CAPSTONE SCRUM PROJECT

1.write Agile Manifesto?

Ans-

Four main Values

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

Twelve Principles of Agile Software

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

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

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

7. Working software is the primary measure of progress.

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

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

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

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

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

2. Write minimum 40 User stories and their Acceptance Criteria along with their BV and CP? Ans-

A user story in Agile is a short, simple description of a feature or functionality from the perspective of the end user. It explains who the user is, what they want to do, and why they need it, often written in the format:

"As a [user role], I want to [goal or need] so that [benefit or reason]."

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	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 TH	HE LIST OF C	RDERS				
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	AS A CUSTOMER					
I WANT TO ADD THE AD	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	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	AS AN ADMIN						
I WANT TO VIEW THE R	ESTAURAN	ГS					
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 P	I WANT TO VIEW THE PRICE				
SO THAT I CAN ORDER	THE FOOD				
BV: 50 CP: 1					
Acceptance Criteria :					
1. Display price in the list of menu items					

User Story No:7	Tasks:2		Priority: LOW	
AS A CUSTOMER				
I WANT TO VIEW THE C	ONTACT NU	JMBER OF DE	LIVERY	
BOY SO THAT I CAN CO	NTACT DEL	IVERY BOY FO	R THE	
STATUS				
BV: 50 CP: 1				
Acceptance Criteria :				
1. Display delivery boy mobile number				
2. Display delivery boy name in tracking field				
3. Display delivery boy picture				

User Story No: 8	Tasks:2		Priority: MEDIUM		
AS A RESTAURANT OW	NER				
I WANT TO PROVIDE TI	ME SLOTS				
SO THAT CUSTOMER CA	AN CHECK O	PENING AND	CLOSING HOURS		
BV: 100		CP: 2			
Acceptance Criteria :					
1. Click on restaurant d	1. Click on restaurant dashboard				
2. Add from time to time					
3. Click on submit					
4. Display updated successfully					

User Story No: 9	Tasks:2		Priority: HIGH		
AS A Business OWNER	I				
I WANT TO VIEW REST	AURANT RE	VENUE			
REPORT SO THAT I CAN	VIEW THE				
RESTAURANT'S REVEN	UE				
BV: 200		CP: 3			
Acceptance Criteria :		L			
Select Reports					
Select Revenue Report	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 R	EGIONAL R	ESTAURANTS,		
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	ASADMIN						
I WANT TO SEE THE R	EGIONAL RE	VENUE					
REPORTS, SO THAT I C	AN VIEW TH	E REGIONAL					
PERFORMANCE							
BV: 100 CP: 03							
Acceptance Criteria :	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 W	/ITH REG AD	MIN SO THAT	I CAN REQUEST FOR REFUND
BV: 200		CP: 02	
Acceptance Criteria	:		
BR-ALL MANDATOR			
TEXT BOX FIELDS			
DISPLAY ORDER ID			
TEXT BOX,FOR DESC	CRIPTION		
SUBMIT BUTTON			
GENERATE ISSUE ID			
DISPLAY SUCCESSFU	JL		

User Story No: 13	Tasks: 02	Priority: High
AS A HUNGRY USER	I	I
I WANT TO BROWS	E NEARBY RESTAUR	ANTS
SO THAT I CAN ORD	ER THE FOOD	
BV: 200	CP: 0	12
ACCEPTANCE CRITE	RIA	
1) Each restaurant e 2)This list can be so		me, cuisine type, and rating rating

User Story No: 14	Tasks: 02	Priority: High	
AS A CUSTOMER			
I WANT TO BROWSE	DIFFERENT RESTAU	RANTS AND MENUS	
SO THAT I CAN FIND	A PLACE TO ORDER	FOOD	
BV: 200	CP: 02		
Acceptance Criteria : 1)The menu include	s dishes, prices and d	escriptions	
2)Show the restaura	nt is open or closed		
]

User Story No: 15	Tasks: 01		Priority: High	
AS A CUSTOMER				
I WANT TO BROWS	E FOR SPECIFIC D	ISHES A	ND CUISINES	
SO THAT I CAN FIN	D A PLACE TO ORI	DER FO	DC	
BV: 200	CP: 02	2		
Acceptance Criteria 1)App displays rele		nd dishe	es 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	CF	2: 02				
Acceptance Criteria	:					
1)Filter restaurant: egg)	s by cuisine ty	pe and diet	ary options(vegan, veg, nonveg,			

User Story No: 17	Tasks: 02		Priority: High			
AS A CUSTOMER						
I WANT TO TRACK I	MY ORDER					
SO THAT I KNOW THE TIME OF DELIVERY						
BV: 200	C	:P: 02				
Acceptance Criteria	:					
1)App shows real t	1)App shows real time update on the order status					
2)Display estimate	d delivery tin	ne				

User Story No: 18	Tasks: 01	Priority: High
AS A USER		
I WANT TO RATE A	ND REVIEW RESTAU	URANTS
SO THAT I CAN RAT	E AND REVIEW TH	E RESTAURANTS I HAVE VISITED
BV: 200	CP: 02	
Acceptance Criteria 1)Can see reviews dining decisions.		o help me make

User Story No: 19	Tasks: 01	Priority: High
AS A USER		
I WANT TO VIEW P	AST ORDER HISTORY	
SO THAT I CAN ORE	DER AGAIN	
BV: 200	CP: 02	
Acceptance Criteria 1) Can see the deta		total cost and order date

User Story No: 20	Tasks: 03		Priority: High				
AS A USER							
I WANT TO RECEI	I WANT TO RECEIVE NOTIFICATIONS						
SO THAT I CAN RE	CEIVE UPDA	ATES					
BV: 200		CP: 02					
Acceptance Criteri	ia :	L					
1)Notifications fo	r order confi	irmation					
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							
T customer supp							

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

User Story No: 23	Tasks: 02		Priority: High			
AS A RESTAURAN	TOWNER					
I WANT TO ACCESS TO CUSTOMER REVIEWS						
SO THAT I CAN VI	EW AND RESPON	ID TO CU	STOMER REVIEWS			
BV: 200	CP: 0)2				
Acceptance Criteri	a :					
1) Owners can address feedback						
2)Owners can imp	prove their servic	ces				

User Story No: 24	Tasks: 01		Priority: Medium	
AS A CUSTOMER				
I WANT TO APPLY			OUNTS	
SO THAT I CAN OF	RDER AT LO	NER PRICE		
BV: 100		CP: 04		
Acceptance Criteri	a :			
1)Active Promoco	des			

User Story No: 25	Tasks: 07		Priority: High	
AS A DELIVERY BC	ΟY			
I WANT TO VIEW	THE ORDERS	S		
SO THAT I ACCEPT	THE ORDE	3		
BV: 100		CP: 04		
Acceptance Criteri 1)Order visibility 2)Real-time updat 3)Order details 4)Order filtering a 5)Order map view 6)Order navigatio	tes and sorting v			
7)Order completic	on and confi	rmation		

User Story No: 26	Tasks: 01		Priority: High	
AS A USER				
I WANT TO SAVE I				
	_		23	
BV: 200	CP:	02		
Acceptance Criteri	a :			
1)Access my list o	f favourites eas	ily for futu	re orders	

User Story No: 27	Tasks: 5		Priority: HIGH
AS A DELIVERY BOY			
I WANT TO LOGIN SO TH	HAT I CAN A	CCEPT THE OF	RDER
BV: 200		CP: 4	
Acceptance Criteria :			
1) User Authentication			
2) Error Handling			
3) Password security			
4) Multi-factor Authentication			
5) Compatibility and Us	ability		

User Story No: 28	Tasks: 5		Priority: MEDIUM
AS A DELIVERY BOY			
I WANT TO VEIW FEEDE	BACK SO TH	AT I CAN KNO	W THE CUSTOMER
FEEDBACK			
DV/: 200		CP: 4	
BV: 200		CP:4	
Acceptance Criteria :			
1) Access to feedback s	ystem		
2) Feedback Visibility			
3) Feedback sorting and	d filtering		
4) Response Mechanism			
5) User Support			

User Story No: 29	Tasks: 5	Priority: MEDIUM
AS A ADMIN I WANT TO VEIW FEECI FEEDBACK	BACK SO THA	T I CAN KNOW THE CUSTOMERS
BV: 200	C	CP: 4
Acceptance Criteria : 1) Access to feedback sy 2) Feedback Visibility 3) Feedback sorting and 4) Response Mechanist 5) User Support	filtering	

User Story No: 30	Tasks: 5	Priority: MEDIUM
AS A RESTAURANT OW	NER	
I WANT TO VEIW FEECE	ACK SO THAT I CA	N KNOW THE CUSTOMERS
FEEDBACK		
BV: 200	CP: 4	
Acceptance Criteria :		
1) Access to feedback sy	stem	
2) Feedback Visibility		
3) Feedback sorting and	filtering	
4) Response Mechanisr	n	
5) User Support		

Acceptance Criteria : 1) Display issue section 2) Sorting and filtering of issues list	User Story No: 31	Fasks: 3	Priority: HIGH
Acceptance Criteria : 1) Display issue section 2) Sorting and filtering of issues list		SSUES SO THAT	I CAN RESOLVE THEM
 Display issue section Sorting and filtering of issues list 	BV: 100	CP: 3	
 Display issue section Sorting and filtering of issues list Editing and modifying the issues 	Acceptance Criteria :		
	1) Display issue section		

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

User Story No: 33	Tasks: 6		Priority: HIGH		
	AS A RESTAURANT OWNER				
I WANT TO VIEW REVE RESTAURANTS REVENU		ATED SO THA	I I CAN VIEW		
RESTAORANTS REVENC					
BV: 200		CP: 4			
Acceptance Criteria :					
Select Reports					
Select Revenue Report	s Select				
to and from date Selec	t Region				
(can select all) Generat	e Report				
Download Report in EX	CEL				

User Story No: 34	Tasks: 2		Priority: HIGH
AS A RESTAURANT OW I WANT TO KNOW DEL BOY		O THAT I CAI	N VERIFY THE DELIVERY
BV: 200	С	P: 4	
Acceptance Criteria : ID proof Punctuality and reliabil	ity		

User Story No: 35	Tasks: 2		Priority: LOW
AS A CUSTOMER	L		
I WANT TO VIEW THE CO	ONTACT NU	MBER OF DEL	IVERY BOY SO THAT I CAN
CONTACT DELIVERY BOY	FOR THE S	TATUS	
BV: 50		CP: 1	
Acceptance Criteria :			
1. Display delivery boy n	nobile num	ber	
2. Display delivery boy n	ame in trac	king field	
3. Display delivery boy p	icture		

User Story No: 36	Tasks: 2		Priority: MEDIUM	
AS A RESTAURANT O	WNER			
I WANT TO PROVIDE	TIME SLOTS	SO THAT CUST	OMER CAN CHECK	
OPENING AND CLOS	ING HOURS			
BV: 100		CP: 2		
Acceptance Criteria :				
1. Click on restaurant	dashboard			
2. Add from time to ti	me			
3. Click on submit				
4. Display updated su	ccessfully			

User Story No: 37	Tasks: 3	Priority: HIGH	
AS A USER I WANT TO RECEIVE NO UPDATES)TIFICATIONS S	SO THAT I CAN RECEIVE	
BV: 200	СР	: 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 CONTAC QUERIES OR ISSUES	T CUSTOMER SI	JPPORT SO THAT I CAN SUBMIT
BV: 200	C	P: 2
Acceptance Criteria : 1) Customer support section with contact information		

User Story No: 39	Tasks: 4		Priority: MEDIUM		
AS A CUSTOMER	AS A CUSTOMER				
I WANT TO VIEW THE C	ORDER SO T	HAT I CAN CA	NCEL 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			VIEW THE STATUS OF
BV: 100 CP: 3			
Acceptance Criteria : Real time tracking Security and data privacy User friendly Interface			

3.What is epic? Write 2 epics?

Ans-

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.

2 Epics 1. Ratings and reviews:

User stories

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

2. Epic: Real-Time Order Tracking for Food Delivery App

User Stories:

As a customer, I want to see the live status of my order.

As a customer, I want to track the location of my delivery.

As a customer, I want to receive notifications for order updates.

As a customer, I want to contact the delivery partner directly.

As a customer, I want to view the delivery route.

As a customer, I want to provide feedback on the delivery experience.

As a customer, I want to see estimated delivery time adjustments.

As a customer, I want to have a seamless tracking experience across platforms.

As an admin, I want to monitor order tracking performance.

Acceptance Criteria:

Real-Time Order Updates:

The app should provide real-time updates on the status of the user's order, such as "Order received," "Preparing," "Out for delivery," and "Delivered."

Order Location Tracking:

The app should display the live location of the delivery driver while en route to the user's address.

The map should update at regular intervals to reflect the driver's movement accurately.

Estimated Delivery Time:

The app should provide an accurate estimated time of delivery (ETA) based on the driver's current location, distance to the delivery address, and traffic conditions.

Delivery Notifications:

Users should receive push notifications or in-app alerts for significant order updates, such as when the order is dispatched for delivery or when it is near the delivery address.

Map Zoom and Interaction:

Users should be able to zoom in and out on the map to view the delivery driver's route more closely.

The map should support standard interactions, such as panning and rotating, to improve the user experience.

Delivery Status History:

Users should have access to the delivery status history, allowing them to see the timeline of their order from placement to delivery completion.

Accuracy and Reliability:

The real-time tracking information should be accurate and reliable, providing users with the most up-to-date data available.

The system should handle location updates efficiently, minimizing delays or inaccuracies.

4.What is the difference between BV and CP?

Ans-

Business Value is how important is this feature (user Story) to the Business. This is estimated by Scrum Currency Notes. We provide Rs 1000. Rs 500, Rs 100, Rs 50, Rs 20 and Rs 10 Denominations. These estimations are done by the Stakeholders (Clients). If different values are selected by the stakeholders, then discussions will happen, and they agree to one BV value to that user story.

Techniques used- Moscow, Currency notes techniques.

CP – Complexity Points

CP is also known as Story Points (SP). CP is the effort required by the Scrum Developers to develop this feature (user story) using technology. Efforts include time taken to solve the complexity and write the code. CP is estimated by the Scrum Developers by using Poker

cards. We provide pokers with values "?", 1, 2, 3, 5, 8, 13, 20, 40, 100 and BIG. If the entire Project development takes 200 points, then this user

story coding effort will be... how many points? ... Thinking in this way, Scrum Developers will give CP to the User story.). If different values are selected by the Scrum Developers, then discussions will happen, and they agree to one CP value to that user story. **Techniques used- Planning poker**

- BV is about "Why is this task/story important?"
- CP is about "How difficult is this task/story to complete?"

Aspects	BV (business value)	CP (complexity points)
Definition	A measure of the	A measure of the effort, risk,
	importance or impact a	and complexity involved in
	task/story brings to the	completing a task/story.
	business.	
Purpose	To prioritize tasks/stories	To estimate the workload
	based on their value to	and difficulty of
	stakeholders or customers.	implementing tasks/stories.
Unit of Measurement	Typically assigned as a	Measured in story points, often
	numerical score (e.g., 1-100)	using Fibonacci sequence (e.g.,
	reflecting importance.	1, 2, 3, 5, 8, 13).
Focus Area	Focuses on delivering	Focuses on team capacity,
	maximum impact and ROI for	effort estimation, and sprint
14/b - A 1 11	the business.	planning.
Who Assigns It	Product Owner or	Scrum Team or development
	stakeholders.	team members during
		planning sessions.
Based On	Business needs, customer	Technical challenges,
	demands, and strategic	dependencies, risks, and
	priorities.	resource needs.
When used	During backlog refinement	During sprint planning to
	to decide which items to	assess the feasibility of
	prioritize.	completing tasks within a
		sprint.
Example	A feature generating 20%	A feature requiring
	revenue increase might be	integration with an external
	assigned a BV of 90	API might have a CP of 8.
Role in Planning	Helps in selecting high-	Helps ensure tasks are
	impact items for inclusion in	realistically assigned based
	the sprint or release.	on team capacity.
Subjectivity	More subjective as it is	More technical and team-
	influenced by business goals	driven, based on estimation
	and market insights.	techniques.

5. Explain about Sprint?

Ans-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.

Key Characteristics of a Sprint:

Time-Boxed:

Typically lasts 1 to 4 weeks, with 2 weeks being the most common.

The duration is consistent throughout the project to maintain predictability.

Fixed Goals:

At the start of the Sprint, a Sprint Goal is defined, which serves as the focus for the team.

The Sprint Backlog contains tasks or user stories the team commits to completing.

Plan, Do, Review:

The Sprint begins with Sprint Planning, where the team defines what they will accomplish. Daily Scrum meetings are held to track progress and address blockers.

The Sprint ends with a Sprint Review (to showcase the work done) and a Sprint Retrospective (to improve the process).

Deliverable:

Produces a working increment of the product that meets the Definition of Done (DoD). The increment should be potentially shippable, even if not released immediately.

Sprint Workflow:

Stage	Description
Sprint Planning	The team collaborates to decide the work (user stories) for the
	Sprint and defines the Sprint Goal.
Sprint Execution	The team works on the agreed tasks, conducting daily Scrum
	meetings to ensure alignment and address challenges.
Increment Creation	The product increment is developed, tested, and reviewed to
	meet the Definition of Done.
Sprint Review	Stakeholders review the completed increment to provide
	feedback and ensure alignment with business goals.
Sprint Retrospective	The team reflects on the Sprint process to identify successes,
	challenges, and actionable improvements for future Sprints.

Benefits of Sprints:

Focus: The team works on a clear and achievable goal within a short time frame. **Flexibility:** Agile allows reprioritization after each Sprint, accommodating changing requirements.

Transparency: Regular reviews and Scrum meetings ensure stakeholders are informed of progress.

Continuous Improvement: Retrospectives allow the team to evolve their processes for better productivity and quality.

6. Explain Product backlog and sprint back log?

Ans-

The Product Backlog is a dynamic, prioritized list of all the features, user stories, enhancements, bug fixes, and other work items that need to be addressed over the course of a project. It represents the entire scope of the product's development and is managed by the Product Owner. The Product Backlog is continually refined and updated based on feedback, changing requirements, and new insights.

The Sprint Backlog is a subset of the Product Backlog that represents the work that the development team commits to completing during a specific time period called a "Sprint." A Sprint is a fixed-duration iteration, usually lasting two to four weeks, in which the team works on a set of items from the Product Backlog. The Sprint Backlog is created during the Sprint Planning meeting, where the development team selects a set of items to work on based on their capacity and the priorities set by the Product Owner.

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

7. What is impediments log? write 2 impediments?

Ans-

An impediment log, also known as an issue log or obstacle log, is a document or tool used in Agile software development to track and manage obstacles, bottlenecks, or any factors that impede the progress of a project or team.

2 Impediments:

- Delivery partner shortage in a specific region
- Technical issue causing intermittent order processing failure

Delivery partner shortage in a specific region

Login ID	1
Description	Delivery partner storage in specific region
Impact	Delays in order deliveries and increases customer dissatisfaction
Priority	High (due to its impact on customer experience)
Assigned to	Operations team and HR team
Status	Open

Action taken	The operations team is actively recruiting new delivery partners in the region. The HR team is working on fast-tracking the onboarding process.
Resolution	Delivery partner recruitment efforts are ongoing and the HR team is streamlining the onboarding process to expedite new hires. Regular updates are being provided in team meetings.

Technical issue causing intermittent order processing failure

Login ID	2
Description	Technical issue causing intermittent order processing failures
Impact	Delays in order processing and potential revenue loss
Priority	High (due to its impact on revenue and customer experience)
Assigned to	Tech team and QA team
Status	In progress
Action taken	The tech team has identified the root cause and is working on a fix.
	The QA team is conducting extensive testing to ensure the issue is
	resolved
Resolution	The tech team has implemented a fix and conducted through
	testing. The issue has been resolved, and orders are now processing
	smoothly.

8. Explain Velocity of the Team?

Ans-

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.

Average velocity:

Average velocity in Agile development refers to the average amount of work, measured in story points, that a team completes during a series of sprints or iterations. It's a key metric used for planning and estimating future work. Here's how to calculate average velocity:

Select a Time Frame: Choose a specific number of past sprints or iterations for which you want to calculate the average velocity. For example, you might choose the last 5 sprints.

Sum Completed Story Points: Add up the total story points completed by the team in each of the selected sprints. This will give you the total completed work for the chosen time frame.

Calculate Average: Divide the total completed story points by the number of sprints or iterations you selected. This will give you the average velocity for that period.

Formula: Average Velocity= Total Completed Story Points/Number of Sprints

Use for Planning: The average velocity can serve as a guideline for future sprint planning. It helps the team estimate how much work they can commit to in upcoming iterations based on their historical performance.

Keep in mind that average velocity is a rough estimate and can fluctuate based on various factors. It's important to consider the team's capacity, any changes in team composition, and improvements in estimation accuracy over time.

9. Draw Sprint Burn Charts and Product Burn Down Charts?

Ans-

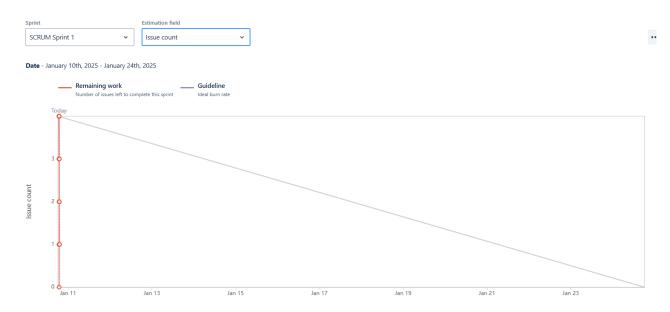
Sprint Burndown Chart: A graphical representation of the amount of work remaining versus time in a sprint, helping the team track progress toward sprint goals.

Product Burndown Chart: A visual tool showing the total amount of remaining work for a product over time, used to track progress toward completing the product backlog.

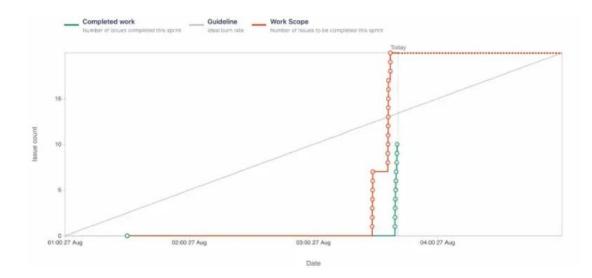
Sprint Burnup Chart: A chart that tracks the amount of work completed over time in a sprint, providing visibility into progress made toward the sprint goals.

Product Burnup Chart: A visual representation of the total work completed over time for the product, helping track progress toward overall product delivery.

Sprint burn down chart:



Product burn down chart:



10. Explain about Product Grooming?

Ans-

Product grooming, also known as backlog grooming or refinement, is a crucial activity in Agile development that involves preparing and refining items in the product backlog to ensure they are well-understood, prioritized, and ready for development. Let's break down the process step by step:

Setting the Context: At the beginning of the backlog grooming process, the team and relevant stakeholders come together to understand the overall goals and objectives of the project. This helps set the context for the work to be done and aligns everyone's understanding.

Backlog Review: The product owner and the development team review the items in the product backlog. This involves assessing the user stories, tasks, and other items to ensure they are accurate, up-to-date, and still relevant to the project's goals.

Prioritization: During backlog grooming, the team collaboratively prioritizes the backlog items based on their value to the product and the needs of the users or customers. This helps ensure that the most important and valuable work is addressed first.

Refinement and Estimation: In this step, the backlog items are refined to provide clear and detailed descriptions. The team breaks down user stories into smaller tasks and discusses the technical requirements. Estimation involves assigning story points or other sizing metrics to each item, indicating the relative effort needed for implementation.

Dependency Analysis: The team examines potential dependencies between backlog items. Identifying and understanding dependencies helps in planning the order of implementation and managing potential bottlenecks.

Acceptance Criteria: Well-defined acceptance criteria are established for each backlog item. These criteria outline the conditions that must be met for the item to be considered complete and ready for delivery. Clear acceptance criteria help prevent misunderstandings and ensure a shared understanding of what is expected. **Backlog Grooming Meetings:** These are recurring meetings where the product owner and the development team come together to perform the activities mentioned above. These meetings often occur before sprint planning sessions to ensure that the upcoming sprint backlog is well-prepared.

Backlog grooming is an iterative process that helps maintain a healthy and well-organized product backlog. It ensures that the development team always has a prioritized list of well-defined, estimated, and ready-to-develop items. This, in tum, supports the efficient planning and execution of sprints and helps the team deliver value to customers in a more predictable and effective manner.

11. Explain the roles of Scrum Master and Product Owner?

Ans-

Scrum Master

The Scrum Master serves as a facilitator and coach for the Scrum Team, ensuring that the Scrum framework is followed and helping the team improve its processes.

Key Responsibilities:

Facilitating Scrum Events:

Organizes and ensures the effectiveness of Sprint Planning, Daily Stand-ups, Sprint Reviews, and Retrospectives.

Ensures these events run smoothly and serve their intended purpose.

Removing Impediments:

Identifies and addresses obstacles that may block the team's progress. Acts as a shield, protecting the team from external distractions.

Promoting Scrum Practices:

Educates the team and stakeholders about Scrum principles, values, and practices. Encourages self-organization and cross-functional collaboration.

Supporting the Development Team:

Assists the team in achieving high levels of performance and efficiency. Coaches team members in agile best practices and continuous improvement.

Facilitating Communication:

Acts as a bridge between the Product Owner and the Development Team, ensuring clear communication of requirements and goals.

Monitoring Progress:

Tracks and communicates metrics like burn-down charts to provide visibility on the team's progress.

Core Focus:

The Scrum Master's primary focus is on team efficiency, fostering an environment where the Scrum Team can thrive and deliver value.

Product Owner

The Product Owner is the voice of the customer and holds the responsibility for maximizing the product's value. They own the product backlog and work closely with the stakeholders.

Key Responsibilities:

Managing the Product Backlog:

Defines, prioritizes, and refines the backlog items to ensure clarity and alignment with business goals. Ensures the backlog is visible, transparent, and understood by the team.

Setting the Vision:

Establishes and communicates the product vision and goals to the Scrum Team and stakeholders. Aligns the development work with customer needs and business strategy.

Stakeholder Collaboration:

Acts as the main point of contact for stakeholders. Gathers requirements, feedback, and insights from customers and other stakeholders.

Prioritizing Work:

Determines what the team should work on next based on business value, customer needs, and technical considerations.

Balances competing priorities to maximize ROI.

Accepting Work:

Reviews and accepts the deliverables during the Sprint Review to ensure they meet the acceptance criteria and Definition of Done (DoD).

Refining Requirements:

Works closely with the Scrum Team to clarify requirements and ensure they understand the desired outcomes.

Core Focus:

The Product Owner's primary focus is on product value, ensuring that the team delivers the most valuable product increments.

12. Explain all Meetings Conducted in Scrum Project?

Ans-

Sprint Planning: This meeting kicks off each sprint, which is a time-boxed iteration of work, usually spanning 2-4 weeks. During this meeting, the Scrum team, including the Product Owner, Scrum Master, and Development Team, collaborates to determine which backlog items (user stories, features, etc.) will be worked on in the upcoming sprint. The team also breaks down these items into tasks and estimates the effort required.

Daily Stand-up (Daily Scrum): Held daily during the sprint, this short meeting aims to facilitate quick and focused communication among team members. Each team member answers three key questions: What did I accomplish since the last stand-up? What will I work on until the next stand-up? Are there any obstacles or impediments in my way? This meeting helps keep everyone aligned and informed about the progress and challenges.

Sprint Review: At the end of each sprint, the team holds a review meeting to showcase the work completed during the sprint to stakeholders, customers, and the Product Owner. The team demonstrates the potentially shippable product increment and gathers feedback. Based on this feedback, the Product Owner can update the backlog.

Sprint Retrospective: Also held at the end of each sprint, the retrospective is a dedicated time for the team to reflect on their processes and practices. The team discusses what went well, what could be improved, and any potential changes they'd like to make in the next sprint to enhance their efficiency and effectiveness.

Backlog Refinement (Grooming): While not officially part of the Scrum events, backlog refinement is an important ongoing activity. During these sessions, the team and the Product Owner review and refine backlog items, adding details, clarifications, and estimates to make them ready for inclusion in future sprints.

Product Backlog Refinement: This meeting focuses on refining the product backlog items. The team and the Product Owner discuss and clarify requirements, priorities, and any changes needed in the backlog items. This ensures that the backlog is well-prepared for upcoming sprints.

Release planning: This meeting occurs at the start of the 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.

13.Explain Sprint Size and Scrum Size?

Sprint Size:

In Scrum, a "sprint" is a time-boxed iteration during which the development team works to deliver a potentially shippable product increment. The length of a sprint is referred to as the "sprint duration" and is usually fixed throughout the project. Common sprint durations are 1 to 4 weeks. The choice of sprint duration depends on factors such as team velocity, project complexity, and business needs. A shorter sprint encourages more frequent opportunities for feedback and adaptation, while a longer sprint provides more time for development.

Scrum Team Size:

The Scrum team size refers to the number of individuals who collectively contribute to the development of the product. A Scrum team consists of three key roles: the Product Owner, the Scrum Master, and the Development Team. The Development Team, in particular, is responsible for creating the product increment. Scrum recommends that the Development Team size be kept small, typically between 3 to 9 members, to facilitate effective communication, collaboration, and decision-making.

14. Explain DOR and DOD?

Ans-

Definition of Ready (DOR):

The Definition of Ready outlines the criteria that a product backlog item (user story, feature, task, etc.) should meet before it is considered ready to be taken into a sprint for development. The DOR ensures that the item is well-defined. understood, and prepared for efficient development. The specific criteria in the DOR can vary from team to team, but commonly include elements such as:

- Clear description and acceptance criteria: The item's requirements are clearly stated, and the conditions for its successful completion are well-defined.
- Dependencies identified: Any dependencies on external factors, teams, or resources are identified and addressed.
- Estimable: The team has enough information to provide a reasonable estimate of the effort required.
- Testable: It's possible to determine whether the item has been successfully implemented through testing.
- Minimal ambiguity: The item's details are clear, and any uncertainties are resolved.

Definition of Done (DOD):

The Definition of Done outlines the criteria that must be met for a product increment or backlog item to be considered complete and potentially shippable. The DOD ensures that the team maintains a consistent level of quality and completeness in their work. The specific criteria in the DOD can vary based on the team's standards, the nature of the project, and the industry, but commonly include elements such as:

- Code complete: All development work is finished, including coding, testing, and integration.
- Peer-reviewed: Code has been reviewed by other team members for quality and adherence to coding standards.
- Automated tests passed: Automated tests (unit tests, integration tests, etc.) have been successfully executed and passed.
- Functional requirements met: The item meets all specified acceptance criteria and functional requirements.
- Documentation updated: Any necessary documentation, user guides, or technical documentation has been updated.

15.Explain Prioritization Techniques and MVP?

Ans-

Prioritization Techniques:

Prioritization techniques are methods used to determine the order in which tasks, features, or items should be addressed in a project. These techniques help teams allocate resources effectively and focus on delivering the most valuable work first. Some common prioritization techniques include:

MOSCOW: This technique categorizes items into Must have, Should have, Could have, and Won't have categories. It helps clarify essential features from those that are optional or lower priority.

Weighted Shortest Job First (WSJF): WSJF assigns a priority score to each item based on factors like business value, time sensitivity, and risk. Items with higher scores are considered more important to work on.

Kano Model: This model categorizes features into Basic Needs, Performance Needs, and Delighters. It helps prioritize based on how features impact user satisfaction.

Value vs. Effort Matrix: Items are plotted on a matrix based on their potential value and effort required. This helps identify quick wins and high-value tasks.

Relative Prioritization: Teams compare items pairwise to determine which is more important. This helps create a relative ranking of items.

Buy a Feature: Stakeholders are given a budget to 'buy' features, which helps prioritize features based on how much value they see in them.

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 behaviour, market demand, and product viability.

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

Early value: The MVP allows the product to be released faster, gaining valuable insights and attracting early adopters.

16. Difference between Business Analyst and Product Owner?

Ans-

Aspects	Business Analyst	Product Owner
Role Focus	Understand business needs,	Define, prioritize, and
	processes, and requirements.	convey requirements for
		the product.
Requirement Gathering	Gathers and documents detailed	Creates user stories and
	business requirements.	defines product features.
Problem Solving	Identifies problems,	Drives the product vision,
	inefficiencies, and suggests	strategy, and value
	improvements.	proposition.
Communication	Acts as a liaison between	Collaborates with
	business stakeholders and	stakeholders, customers,
	development teams.	and the development
		team.
Documentation	Creates documentation of	Manages the product
	business rules, workflows, and	backlog and maintains
	requirements.	clear user stories.
Scope Definition	Helps define the scope of	Defines the scope of
	projects based on business	product features and
	needs.	enhancements.
Vision and Strategy	Focuses on specific project or	Has a holistic vision for
	process improvements.	the product and its
		strategic direction.
Backlog Management	Not typically responsible for	Manages and prioritizes
	managing a product backlog.	the product backlog
		items.
Prioritization	Does not have a primary role in	Prioritizes features based
	prioritizing features.	on business value, user
		needs, and market trends.
Decision Making	Provides input but not	Makes final decisions on
	responsible for final product	product features,
	decisions.	enhancements, and
		priorities.
Iterative Development	May or may not be involved in	Actively participates in
	iterative. development cycles.	sprint planning, reviews,
		and retrospectives.
Collaboration	Collaborates with business	Collaborates closely with
	stakeholders and development	stakeholders, customers,
	teams.	and the development
		team.
Acceptance	Ensures business requirements	Ensures user stories meet
	are met.	acceptance criteria and
		align with product vision.
Leadership and strategy	Focuses on tactical solutions and	Focuses on strategic
	improvements.	leadership and product
		direction.

Continuous Improvement	Contributes to process	Incorporates user
	improvements and business	feedback for ongoing
	efficiency.	product enhancement.

17. Prepare a sample Resume of 3yrs experience Product Owner?

Kasuganti Venkata Charani

Product Owner

Hyderabad, India 9381880682 · <u>charanirao571@gmail.com</u>

Skills

Critical thinking and problem solving

Fast Learner

Communication Skills

Effective Time Management

Ability to Work in a Team

Microsoft Office Word

Microsoft PowerPoint

Microsoft Excel

SQL

Agile Project Management

Agile and Scrum

JIRA

Tableau

Power BI

Mock ups- Balsamiq, Axure

Employment History

Product Owner, Hyderabad

January 2024 - January 2025

Microsoft/Product Owner

- Created user story acceptance criteria to get buy-in from stakeholders and refined those stories with Scrum teams.
- Owned the planning and scheduling of two-week sprints and articulated the product vision to engineering, resulting in hitting 98% of the product goals defined at the beginning of the year in. 2024
- Managed and re-prioritized the product backlog, resulting in coming under budget by an average of 40 lakhs on projects.
- Directed vendor relationship and 30% of contracts, including execution and financial payments.

Agile Product Owner, Hyderabad

January 2023 - January 2024

Apple/Agile Product Owner

- Acted as the liaison between product, IT, and sales teams to understand customer demand for new features and prioritize the product road map.
- Owned the product road map and met 96% of all feature deadlines 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 the feature development life-cycle by 22% year over year.
- Led a team of 1 full-time employee and 3 contractors

Associate Product Owner, Hyderabad

January 2022 — January 2023

Google/Associate Product Owner

- Assisted in backlog management, refining user stories and maintaining clear acceptance criteria to ensure smooth development processes.
- Collaborated with Scrum Masters to facilitate sprint planning. backlog grooming, and sprint reviews. adhering to Agile methodologies.

- Conducted user acceptance testing (UAT) and gathered feedback from stakeholders to ensure product quality and alignment with requirements.
- Supported the Product Owner in market research and competitive analysis, contributing insights for strategic decision-making

Education

MBA, Hyderabad

December 2022 - December 2024

MBA BUSINESS ANALYTICS

MALLA REDDY UNIVERSITY, Medchal-malkajgiri,

Certifications

- Agile certified Practitioner (PMI-ACP)
- Certified Scrum Product Owner (CSPO)