	Tasks: 4	Priority: MEDIUM
AS A CUSTOMER I WANT TO VIEW THE ORDER SO THAT I CAN CANCEL IT		
BV: 100	CP: 3	
Acceptance Criteria : Order status Method of cancellation Refund policy Time frame		

User Story No: 40	Tasks: 4	Priority: HIGH
AS A REGIONAL ADMIN I WANT TO TRACK THE DELIVERY SO THAT I CAN VIEW THE STATUS OF THE DELIVERY		
BV: 100	CP: 3	
Acceptance Criteria : Real time tracking Security and data privacy User friendly Interface		

Q3 What is epic? Write 2 epics
Ans An epic is a set of related user stories . they are also considered a " real big user story".
Epic 1: Customer Food Ordering and Tracking
Description:
Enable customers to seamlessly search for restaurants, place orders, and track their deliveries in real-time while ensuring convenience and customer satisfaction.
Acceptance criteria :
Customer registration and login.
Search and view restaurants and menus.
Add address for delivery with a 5 km radius restriction.
Place orders and select payment modes.
Track delivery status, including delivery boy details.
Provide feedback and ratings.

Epic No.2: Ratings and reviews:
Description:
As a user, I want to view ratings and reviews for restaurants on scrum foods, so that I can make informed decisions about where to order food from.
As a user, I want to provide ratings and reviews for restaurants on scrum foods, so that I can share my experiences with other users and contribute to the community.
Acceptance Criteria
Users can view average ratings and reviews for each restaurant on the restaurants details page
Users can read detailed reviews and comments left by the other customers
Users can sort and filter reviews based on criteria such as rating and relevance
Users can rate the restaurants and leave a review after placing the order
User can edit or delete their own reviews within a specified timeframe
Reviews are displayed in a way that provides helpful insights to other users
The rating and review system maintains the integrity and authenticity of user feedback .

Q4 What is the difference between BV and CP
Ans

ASPECT	BUSINESS VALUE (BV)	COMPLEXITY POINT (CP)
Definition	Represents the importance or value of a user story to the business.	Represents the effort or complexity required to implement the user story.
Purpose	Helps prioritize features based on their business impact.	Helps estimate development time and effort required.
Determined By	Stakeholders, such as clients or business owners .	Scrum developers or the Scrum team.
Unit of Measurement	Assigned using denominations (e.g., Rs 1000, Rs 500).	Measured using story points (e.g., 1, 2, 3, 5, etc.).
Focus	Focused on business needs and impact.	Focused on technical challenges and coding effort.
Influence on Prioritization	High BV user stories are prioritized over low BV stories.	CP helps allocate resources and time effectively but doesn't determine priority.

Relation to cost	Does not represent development cost or effort.	Indicates the difficulty and potential cost of implementation.
Consensus Process	Stakeholders discuss and agree on the BV for each story	Scrum team uses tools like planning poker to agree on CP

Q5 Explain about Sprint

Ans Sprint: This is the period that team decides to deliver their objective. Normally a sprint period will be for 2 weeks but may extend to 4 weeks.

A Sprint is a fixed-length timebox within which the Scrum Team delivers a potentially shippable product increment. It is one of the core components of the Scrum framework, designed to promote focus, adaptability, and continuous improvement. A Sprint is the heartbeat of Scrum, where ideas are turned into value.

The key aspects of a Sprint are:

1. Sprint Duration:

The length of a Sprint is fixed and usually ranges from 1 to 4 weeks. The shorter duration (e.g., 1 week) makes it easier for teams to stay focused, whereas longer durations may lead to diminishing returns in terms of feedback and adjustments.

2. Sprint Goal:

Each Sprint has a clear Sprint Goal, which defines what the team aims to achieve by the end of the Sprint. The goal is usually derived from the Product Backlog, which contains all the features, fixes, and improvements needed for the product.

3. Sprint Planning:

Before the Sprint begins, there is a Sprint Planning Meeting, where the Scrum Team (Product Owner, Scrum Master, and Developers) collaborates to define which User Stories from the Product Backlog will be included in the Sprint.

The team reviews each user story, estimates its complexity (using Complexity Points (CP)), and discusses the necessary steps to implement it. A Sprint Backlog is created at the end of this meeting, which outlines all the tasks to be completed.

4. Daily Scrum (Stand-up) Meetings:

Every day during the Sprint, the team holds a Daily Scrum (also known as the Daily Stand-up). This is a short, time-boxed (usually 15 minutes) meeting where each team member answers three questions:

What did I do yesterday?

What will I do today?

Are there any blockers or obstacles in my way?

The purpose of this meeting is to ensure that the team is aligned and progressing as planned and to quickly identify any issues that need to be addressed.

5. Sprint Review:

At the end of the Sprint, the team holds a Sprint Review Meeting where the Product Owner and stakeholders review the work completed during the Sprint. The team demonstrates the features or increments they have developed, and feedback is gathered to assess if any adjustments are needed. The goal of the review is to assess progress and ensure the product meets the expected requirements.

6. Sprint Retrospective:

After the Sprint Review, the team holds a Sprint Retrospective to reflect on the Sprint process itself. During this meeting, the team discusses what went well, what didn't go as planned, and what

improvements can be made in the next Sprint. It focuses on improving teamwork, efficiency, and the Scrum process.

7. Definition of Done (DoD):

Before the Sprint begins, the team agrees upon a Definition of Done (DoD), which defines the criteria that must be met for a user story or task to be considered complete. This could include aspects such as code quality, testing, documentation, and review by stakeholders. The goal is to ensure that the work completed is fully finished and ready for delivery.

Key Roles During a Sprint:

Product Owner:

The Product Owner is responsible for ensuring that the team is working on the highest-priority tasks in the Product Backlog. During the Sprint, they collaborate with the team to provide clarification on user stories, answer questions, and make decisions about the product.

Scrum Master:

The Scrum Master acts as a facilitator for the team, ensuring that Scrum principles are followed. They remove any obstacles the team may face during the Sprint, guide the team to stay focused, and ensure that the team is continuously improving.

Development Team:

The Development Team is composed of developers who work on the tasks defined in the Sprint Backlog. They are responsible for delivering the work and meeting the Sprint Goal by the end of the Sprint.

Sprint Lifecycle:

Sprint Planning (Start of Sprint):

The team gathers to decide which User Stories from the Product Backlog will be worked on during the Sprint.

The work to be done is broken down into tasks, and the team assigns Complexity Points (CP) to each User Story.

A Sprint Backlog is created, and a Sprint Goal is defined.

Execution (During the Sprint):

The team works on the User Stories in the Sprint Backlog. Daily Scrums are held to monitor progress, identify blockers, and adjust plans as necessary.

Developers focus on completing tasks, coding, testing, and ensuring the work meets the Definition of Done.

Sprint Review (End of Sprint):

The Scrum Team demonstrates the completed work to stakeholders.

Feedback is gathered, and the team discusses any changes or additions that might be needed for the product.

Sprint Retrospective (End of Sprint):

The team evaluates their processes, identifies challenges, and discusses ways to improve. They agree on actionable items to implement in the next Sprint to improve performance and efficiency.

Q6 Explain Product backlog and sprint back log

Ans Product Backlog

The Product Backlog is a dynamic, ordered list of all the desired work (user stories, features, fixes, etc.) for the product that needs to be done. It is the single source of requirements for the Scrum Team, which evolves over time as new needs are identified and existing ones are refined.

Key Characteristics of Product Backlog:

Contains All Product Requirements: It includes everything that needs to be done for the product to be released, like features, bug fixes, improvements, technical debt, and other tasks. For example, in the Scrum Foods app, the product backlog would contain stories like "As a customer, I want to be able to track my delivery in real time."

Prioritized by Business Value: The product owner is responsible for prioritizing the backlog based on business needs, customer feedback, and market conditions. High-priority stories (with high Business Value) are worked on first.

Managed by the Product Owner: The Product Owner is responsible for ensuring that the product backlog is clear, detailed, and up to date. They refine it regularly by breaking down large stories (called epics) into smaller, actionable tasks (user stories).

Emergent: The product backlog is never complete. It is a living document that changes over time based on feedback from customers, stakeholders, or team members. New stories are added as the team learns more about the product's needs.

Not a Fixed Schedule: The Product Backlog is constantly evolving. New stories might be added, and older ones might be re-prioritized or removed as the project progresses.

For Scrum Foods, some examples of user stories in the product backlog could be:

"As a customer, I want to be able to order food from a nearby restaurant."

"As an admin, I want to approve new restaurants that wish to join the platform."

Sprint Backlog

The Sprint Backlog is a subset of the Product Backlog that is selected and worked on during a particular sprint (usually 1-4 weeks). It contains all the tasks and user stories that the Scrum Team has committed to completing in that sprint. The Sprint Backlog evolves as the team works, adding more detailed tasks as necessary.

Key Characteristics of Sprint Backlog:

Subset of Product Backlog: The Sprint Backlog is derived from the Product Backlog. During Sprint Planning, the team selects the highest priority items (user stories) from the Product Backlog that can be completed in the upcoming sprint, based on team capacity.

Commitment to Delivery: The Scrum Team commits to delivering all items in the Sprint Backlog by the end of the sprint. This backlog typically contains smaller tasks that break down user stories into actionable steps (e.g., coding, testing, UI design).

Daily Adjustments: The Sprint Backlog is adjusted daily during the Daily Scrum meeting (stand-up). If necessary, tasks may be added or removed, and priorities may shift to ensure the sprint goal is met.

Owned by the Scrum Team: While the Product Owner defines the goals and priorities, the entire Scrum Team (including developers) owns the Sprint Backlog. The team collaborates to decide how much work they can realistically accomplish in the sprint.

For Scrum Foods, during a sprint, the Sprint Backlog may look like this:

User Story No. 1 (Customer Login) – Tasks: Develop login UI, integrate with database, write tests, deploy to dev environment. User Story No. 2 (Order Tracking) – Tasks: Design tracking page, implement real-time tracking feature, integrate tracking API.

ASPECT	PRODUCT BACKLOG	SPRINT BACKLOG
Scope	Contains all possible user stories for the entire product	Contains the user stories/tasks selected for the current sprint
Ownership	Managed by the Product Owner	Owned by the Scrum Team
Content	High-level features, user stories, bugs, tasks	Tasks and user stories that are planned for the sprint
Priority	Prioritized by business value	Items are selected based on team capacity and sprint goals
Changeability	Continuously refined and updated based on feedback	Adjusted daily based on progress in the sprint
Timeframe	Long-term vision for the product (ongoing)	Short-term (for one sprint only)

Q7 What is impediments log? write 2 impediments

Ans An Impediments Log is a tool used by the Scrum team to track and manage any obstacles or issues (impediments) that could hinder the progress of the team in achieving its Sprint goals. The Scrum Master is responsible for removing these impediments to ensure that the team can continue working efficiently. The log typically includes information such as the description of the impediment, its impact on the project, the priority of resolution, the person assigned to resolve it, the status of the impediment, the action taken, and the final resolution.

1. Unable to register due to incorrect input validation

LOGIN ID	1
DESCRIPTION	Unable to register due to incorrect input validation
IMPACT	Delivery boy unable to join the system
PRIORITY	High
ASSIGNED TO	Satya Rathnakar
STATUS	Open
ACTION TAKEN	Investigated issue , found problem in registration from validation
RESOLUTION	Fix applied to input fields validation

2. Payment gateway error during transaction

LOGIN ID	2
DESCRIPTION	Payment gateway error during transaction
IMPACT	Restaurant unable to receive payments
PRIORITY	High
ASSIGNED TO	Madhuri
STATUS	In Progress
ACTION TAKEN	Contacted payment gateway provider awaiting resolution .
RESOLUTION	Payment gateway issue resolved by provider .

Q8 Explain Velocity of the Team

Ans Velocity is the total number of Story Points (CP) completed during a sprint. It serves as a useful metric for predicting how much work the team can take on in upcoming sprints, based on their past performance.

For example, if a team completes 50 CP worth of user stories in Sprint 1, then their velocity for Sprint 1 is 50 CP.

How to Calculate Velocity

To calculate the velocity, the team needs to sum up the CP (complexity points) of all user stories that were completed in the sprint.

Only the user stories that meet the Definition of Done are counted towards the velocity.

Example: If a team completes the following user stories in Sprint 1:

User Story 1: 3 CP

User Story 2: 5 CP

User Story 3: 8 CP

Total Velocity = 3 + 5 + 8 = 16 CP

Average Velocity Calculation

After a few sprints, the team can calculate their average velocity (e.g., if the team completed 50 CP in Sprint 1, 60 CP in Sprint 2, and 55 CP in Sprint 3, the average velocity would be (50+60+55)/3 = 55 CP). This helps refine future planning and expectations.

Q9 Draw Sprint Burn down Charts n Product Burn Down Chart

Ans A **Sprint burndown chart** is a visual representation used in Agile project management to track the progress of work completed during a sprint. It provides a snapshot of the remaining work (usually measured in story points, hours, or tasks) versus the time remaining in the sprint.

A **Sprint Burn-up Chart** is a visual tool used in agile project management to track progress during a sprint. It shows the cumulative amount of work completed over time in relation to the total amount of work planned. This helps teams monitor their progress toward achieving sprint goals and identify any trends or impediments that might impact the sprint's success.

A **Product Burn-Down Chart** is a visual tool used in Agile project management to track the progress of work remaining in a project or sprint. It provides a clear, graphical representation of the amount of work completed over time versus the total work planned.

A **Product Burn-Up Chart** is a visual tool used in agile project management to track progress toward completing a product or a project. It shows the cumulative work completed over time against the total scope of work, providing an at-a-glance view of whether the team is on track to meet its goals.

SPRINT BURNDOWN CHART

Date - January 10th, 2025 - January 24th, 2025
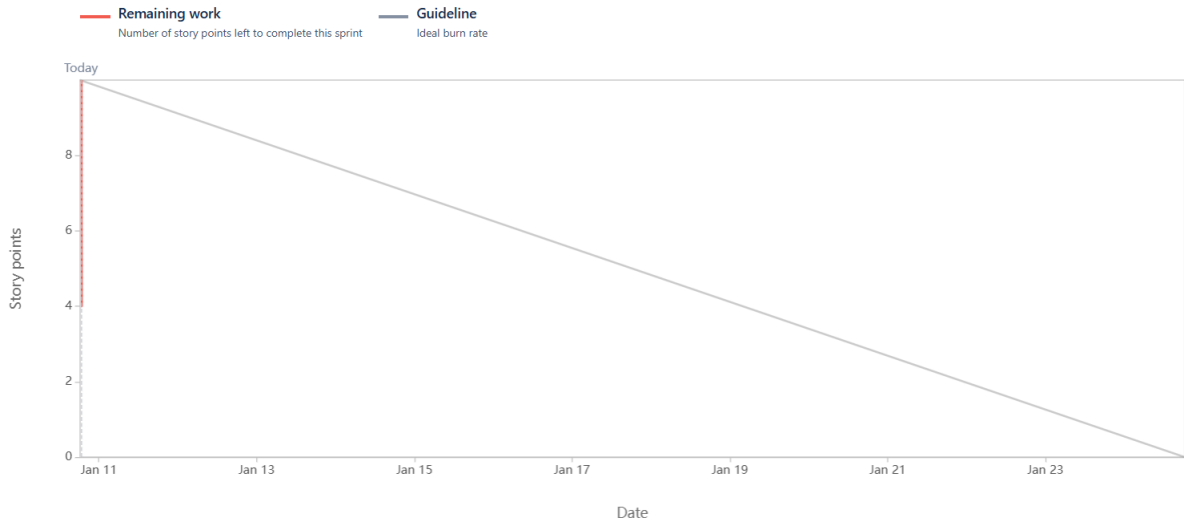
PRODUCT BURNDOWN CHART
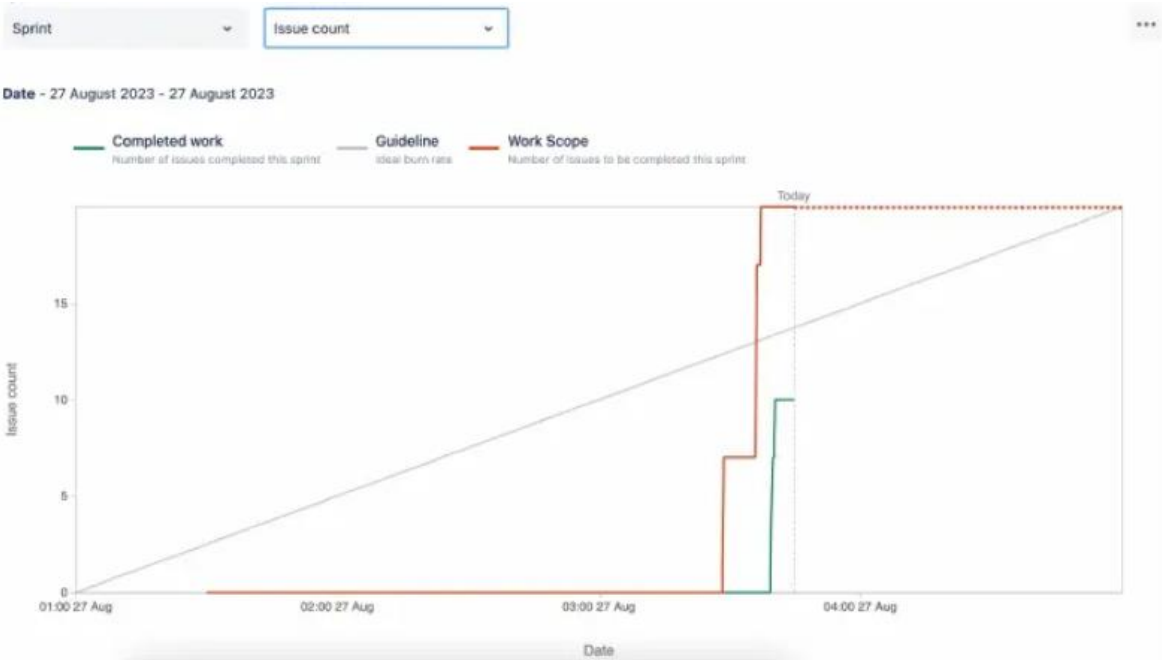
Q10 Explain about Product Grooming

Ans Product Grooming Process (also known as backlog refinement) is an iterative activity in Scrum to ensure the Product Backlog remains updated, clear, and actionable. The process focuses on preparing and refining backlog items for upcoming sprints, ensuring that the Scrum team is aligned on goals and priorities.

Steps in the Product Grooming Process:

Review Backlog Items:

Examine existing backlog items for relevance and alignment with the product roadmap.

Remove outdated or no longer relevant items.

Prioritize Items:

Collaboratively set priorities based on business value, urgency, and stakeholder feedback.

Reorder the backlog if priorities have shifted.

Define and Refine User Stories:

Write clear and concise user stories using the format:

As a [user role], I want to [goal] so that [benefit].

Refine acceptance criteria to clarify the "definition of done."

Estimate Effort:

Scrum team uses estimation techniques like Planning Poker or T-shirt sizing to assign effort (complexity points) to each item.

Ensure estimates are realistic and account for technical dependencies.

Break Down Epics:

Split large items (epics) into smaller, actionable stories that fit within a sprint.

Ensure each story is small enough to be completed in a single sprint.

Identify Dependencies and Risks:

Discuss any technical, resource, or timeline dependencies that might affect implementation.

Proactively address risks to avoid delays during the sprint.

Add or Update Details:

Include supporting information, such as wireframes, mockups, or technical notes, for better understanding.

Confirm Readiness:

Ensure all high-priority items meet the "definition of ready" (DoR), meaning they are ready to be taken into the next sprint.

Q11 Explain the roles of Scrum Master and Product Owner

Ans

Roles	Scrum Master	Product Owner
Primary Role	Facilitates the Scrum process and ensures adherence to Scrum principles.	Manages the Product Backlog and ensures the product delivers value.
Focus	Team efficiency, collaboration, and removing impediments.	Maximizing the value of the product and aligning it with business goals.

Interaction with Team	Acts as a servant-leader, supporting the team in self-organization and productivity.	Acts as a voice of the customer, providing direction and clarification to the team.
Decision making	Facilitates team decisions without imposing solutions.	Makes key product decisions, such as backlog prioritization and scope adjustments.
Focus on Metrics	Tracks team performance metrics (e.g., velocity, cycle time).	Tracks product metrics (e.g., ROI, customer satisfaction).
Role in Sprint Planning	Facilitates the meeting and ensures clarity on scope and capacity.	Explains the prioritized backlog items and ensures alignment with business goals.
Role in Daily Scrum	Facilitates the event and ensures focus on progress and impediments.	May attend as a listener but does not direct the team.
Role in Sprint Review	Ensures the meeting is collaborative and focused on feedback.	Presents the product increment and gathers feedback from stakeholders.
Role in Retrospectives	Facilitates discussions to identify improvement areas.	May participate but primarily focuses on team processes.

Q12 Explain all Meetings Conducted in Scrum Project
Ans In a Scrum project, several meetings, known as Scrum ceremonies, are conducted to ensure alignment, collaboration, and transparency among team members and stakeholders.

Sprint Planning
Sprint Planning is the first meeting of every Sprint where the Scrum Team collaborates to define the Sprint Goal and decide which Product Backlog items will be delivered in the upcoming Sprint. The team estimates the effort required for each selected item and plans how the work will be completed. The Product Owner prioritizes the items, and the Scrum Master ensures the meeting is focused and adheres to time-boxing. The outcome is a clear Sprint Backlog that guides the team throughout the Sprint.

Daily Scrum
The Daily Scrum, also known as the Stand-up Meeting, is a short, time-boxed meeting held daily, typically lasting 15 minutes. The Development Team discusses progress toward the Sprint Goal, shares updates on completed tasks, and identifies any obstacles that might impede progress. Each team member answers three key questions: What was done yesterday? What will be done today? Are there any impediments? The Scrum Master ensures the meeting stays on track, and the Product Owner may attend but does not actively participate.

Sprint Review
The Sprint Review takes place at the end of each Sprint to showcase the work completed during the Sprint. The team demonstrates the Increment to stakeholders and gathers feedback. This collaborative meeting ensures alignment with stakeholder expectations and helps refine the Product Backlog based on feedback. The Product Owner leads the discussion on what was accomplished, while the Development Team answers questions about the implementation.

Sprint Retrospective
The Sprint Retrospective is conducted after the Sprint Review and before the next Sprint begins. It provides the Scrum Team an opportunity to reflect on the past Sprint, discussing what went well, what didn't go as planned, and what could be improved. The Scrum Master facilitates this meeting, ensuring it is constructive and focused on continuous improvement. The team identifies actionable items to enhance efficiency and effectiveness for future Sprints.

Backlog Refinement
Backlog Refinement, also called Grooming, is an ongoing meeting where the Product Owner and the Scrum Team collaborate to ensure the Product Backlog is clear, prioritized, and ready for upcoming Sprints. This session includes adding details to backlog items, breaking down large items into smaller ones, and estimating effort. While not officially a Scrum ceremony, it is a critical practice that ensures smooth Sprint Planning and alignment between the Product Owner and the Development Team.

Q13 Explain Sprint Size and Scrum Size
Ans Sprint size
It refers to the duration or capacity of a sprint within a Scrum framework. It is determined by how much work a team can complete within a predefined timebox, typically ranging from one to four weeks. The sprint size depends on the complexity of the tasks, team velocity, and the nature of the project. A smaller sprint size allows for quicker feedback loops and greater adaptability, while larger sprint sizes provide more time for complex work but may delay feedback and adjustment opportunities. Teams decide on the optimal sprint size based on their goals, workflow, and ability to deliver a potentially shippable product increment within the timeframe.

Scrum size, on the other hand, refers to the size of the Scrum team itself. Scrum recommends a team size of 10 or fewer members, with cross-functional skills to handle various aspects of product development. A smaller Scrum team ensures better communication, collaboration, and agility, while larger teams might struggle with coordination and maintaining focus. If a project requires more people, the work is typically divided across multiple Scrum teams, each responsible for specific aspects, collaborating under a common product vision. Balancing Scrum size is critical to maintaining efficiency and delivering value effectively.

Q14 Explain DOR and DOD
Ans Definition of Ready (DoR):
The DoR specifies the criteria a product backlog item (PBI) must meet before the team commits to working on it in a sprint. It ensures that work is well-defined, actionable, and understood by the team, reducing ambiguity and avoiding delays. Typical DoR criteria include:
- The user story is clearly written and follows the standard format (e.g., "As a [user], I want [functionality], so that [benefit]").
- Acceptance criteria are clearly defined and agreed upon.
- Dependencies and risks are identified and addressed.
- Necessary designs, wireframes, or specifications are provided.
- The effort for the PBI is estimated by the team.

- When an item meets the DoR, it is deemed "ready" for the sprint.

Definition of Done (DoD):

The DoD outlines the quality and completeness standards for a product backlog item or an increment to be considered finished. It ensures that the delivered work is of high quality and potentially shippable. Typical DoD criteria include:

- Code is written, reviewed, and adheres to coding standards.
- Code is tested (unit tests, integration tests, regression tests) and passes all test cases.
- The functionality is documented and demo-ready.
- The increment has been deployed to a staging environment for validation.
- User acceptance criteria have been met.
- Relevant documentation is updated (e.g., technical, user manuals).
- Stakeholders have reviewed and approved the work.
- When an item meets the DoD, it is ready for release or integration into the product.

Q15 Explain Prioritization Techniques and MVP

Ans Prioritization Techniques are methods used to determine the order in which product backlog items (PBIs) should be worked on. Since not all tasks can be completed at once, prioritization ensures that the most valuable and urgent tasks are completed first, maximizing business value. Some common prioritization techniques in Scrum include:

Moscow Method:

This method classifies tasks into four categories:

Must Have: Essential tasks that are necessary for the success of the product.

Should Have: Important tasks, but not essential for the product's initial release.

Could Have: Tasks that are nice to have, but not critical for the release.

Won't Have: Tasks that are out of scope for the current iteration or release.

Kano Model:

This technique categorizes features based on customer satisfaction and their potential to delight users:

Basic Needs: Features that are expected and their absence will cause dissatisfaction.

Performance Needs: Features that improve user satisfaction as they become better.

Excitement Needs: Features that delight customers but are not expected or required.

Weighted Shortest Job First (WSJF):

WSJF is used in Lean and Agile environments to prioritize work based on the cost of delay divided by the job size (effort). Features or tasks that have a higher cost of delay and a smaller size should be prioritized as they provide the most value with the least effort.

Value vs. Effort Matrix:

This technique plots features or tasks on a grid where one axis represents the value or benefit delivered, and the other represents the effort or cost to implement. Items in the high-value, low-effort quadrant should be prioritized for implementation, as they offer the most return on investment. Tasks with low value and high effort are typically deprioritized

Minimum Viable Product (MVP):

An MVP is the smallest version of a product that includes just enough features to provide value to early adopters and gather feedback. The MVP approach helps validate assumptions, learn from users, and iteratively build upon a product's foundation. It involves:

Core Functionality: An MVP focuses on delivering the core functionalities that address the primary needs or pain points of the target users.

Minimal Features: The MVP omits non-essential features to avoid unnecessary complexity and expedite development.

Testing Hypotheses: The MVP tests assumptions and hypotheses about user behavior, market demand, and product viability.

Iterative Development: Based on user feedback, the product is refined and expanded in subsequent iterations, gradually adding more features.

Q16 Difference between Business Analyst n Product Owner
Ans

ASPECTS	BUSINESS ANALYST	PRODUCT OWNER
Primary focus	Focuses on gathering, analyzing, and documenting business requirements.	Focuses on defining the product vision and ensuring it meets business needs.
Role in scrum	May not be directly part of the Scrum team but provides input and documentation for requirements.	Part of the Scrum team, responsible for maintaining the Product Backlog and ensuring its alignment with the vision
Key Responsibilities	- Conducts stakeholder interviews. - Analyzes business processes. - Creates functional requirements. - Ensures the solution meets business needs.	- Defines and prioritizes the Product Backlog. - Makes decisions regarding product features. - Represents stakeholders' needs. - Accepts or rejects work in the Sprint.
Interaction with Stakeholders	Works closely with business stakeholders to elicit and define requirements.	Directly interacts with stakeholders, but also collaborates with the Scrum Team to balance user needs and technical constraints.
Documentation Process	Emphasizes detailed documentation such as Business Requirement Documents (BRD), Use Cases, and process flows.	Focuses on maintaining and refining the Product Backlog, which includes user stories and acceptance criteria.
Decision Making	Provides input to decision-making by offering data, analysis, and process improvements.	Makes final decisions about what features should be included in the product and prioritizes the backlog.

Product Vision	May assist in aligning requirements with the overall product vision but typically does not own it.	Owns the product vision, ensuring the team works toward delivering a product that fulfills stakeholder needs.
Collaboration	Works with Product Owners, Project Managers, and development teams to clarify requirements.	Works with the Scrum Team, stakeholders, and sometimes Business Analysts to ensure alignment with the product vision.
Timeframe Focus	Typically focused on longer-term business requirements, spanning multiple sprints or projects.	Focuses on short-term iterations within each Sprint, ensuring the backlog is refined and ready for upcoming work.
Skills Required	Strong analytical and problem-solving skills, process mapping, requirements gathering.	Strong communication, decision-making, and prioritization skills, with a focus on delivering value to customers

Q17 Prepare a sample Resume of 3yrs exp Product Owner
Ans

ASHWADEEPA KOLA

CONTACT

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📱 6301417305

✉ kashwadeepareddy@gmail.com

SKILLS

- Conceptual skills
- User-centered design processes
- Design quality standards
- Service and product design methodologies
- Agile and Scrum
- Conducting design sprints
- User validation
- Analytical skills
- Collaboration and teamwork
- Strong Communication skills

CERTIFICATIONS

- AGILE CERTIFIED PRACTITIONER (PMI-ACP)
- CERTIFIED SAFe® PRODUCT OWNER

Experienced Agile Product Owner with a proven track record at Microsoft, Innovation Group, and Cognizant Technology Solutions in Hyderabad. Demonstrated expertise in managing product roadmaps, prioritising backlogs, and fostering communication between stakeholders to enhance feature development life-cycles. Notable achievements include meeting 96% of feature deadlines at Microsoft and increasing ROI by 16% through targeted user stories.

EXPERIENCE

April 2024 - Current
Agile product owner *Microsoft*, HYDERABAD
- Acted as the liaison between product, IT, and sales teams to understand customer demand for new features and prioritize the product roadmap.
- Owned the product roadmap and met 96% of all feature deadline- by identifying and mitigating any engineering roadblocks.
- Developed 6 different user stories for a new subscription product leading to focused marketing copy and an ROI increase of 16%
- Fostered open communication between executive stakeholders, engineering, and marketing, resulting in a speed improvement of th feature development life-cycle by 22% year over year.
- Led a team of 1 full-time employee and 3 contractors

January 2023 - March 2024
Product Owner *Innovation Group*, HYDERABAD
- Provide week-to-week tactical objectives to scrum team, and provide quick JIT decisions to system level questions and defect triage
- Possibly work with 3rd party system integrators to drive process on schedule and on budget
- Defining the road map and prioritizing the backlog of work to meet the vision in a timely manner to meet market and customer demands
- Drive and own backlog grooming and management, prioritize the iteration and drive acceptance testing and delivery of iteration
- Relating & Networking
- Entrepreneurial & Commercial Thinking
- Track budget and delivery of engineering projects and releases

January 2021 - December 2022
Product Owner *Cognizant Technology Solutions*, HYDERABAD
- Work directly with end users to capture and analyze challenges to their workflow.
- Provide key performance metrics to the Head of IT on the deliveries and benefits realization of change implementations.
- Prioritizes work within an agile team and maintain a backlog of future work for consideration/prioritization.
- Take responsibility for the development of on-going enhancements, create and prioritize user stores with the agile teams
- Own and drive backlog grooming and management, prioritize user stories, create acceptance criteria and drive testing and delivery.
- Work with Program Management and Battelle leadership to support new business.
- Maximizing the work of the development team.

EDUCATION

2020
MBA BUSINESS ANALYTICS
Malla Reddy University, Medchal- Malkajgiri, IN-TS