**Nurturing Process - Capstone Project2 – Agile-Scrum**

**Question 1 - Agile Manifesto**

**Agile Manifesto**

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 for 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 seif-organizing teams.

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

**Question 2 – User Stories**

A User Story is a simple, concise description of a feature or functionality written from the perspective of the end-user. It helps Agile teams understand what the user wants and why, without getting into technical details

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| User story 1 | Task -2 | Priority-Highest  |
| As a USER |
| I WANT TO SIGN UP AND CREATE AN ACCOUNT |
| SO THAT I CAN PERSONALIZE MY EXPERIENCE |
| BV:200 |   | CP:02 |
| Acceptance Criteria |
| User can sign up using email, phone number or social media |
| A confirmation email/SMS is sent upon successful registration |

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| User story 2 | Task -2 | Priority-Highest  |
| As a USER |
| I WANT TO LOGIN USING MY CREDENTIALS |
| SO THAT I CAN ACCESS MY ACCOUNT |
| BV:200 |   | CP:02 |
| Acceptance Criteria |
| User can login using email/password or social media. |
| A "Forgot Password" option is available for account recovery. |

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| User story 3 | Task -3 | Priority -low |
| As a USER |
| I WANT TO UPDATE MY PROFILE INFORMATION |
| SO THAT IT STAYS CURRENT |
| BV:20 |   | CP:02 |
| Acceptance Criteria |
| Changes are saved and reflected immediately  |
| User can edit their name, contact details and profile picture. |

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| User story 4 | Task -4 | Priority-Highest  |
| As a USER |
| I WANT TO SEARCH FOR RESTAURENTS OR DISHES  |
| SO THAT I FIND WHAT I NEED QUICKLY |
| BV:50 |   | CP:02 |
| Acceptance Criteria |
| Search results are displayed within 2 seconds. |
| Filters for cuisine, price, and ratings are available |
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| User story 5 | Task-2  | Priority-medium |
| As a USER |
| I WANT TO SEE TRENDING AND POPULAR DISHES. |
| SO THAT I CAN DISCOVER NEW FOOD. |
| BV:10 |   | CP:02 |
| Acceptance Criteria |
| A dedicated section highlights trending items |
| Clicking on a trending dish shows restaurant details and order options. |

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| User story 6 | Task -5 | Priority-Highest  |
| As a USER |
| I WANT TO VIEW DETAILED MENUS  |
| SO THAT I CAN TO DECIDE ON MY ORDER. |
| BV:100 |   | CP:03 |
| Acceptance Criteria |
| Availability status is shown for each item |
| Menus display item names, descriptions, prices, and images |

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| User story 7 | Task-4 | Priority-Highest  |
| As a USER |
| I WANT TO CUSTOMIZE MY ORDER TO SUIT MY PREFERENCES |
| SO THAT I CAN ORDER FOOD AS PER MY PRFERENCES |
| BV:100 |   | CP:05 |
| Acceptance Criteria |
| Users can add/remove ingredients or add notes for customization. |
| The updated price reflects customization charges, if any. |

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| User story 8 | Task-2 | Priority-Highest  |
| As a USER |
| I WANT TO ADD ITEMS TO MY CART AND REVIEW THEM BEFORE CHECKOUT |
| SO THAT I CAN REVIEW MY ORDER |
| BV:20 |   | CP:05 |
| Acceptance Criteria |
| Users can view an itemized list of the cart with subtotals |
| A "Remove" button is available for each item. |

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| User story 9 | Task-2  | Priority-Highest  |
| As a USER |
| I WANT TO PLACE AN ORDER  |
| SO THAT I CAN ENJOY MY MEAL |
| BV:500 |   | CP:02 |
| Acceptance Criteria |
| Clicking "Place Order" confirms the purchase. |
| A confirmation screen shows the order details and estimated delivery time. |

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| User story 10 | Task-2  | Priority-low |
| As a USER |
| I WANT TO SCHEDULE MY ORDER FOR A SPECIFIC TIME  |
| SO THAT I CAN ENJOY MY MEAL AT ANY TIME  |
| BV:10 |   | CP:05 |
| Acceptance Criteria |
| Users can select a date and time for delivery. |
| Scheduled orders are stored and processed at the chosen time. |

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| User story 11 | Task -3 | Priority-Medium |
| As a USER |
| I WANT TO CHOOSE MULTIPLE OPTIONS TO PAY  |
| SO THAT I PAY CONVENIENTLY |
| BV:10 |   | CP:01 |
| Acceptance Criteria |
| Users can pay via card, digital wallets, or cash on delivery. |
| A confirmation screen shows successful payment details. |

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| User story 12 | Task -2 | Priority-Highest  |
| As a USER |
| I WANT TO KEEP MY PAYMENT DETAILS TO BE STORED SECURELY |
| SO THAT MY PRIVACY IS MAINTAINED  |
| BV:100 |   | CP:02 |
| Acceptance Criteria |
| Payment data is encrypted and complies with PCI-DSS standards |
| Users can opt to save or not save their card details. |

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| User story 13 | Task-4 | Priority-MEDIUM |
| As a USER |
| I WANT TO GET REFUND IN CASE OF ISSUES  |
| SO THAT MY MONEY IS BACK |
| BV:500 |   | CP:03 |
| Acceptance Criteria |
| Refund requests can be submitted within the app. |
| Notifications are sent upon refund processing. |

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| User story 14 | Task -2 | Priority-MEDIUM |
| As a USER |
| I WANT TO TRACK MY ORDER STATUS IN REAL TIME |
| SO THAT I GET UPDATES TO MY ORDER |
| BV:500 |   | CP:03 |
| Acceptance Criteria |
| Notifications are sent for order confirmation, preparation, dispatch, and delivery. |
| A progress bar displays the order's current stage. |

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| User story 15 | Task -2 | Priority-LOW |
| As a USER |
| I WANT TO TRACK MY DELIVERY DRIVER ON MAP |
| SO THAT I GET UPDATES IN REAL TIME |
| BV:500 |   | CP:03 |
| Acceptance Criteria |
| A map shows the driver's live location |
| ETA updates dynamically based on the driver's movement. |

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| User story 16 | Task-2  | Priority-MEDIUM |
| As a USER |
| I WANT TO CONTACT DELIVERY DRIVER FOR INSTRUCTIONS  |
| SO THAT I GET UPDATE ON ANY ADRESS ISSUES |
| BV:500 |   | CP:03 |
| Acceptance Criteria |
| Users can call or message the driver directly through the app. |
| Communication is anonymized for privacy. |

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| User story 17 | Task -2 | Priority-Highest  |
| As a USER |
| I WANT TO HAVE ACCESS TO SUPPORT SERVICE 24/7. |
| SO THAT I CAN GET MY ISSUES RESOLVED  |
| BV:500 |   | CP:03 |
| Acceptance Criteria |
| A "Help" button connects users to a live agent. |
| FAQs address common issues. |

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| User story 18 | Task -2 | Priority-Highest  |
| As a USER |
| I WANT TO REPORT MISSING OR INCORRECT ITEMS. |
| SO THAT I CAN REPORT INCORRECT ORDER |
| BV:200 |   | CP:03 |
| Acceptance Criteria |
| Users can report an issue with a specific item or the entire order |
| Resolutions (refund/replacement) are initiated within 24 hours. |

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| User story 19 | Task -2 | Priority- Low |
| As a USER |
| I WANT TO RECEIVE NOTIFICATIONS ABOUT DISCOUNTS  |
| SO THAT I CAN BE UP TO DATE OF THE INFORMATION |
| BV:100 |   | CP:03 |
| Acceptance Criteria |
| Users receive personalized offers based on order history. |
| Offers are displayed prominently on the home screen. |

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| User story 20 | Task -2 | Priority- Low |
| As a USER |
| I WANT TO GET REWARDED FOR EVERY ORDER |
| SO THAT I EARN REWARDS FOR EVERY ORDER |
| BV:300 |   | CP:03 |
| Acceptance Criteria |
| Users earn points automatically after payment |
| Points can be redeemed during checkout. |

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| User story 21 | Task -2 | Priority- Medium |
| As a USER |
| I WANT TO VIEW ORDER HISTORY  |
| SO THAT I VIEW FOR REFERNCES. |
| BV:200 |   | CP:03 |
| Acceptance Criteria |
| A chronological list of past orders is available. |
| Clicking an order shows detailed receipts. |

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| User story 22 | Task -2 | Priority- Medium |
| As a USER |
| I WANT TO REORDER QUICKLY |
| SO THAT I CAN ORDER THE SAME THINGS AGAIN. |
| BV:100 |   | CP:03 |
| Acceptance Criteria |
| A "Reorder" button copies items to the cart |
| Users can edit the reorder before checkout. |

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| User story 23 | Task -3 | Priority- Medium |
| As a USER |
| I WANT TO USE THE APP IN MY PREFERRED LANGUAGE  |
| SO THAT I CAN GET EASE OF UNDERSTANDING |
| BV:500 |   | CP:03 |
| Acceptance Criteria |
| Users can switch between languages in settings. |
| The app displays all text in the selected language. |

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| User story 23 | Task -4 | Priority- Medium |
| As a USER |
| I WANT THE APP TO SUPPORT SCREEN READERS |
| SO THAT AS A VISUALLY IMPAIRED USER IT SUPPORTS ME  |
| BV:30 |   | CP:03 |
| Acceptance Criteria |
| All interface elements are compatible with screen readers. |

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| User story 24 | Task -2 | Priority- Highest |
| AS A RESTAURANT OWNER |
| I WANT TO REGISTER MY BUSINESS  |
| SO THAT TO REACH CUSTOMERS |
| BV:40 |   | CP:03 |
| Acceptance Criteria |
| Owners can sign up, upload menus, and set prices. |
| Approval is granted after review |
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| User story 25 | Task -4 | Priority- Highest |
| AS A RESTAURANT OWNER |
| I WANT TO ACCESS TO SALES DATA. |
| SO THAT I CAN ANALYZE DATA  |
| BV:50 |   | CP:02 |
| Acceptance Criteria |
| Reports include daily, weekly, and monthly metrics. |
| Data can be exported as CSV files. |

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| User story 26 | Task -5 | Priority- Medium |
| AS A DRIVER |
| I WANT OPTIMIZED ROUTES  |
| SO THAT TO COMPLETE DELIVERIES EFFICIENTLY. |
| BV:500 |   | CP:03 |
| Acceptance Criteria |
| Routes are calculated based on traffic and distance |
| Directions update dynamically during the trip |

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| User story 27 | Task -2 | Priority- Medium |
| AS A USER,  |
| I WANT TO PERSONALIZE MY HOME SCREEN WITH FAVORITE RESTAURANTS OR CUISINES |
| SO THAT I CAN ACCESS THEM QUICKLY. |
| BV:30 |   | CP:02 |
| Acceptance Criteria |
| Users can "pin" favourite restaurants or categories to the home screen. |
| The app saves these preferences for future sessions |

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| User story 28 | Task -2 | Priority- Medium |
| AS A USER,  |
| I WANT TO SET DIETARY PREFERENCES (E.G., VEGETARIAN, VEGAN, GLUTEN-FREE) |
| SO THAT I SEE RELEVANT MENU ITEMS |
| BV:30 |   | CP:02 |
| Acceptance Criteria |
| Users can select dietary preferences in their profile settings. |
| Menus automatically highlight items that meet these preferences |

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| User story 29 | Task -2 | Priority- Medium |
| AS A USER,  |
| I WANT TO THE APP TO RECOMMEND MEALS BASED ON TIME OF DAY  |
| SO THAT I THAT I SEE RELEVANT OPTIONS. |
| BV:50 |   | CP:02 |
| Acceptance Criteria |
| Breakfast options are shown in the morning; lunch/dinner options are shown later. |
| User preferences influence these recommendations. |

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| User story 30 | Task -3 | Priority- Medium |
| AS A USER,  |
| I WANT TO PLACE A GROUP ORDER WITH FRIENDS OR FAMILY  |
| SO THAT EVERYONE’S PREFERENCES ARE INCLUDED |
| BV:100 |   | CP:02 |
| Acceptance Criteria |
| Users can create a group order link to share with others |
| All participants can add items to the shared cart. |

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| User story 31 | Task -4 | Priority- Medium |
| AS A USER,  |
| I WANT TO PLACE BULK ORDERS FOR EVENTS OR PARTIES  |
| SO THAT I CAN ORDER LARGE QUANTITIES. |
| BV:300 |   | CP:02 |
| Acceptance Criteria |
| Users can specify bulk quantities for menu items. |
| Restaurants are notified of the bulk order with extended preparation time |

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| User story 32 | Task -2 | Priority- Medium |
| AS A USER,  |
| I WANT TO SET UP A CORPORATE ACCOUNT FOR TEAM ORDERS  |
| SO THAT MY ORGANIZATION CAN MANAGE GROUP PURCHASES. |
| BV:30 |   | CP:02 |
| Acceptance Criteria |
| Businesses can register and add team members to a shared account |
| Monthly invoices and expense reports are generated for corporate orders. |

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| User story 33 | Task -3 | Priority- Medium |
| AS A USER,  |
| I WANT THE OPTION FOR CONTACTLESS DELIVERY  |
| SO THAT I FEEL SAFE DURING DELIVERY. |
| BV:300 |   | CP:02 |
| Acceptance Criteria |
| Users can select "Contactless Delivery" at checkout. |
| Drivers are notified and instructed to leave the food at a specified location |

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| User story 35 | Task -4 | Priority- Low |
| AS A USER,  |
| I WANT TO VIEW THE DRIVER'S PROFILE AND VERIFICATION STATUS  |
| SO THAT I FEEL SECURE ABOUT THE DELIVERY. |
| BV:400 |   | CP:02 |
| Acceptance Criteria |
| Users can see the driver's photo, name, and delivery rating |
| Drivers must be verified with ID and background checks. |

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| User story 36 | Task -2 | Priority- Medium |
| AS A USER,  |
| I WANT THE OPTION TO REQUEST ECO-FRIENDLY PACKAGING  |
| SO THAT I REDUCE WASTE. |
| BV:400 |   | CP:02 |
| Acceptance Criteria |
| Users can select "Eco-Friendly Packaging" during checkout |
| Restaurants are notified and charged for compliance. |

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| User story 37 | Task -6 | Priority- Medium |
| AS A USER,  |
| I WANT TO TRACK THE CARBON FOOTPRINT OF MY ORDERS  |
| SO THAT I CAN MAKE SUSTAINABLE CHOICES. |
| BV:5 |   | CP:01 |
| Acceptance Criteria |
| Each order displays an estimated carbon impact. |
| The app suggests low-impact meal or delivery options. |

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| User story 38 | Task -3 | Priority- Medium |
| As a user,  |
| I want to to earn badges for milestones  |
| so that I feel rewarded. |
| BV: |   | CP:02 |
| Acceptance Criteria |
| Users are notified when they earn a new badge. |
| User story 39 | Task -2 | Priority- Medium |
| AS A USER,  |
| I WANT TO SHARE MY FAVORITE MEALS OR RESTAURANTS WITH FRIENDS  |
| SO THAT THEY CAN TRY THEM TOO |
| BV:500 |   | CP:02 |
| Acceptance Criteria |
| Users can share links to dishes or restaurants on social media or messaging platforms. |
| Shared links direct recipients to the corresponding page in the app |

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| User story 40 | Task -3 | Priority- Medium |
| As a user,  |
| I want to place orders using voice commands  |
| so that that I can interact hands-free. |
| BV:300 |   | CP:02 |
| Acceptance Criteria |
| The app supports voice input for searching, adding items, and completing orders |
| Confirmation is required before finalizing the order |

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**Question 3 – EPIC**

In Agile, an Epic is a large, high-level user requirement that needs to be broken down into smaller, manageable user stories. Epics represent broad objectives or features that contribute to a product’s overall functionality.

Epic is a set of related user stories. They are also considered a “really big user story”.

Two Epics for a Food Delivery App

1. Epic: Seamless Order Placement & Payment

Description:
As a user, I want a smooth and secure order placement so that I can quickly order food without any hassle.

User Stories:

* As a user, I want to browse restaurants based on cuisine, ratings, and delivery time.
* As a user, I want to add food items to my cart and customize my order (e.g., extra toppings, special instructions).

2. Epic: Real-time Order Tracking & Delivery

Description:
As a user, I want to track my food order in real-time so that I can stay updated on its status and estimated delivery time.

User Stories:

* As a user, I want live order tracking with an interactive map showing the rider’s location.
* As a user, I want notifications at key order stages (order confirmed, food prepared, out for delivery, delivered).
* As a user, I want to contact the delivery partner for updates or special instructions.
* As a user, I want to rate and review my delivery experience after receiving my order.

**Question 4- Difference Between Business Value and Complexity Points**

| **Aspect** | **Business Value** | **Complexity Points** |
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| **Definition** | The importance or impact a feature/user story has on the business. | The effort and technical difficulty required to complete a feature/user story.This is called as story points |
| **Purpose** | Helps prioritize work based on business impact. | Helps estimate the effort required for implementation. |
| **Measured By** | Revenue impact, customer satisfaction, market demand, regulatory compliance, etc. | Story points (based on Fibonacci series), team effort, technical challenges, dependencies. |
| **Who Assigns It?** | Product Owner, Business Stakeholders. | Development Team, Scrum Team. |
| **Scale** | Can be qualitative (low/medium/high) or numerical (1-10, etc.). | Usually follows Fibonacci sequence (1, 2, 3, 5, 8, 13, etc.). |
| **Example** | A feature that improves customer retention has high business value. | A complex AI recommendation engine has high complexity points. |

Question 5 –Explain about Sprint

A Sprint is a time-boxed iteration in Scrum methodology during which a development team works to complete a set amount of work. Sprints help teams deliver small, incremental product improvements that add value to the end user.

Sprint Duration: 2 Weeks -

* Standard Sprint Length: Typically ranges between 1 to 4 weeks, with 2 weeks being the most common.

Scrum: A Subunit of Sprint

Scrum is a framework within Agile that helps teams manage their work effectively. It includes ceremonies (events), roles, and artifacts that guide the Sprint process.

* Scrum Events in a Sprint:
	1. Sprint Planning – Defines what will be delivered in the Sprint.
	2. Daily Scrum (Stand-up Meeting) – Tracks progress and removes roadblocks.
	3. Sprint Review – Demonstrates completed work to stakeholders.
	4. Sprint Retrospective – Identifies areas for improvement in future Sprints.

**Daily Scrum**

* Purpose:
	+ Discuss progress since the last Scrum.
	+ Identify roadblocks.
	+ Plan work for the next 24 hours.

 **Sprint Planning Meeting:**

All 8 Scrum Developers will gather before the sprint starts and understand how many user stories, they can develop in 1 sprint (2 weeks), and move them from the product Backlog to the sprint Backlog. They take inputs from Sprint Retrospective meeting.

Scrum Meeting – Daily Stand-up Meeting End of every Scrum, Scrum Developers will participate in Scrum meeting.

Here they must answer 3 Questions.

a. What task did you work in this scrum?

 b. What task will you work on next scrum?

 c. Any Challenges/impediments?

 When you will complete the user story?

Key Sprint Terms

1. PBI (Product Backlog Item)
	* A feature, bug fix, or improvement that provides value to the product.
	* Comes from the Product Backlog, prioritized by the Product Owner.
2. Task
	* A unit of work that can be completed by one developer within one Scrum (1 day).
	* A PBI is broken down into multiple tasks for better execution.
3. WIP (Work In Progress)
	* The tasks currently being worked on but not yet completed.
	* Helps track the flow of work and prevents overload.
4. Sprint Backlog
	* A subset of the Product Backlog selected for a Sprint.
	* Includes PBIs + tasks needed to complete them.
	* Managed by the development team to track progress.

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Question 6 – **Difference Between Sprint Backlog and Product Backlog**

| **Aspect** | **Sprint Backlog** | **Product Backlog** |
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| **Definition** | A subset of the Product Backlog that contains tasks planned for a specific Sprint. | A prioritized list of all features, enhancements, and fixes needed for the product. |
| **Scope** | Short-term (Sprint-level work). | Long-term (entire product roadmap). |
| **Ownership** | Managed by the **Development Team**. | Managed by the **Product Owner**. |
| **Contents** | - Selected **Product Backlog Items (PBIs)** for the Sprint. - Breakdown into **tasks** for development. | - All **PBIs** (features, bugs, tech debt). - Continuously refined and prioritized. |
| **Flexibility** | **Fixed during Sprint** (changes are rare unless critical). | **Evolves continuously** as per business needs. |
| **Timeframe** | Exists only for the **current Sprint** (1-4 weeks). | Exists throughout the **product lifecycle**. |
| **Purpose** | Helps teams focus on delivering a **working increment** by the end of the Sprint. | Provides a **high-level vision** of what needs to be built and improved over time. |

Question 7-What is impediments log? write 2 impediments

An Impediment Log is a document or tool used in Agile project management to track and manage obstacles (impediments) that hinder the progress of a project. It helps teams identify, document, and resolve issues efficiently.

Impediment Log :-

* + 1. Delayed Restaurant Order Processing-Some restaurants take too long to prepare food, causing delivery delays and affecting customer satisfaction.
		2. Limited Delivery Personnel – Shortage of delivery agents during peak hours affects timely deliveries.
		3. Regulatory Compliance Issues: Ensuring compliance with food safety regulations, payment processing laws, and data privacy rules (like GDPR, HIPAA for health-related foods, etc.) can delay development.
		4. Integration with Third-Party APIs: -The app relies on multiple APIs (e.g., payment gateways, restaurant POS systems, mapping services). Any downtime, changes in API policies, or poor documentation can create delays in development.

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Question 8- Explain Velocity of the Team

Velocity in Agile refers to the amount of work a team completes in a sprint, usually measured in story points, hours, or tasks. It helps teams estimate how much work they can take on in future sprints and predict project timelines more accurately.

Small Teams (3-5 members) → 15-30 story points per sprint
Medium Teams (5-7 members) → 25-50 story points per sprint
Large Teams (8+ members) → 50+ story points per sprint

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





**Product Burndown Chart-** Tracks the progress of the entire product backlog over multiple sprints until the project is completed

**Sprint Burndown Chart-** Tracks the progress of a **single sprint** and helps the team ensure sprint goals are met.

|  | **Product Burndown** | **Sprint Burndown** |
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|  | Entire product backlog | Single sprint backlog |
|  | Multiple sprints (long-term) | One sprint (short-term) |
|  | Product Owners, stakeholders | Scrum Team, Scrum Master |
|  | Tracks overall project progress | Tracks sprint progress |
|  | Release planning, forecasting | Daily sprint tracking, identifying bottlenecks |

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Question 10- – Explain about Product Grooming

Product Grooming in Scrum (Backlog Refinement)

Product Grooming, also known as Backlog Refinement, is an ongoing process in Scrum where the Product Owner, Scrum Team, and sometimes Stakeholders review and refine the Product Backlog to ensure that upcoming work items are well-defined and ready for development in future sprints

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

**Scrum Master Role**

The Scrum Master is a facilitator, coach, and servant leader who ensures that the Scrum process is followed and that the team can work efficiently.

Key Responsibilities of a Scrum Master:

1. Facilitating Scrum Events:
	* Sprint Planning: Helps the team set clear goals and define the sprint backlog.
	* Daily Standups (Daily Scrum): Ensures the team stays aligned by facilitating short, focused discussions on progress.
	* Sprint Review: Guides the team and stakeholders in reviewing the sprint’s results and gathering feedback.
	* Sprint Retrospective: Leads the team in reflecting on the sprint to identify areas for improvement.
2. Removing Impediments:
	* Identifies and helps resolve any obstacles that prevent the team from making progress (e.g., resource constraints, technical issues, or team conflicts).
3. Coaching the Team:
	* Coaches the development team on Scrum principles and practices to help them become self-organizing and more efficient.
	* Works to build team dynamics, foster collaboration, and enhance performance.
4. Protecting the Team:
	* Shields the team from external distractions and interruptions to ensure they can focus on the sprint goals.
5. Ensuring Scrum is Followed:
	* Helps the team understand and adhere to Scrum practices, ensuring proper use of Scrum ceremonies, roles, and artifacts.
6. Continuous Improvement:
	* Encourages a culture of continuous improvement by helping the team experiment with new ways to become more effective.

Product Owner Role

The Product Owner (PO) is responsible for defining the product vision, managing the backlog, and ensuring that the development team delivers the right value to the customer and stakeholders.

Key Responsibilities of a Product Owner:

1. Defining Product Vision:
	* Creates and communicates the product vision, ensuring that it aligns with the business objectives and the needs of stakeholders.
	* Ensures that the team has a clear understanding of the product’s goals and priorities.
2. Managing the Product Backlog:
	* Creates, maintains, and prioritizes the product backlog, which is a list of features, bug fixes, technical debt, and other work required to deliver the product.
	* Prioritizes backlog items based on value to the customer, urgency, and strategic alignment.
3. Writing and Refining User Stories:
	* Defines clear, concise user stories with acceptance criteria, making sure they are ready for development.
	* Breaks down large features (epics) into smaller, actionable user stories that can be completed within a sprint.
4. Stakeholder Engagement:
	* Acts as the primary liaison between stakeholders (customers, business teams, etc.) and the development team.
	* Gathers feedback from stakeholders and customers and incorporates it into the product backlog.
5. Decision-Making:
	* Makes quick, informed decisions about product features, priorities, and release plans.
	* Ensures that the development team is always working on the most valuable and important tasks.
6. Accepting or Rejecting Work:
	* Reviews completed work at the end of the sprint (during the Sprint Review) and accepts or rejects it based on whether it meets the acceptance criteria and definition of "done."

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Question 12 – Explain all Meetings Conducted in Scrum Project

**1**. Sprint Planning Meeting

Purpose:
The goal of the Sprint Planning meeting is to define the work the team will commit to completing during the upcoming sprint. It ensures everyone understands the sprint goals and priorities.

Duration:

* 2 to 4 hours for a 2-week sprint (typically).
The meeting duration increases with longer sprints.

 2. Daily Stand-up (Daily Scrum)

Purpose:
The Daily Stand-up is a short, time-boxed meeting where team members share updates on their work and discuss any obstacles. It’s not meant to be a status report to the Scrum Master but a chance for the team to synchronize.

Key Topics Covered:

* What did I accomplish yesterday?
* What will I work on today?
* Do I have any blockers or issues?

Duration:

* 15 minutes (maximum)
The meeting is often held standing to keep it brief and focused.

3. Sprint Review Meeting

Purpose:
At the end of the sprint, the Sprint Review meeting is held to inspect the increment of work completed and gather feedback from stakeholders. This meeting ensures transparency and helps refine future work.

Key Topics Covered:

* What work has been completed?
The Development Team demonstrates the work completed during the sprint.
* What work was not completed?
* What is the status of the product backlog?
* Feedback from stakeholders
The Product Owner may update the backlog based on the feedback from the review.

Duration:

* 1 to 2 hours for a 2-week sprint.
Adjust the duration depending on the size of the increment and the number of stakeholders involved.

 4. Sprint Retrospective Meeting

Purpose:
The Sprint Retrospective is a meeting for the Scrum Team to reflect on the sprint. It focuses on identifying areas of improvement and making adjustments to optimize team performance in the next sprint.

Key Topics Covered:

* What went well?
Identify what worked effectively during the sprint.
* What didn’t go well?
Discuss challenges, roadblocks, or failures during the sprint.
* What can be improved?
Brainstorm actionable steps to improve processes, team collaboration, or communication.

Duration:

* 1 to 1.5 hours for a 2-week sprint.

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Question 13 – Explain Sprint Size and Scrum Size

Sprint Size- Sprint size refers to the amount of work the team commits to completing within a single sprint.

Typically, 1-4 weeks (most common is 2 weeks).

Scrum Size- The number of people in the Scrum Team

3 to 9 developers (excluding the Scrum Master and Product Owner).

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Question 14 – Explain DOR and DOD

**Definition of Ready (DoR)**

The DoR is a checklist that defines the criteria a user story or backlog item must meet before it is considered ready for development. This ensures that the team has enough clarity and information to start working on it

**Definition of Done (DoD)**

The DoD is a checklist of criteria that a user story, feature, or product increment must meet before it is considered completed and ready for release

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Question 15 – Explain Prioritization Techniques and MVP

Prioritize Requirements:-

Technique for queuing the requirements for the development process

Factors that influence:-

Importance, risk, cost, benefit, time and strategy

3 main actors:-

* Customers
* Developers
* Business Owners

**MOSCOW**

is a prioritization technique used in business analysis and software development to reach a common understanding with stakeholders on the importance they place on the delivery of each requirement known as MoSCoW prioritization or MoSCOW analysis

.MOSCOW stands for must, should, could and would:

M-Must have this requirement to meet the business needs.

5-Should have this requirement if possible, but project success does not rely on it.

C-Could have this requirement if it does not affect anything else in the project.

W-Would like to have this requirement later, but it won't be delivered this time.

* MVP (Minimum Viable Product) is a development approach where a product is built with just enough features to satisfy early adopters and gather real-world feedback for future improvement.

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Question 16 – Difference between Business Analyst n Product Owner

| **Aspect** | **Business Analyst (BA)** | **Product Owner (PO)** |
| --- | --- | --- |
| **Main Focus** | Analysing business needs and ensuring solutions meet business objectives. | Defining and prioritizing the product backlog to maximize product value. |
| **Key Responsibility** | Gathering and analysing business requirements, creating documentation, and ensuring smooth communication between stakeholders and teams. | Owning the product vision, defining backlog items, and prioritizing them for the development team. |
| **Decision-Making** | Recommends solutions but doesn’t have decision-making authority over the product backlog. | Has the final say on what gets developed, prioritizing work based on business value. |
| **Stakeholder Interaction** | Works closely with business stakeholders, customers, and development teams to understand needs and document requirements. | Acts as the bridge between stakeholders and the development team, making key product decisions. |
| **Backlog Ownership** | May contribute to backlog refinement but doesn’t own it. | Solely responsible for managing and prioritizing the product backlog. |
| **Deliverables** | Business Requirement Documents (BRD), Functional Requirement Documents (FRD), Use Cases, User Stories. | Product Vision, Roadmap, Prioritized Backlog, Acceptance Criteria. |
| **Reporting To** | Business teams, project managers, or product managers. | Reports to senior management, customers, or stakeholders responsible for the product. |
| **Industry Presence** | Found in both Agile and traditional project management environments. | Mostly seen in Agile and Scrum-based teams. |

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





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