Question 1 - Agile Manifesto

## In Agile there are Four main Values we consider which are

* Individuals and interactions over process and tools.
* Working software over comprehensive documentation.
* Customer collaboration over contract negotiation.
* Responding to a 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 process 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 behavior accordingly.

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

|  |  |  |  |
| --- | --- | --- | --- |
| 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, National ID Mobile no, Email, Address, Phone number Click on Register Button. Send Successful notification to the user. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 2 | Tasks: 2 | | Priority: Highest |
| AS A RESTAURANT OWNER  I WANT TO VIEW ORDERS  SO TAT CAN VIEW THE LIST OF ORDERS | | | |
| BV: 500 | | CP: 02 | |
| ACCEPTANCE CRITERIA  View Orders, 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 ORDERS TO MY ADDRESS | | | |
| BV: 500 | | CP: 02 | |
| ACCEPTANCE CRITERIA  Text Box to enter.  Business Rule: Within the radius of 5km | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 4 | Tasks: 2 | | Priority: HIGHEST |
| AS A CUSTOMER  I WANT TO SELECT THE PAYMENT MODE  SO THAT I CANMAKE 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 method. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| 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: 02 | |
| ACCEPTANCE CRITERIA:  List of Restaurants, select Restaurants, verify restaurant details, approve button, reject button, notification to the restaurant. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 6 | Tasks: 2 | | Priority: LOW |
| AS A CUSTOMER  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 CANCONTACT 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: 8 | Tasks:2 | | Priority: MEDIUM |
| AS A RESTAURANT OWNER  WANT TO PROVIDE TIMESLOTS  SO THAT CUSTOMER CAN CHECK OPENEING 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: 9 | Tasks: 2 | | Priority: HIGH |
| AS A BUSINESS OWNER  I WANT TO VIEW RESTAURANT REVENUE REPORT  SO THAT I CAN VIEW 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: 3 | | Priority: HIGH |
| AS A REG ADMIN  I WANT TO MANAGE REGIONAL RESTAURANTS  SO THAT I CAN TRACK THE PERFORMANCE OFREGIONAL RESTAURANTS | | | |
| BV: 200 | | CP: 03 | |
| ACCEPTANCE CRITERIA:  CLICK ON PERFORMANCE OF RESTAURANTS SELECT FROM DATE TO DATE CLICK ON GENERATE REPORT WHICH INCLUDES RESTAURANT 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: | | CP: | |
| 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 REGIONAL ADMIN  SO THAT I CAN REQUEST FOR REFUND | | | |
| BV: 200 | | CP: 02 | |
| ACCEPTANCE CRITERIA:  1. BR-ALL MANDATORY 2. TEXTBOOK FIELDS 3.DISPLAY ORDER ID 4.TEXTBOOK FOR DESCRIPTION 5. SUBMIT BUTTON 6. GENERATE ISSUE ID 7. DISPLAY SUCCESSFUL | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No:13 | Tasks: 2 | | Priority: HIGH |
| AS A HUNGRY USER  I WANT TO BROWSE NEARBY RESTAURANTS  SO THAT I CAN ORDER FOOD | | | |
| BV: 200 | | CP: 2 | |
| ACCEPTANCE CRITERIA:  Each restaurants displays its name, cuisine type and rating Can be sorted by distance and rating | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 14 | Tasks: 2 | | 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: 2 | |
| ACCEPTANCE CRITERIA:  The menu includes dishes, prices along with descriptions. Shows whether the restaurant is open or closed. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 15 | Tasks: 1 | | Priority: HIGH |
| AS A BROWSER  I WANT TO BROWSE SPECIFIC DISHES AND CUISINES  SO THAT I CAN ORDER FOOD | | | |
| BV:200 | | CP: 2 | |
| ACCEPTANCE CRITERIA:  Displays relevant restaurants along with dishes matching the query | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 16 | Tasks: 1 | | Priority: HIGH |
| AS A CUSTOMER  I WANT TO FILTER RESTAURANTS  SO THAT I CAN FIND A PLACE TO ORDER FOOD | | | |
| BV: 200 | | CP: 2 | |
| ACCEPTANCE CRITERIA:  Filter restaurants by cuisine type and dietary options ( veg, non-veg) | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 17 | Tasks: 2 | | Priority: HIGH |
| AS A CUSTOMER  I WANT TO TRACK MY ORDER  SO THAT I CAN KNOW THE TIME OF DELIVERY | | | |
| BV: 200 | | CP: 2 | |
| ACCEPTANCE CRITERIA:  App shows real time update on the order status Display estimated delivery time | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 18 | Tasks: 1 | | Priority: HIGH |
| ASA CUSTOMER  I WANT TO RATE AND REVIEW THE RESTAURANTS  I HAVE VISITED | | | |
| BV:200 | | CP:2 | |
| ACCEPTANCE CRITERIA:  Can see reviews from other users to help me make dining decisions. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 19 | Tasks: 1 | | Priority: HIGH |
| AS A USER  I WANT TO VIEW PAST ORDER HISTORY SO THAT I CAN ORDER AGAIN | | | |
| BV: 200 | | CP: 2 | |
| ACCEPTANCE CRITERIA:  Can see the details such as order items, total cost and order items | | | |



|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 21 | Tasks: 1 | | Priority: MEDIUM |
| AS A CUSTOMER  I WANT TO CONTACT CUSTOMER SUPPORT SO THAT I CAN SUBMIT ANY QUIERIES OR ISSUSES | | | |
| BV:200 | | CP:2 | |
| ACCEPTANCE CRITERIA: Customer support option along with contact details. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 22 | Tasks: 2 | | Priority: HIGH |
| AS A RESTAURANT OWNER  I WANT TO RECEIVE AND MANAGE ORDERS SO THAT I CAN UPDATE ORDER STATUS | | | |
| BV: 200 | | CP: 2 | |
| ACCEPTANCE CRITERIA:  1.Manage order status  2.Notify restaurants about incoming orders. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 23 | Tasks: 2 | | Priority: HIGH |
| AS A RESTAURANT OWNER  I WANT ACCESS TO CUSTOMER REVIEWS SO THAT I CAN VIEW AND RESPOND TO CUSTOMER REVIEWS | | | |
| BV:200 | | CP: 2 | |
| ACCEPTANCE CRITERIA:  - Owners can address feedback  - Owners can improve their services | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 24 | Tasks: 1 | | Priority: Medium |
| AS A CUSTOMER  I WANT TO APPLY PROMOCODES AND DISCOUNTS SO THAT I CAN ORDER FOR LOWER PRICE | | | |
| BV: 100 | | CP: 4 | |
| ACCEPTANCE CRITERIA:  Active Promocodes | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 25 | Tasks: 7 | | Priority: HIGH |
| AS A DELIVERY BOY  I WANT TO VIEWTHE ORDERS SO THAT I CAN ACCEPT THEM | | | |
| BV: 200 | | CP: 4 | |
| ACCEPTANCE CRITERIA:  - Order visibility - Real-time updates - order details - order filtering and sorting - order map view - order navigation - order completion and confirmation | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 26 | 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:27 | Tasks:5 | | Priority: MEDIUM |
| AS DELIVERY BOY  I WANT TO VIEW FEEDBACK SO THAT I GET TO KNOW ABOUT 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: 28 | Tasks: 5 | | Priority: MEDIUM |
| 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: 29 | Tasks: | | Priority: |
| AS A RESTAURANT OWNER  I WANT TO KNOW ABOUT THE DELIVER BOY SO THAT I VERIFY THE DELIVERY BOY | | | |
| BV: 200 | | CP: 4 | |
| ACCEPTANCE CRITERIA:   * ID PROOF * PUNCTUALITY AND RELIABILITY | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 30 | Tasks: 2 | | Priority: low |
| AS A CUSTOMER  I WANT TO KNOW ABOUT THE DELIVERY BOY SO THAT I CAN CONTACT DELIEVERY BOY FOR THE STATUS OF THE ORDER | | | |
| 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: 31 | 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: 32 | Tasks:1 | | Priority: High |
| AS A CUSTOMER I WANT TO REGISTER  IN THE APPLICATION SO THAT I CAN ORDER FOOD. | | | |
| BV:200 | | CP:2 | |
| ACCEPTANCE CRITERIA:  A registration option for customers with an Email ID or Phone number. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No:33 | Tasks: 1 | | Priority:HIGH |
| AS A CUSTOMER I WANT TO CANCEL MY ORDER  SO THAT I CAN ORDER AGAIN IF IT WAS MADE BYMISTAKE OR CUSTOMISING IT AND ORDER AGAIN | | | |
| BV:200 | | CP:2 | |
| ACCEPTANCE CRITERIA:  A section of orders having an option of cancelling the order. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No:34 | Tasks:4 | | Priority: HIGH |
| AS A DELIVERY BOY  I WANT TO REGISTER SO THAT I CAN LOGIN AND ACCEPT THE ORDERS AND DELIVERY THEM ACCORDINGLY. | | | |
| BV:200 | | CP: 3 | |
| ACCEPTANCE CRITERIA:  Registering using Email ID or Phone number. logging in after registration to view orders. Accepting orders. Delivering the orders to the respective customers. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 35 | Tasks: 2 | | Priority: HIGH |
| AS A DELIVERY BOY  I WANT TO ACCEPT THE ORDERS SO THAT I CAN DELIVER THEM. | | | |
| BV: 200 | | CP: 2 | |
| ACCEPTANCE CRITERIA: Logging in with registered id to view the orders. Accepting the orders after viewing them. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 36 | Tasks:1 | | Priority: HIGH |
| AS A DELIVERY BOY  I WANT A PAYMENT METHOD PREFERRABILY COD SO AS TO AVOID TECHNICAL ISSUES WHILE PAYMENT. | | | |
| BV: 200 | | CP: 3 | |
| ACCEPTANCE CRITERIA:  Modes of payment. Make payment using upi/ net banking or cash on delivery. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No:37 | Tasks: 2 | | Priority: High |
| AS A DELIVERY BOY  I WANT RAISE ISSUES IF THERE ARE ANY ISSUES. | | | |
| BV:200 | | CP: 2 | |
| ACCEPTANCE CRITERIA: Opening issue section. Raising a ticket according to the issues. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No:38 | Tasks: 2 | | Priority: MEDIUM |
| AS A DELIVERY BOY  I WANT TO VIEW DELIVERIES REPORT AND REVENUE GENERATED  SO THAT I CAN REPORT TO REGIONAL ADMIN. | | | |
| BV: 100 | | CP: 2 | |
| ACCEPTANCE CRITERIA:  Viewing status of delivery report in orders section. Viewing the revenue generated on that particular day in transactions section. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No: 39 | Tasks:3 | | Priority: HIGH |
| AS A RESTAURANT OWNER  I WANT MULTIPLE OPTIONS IN PAYMENTS SO THAT CUSTOMER CAN PAY ACCORDING TO THEIR CONVINIENCE. | | | |
| BV: 200 | | CP: 2 | |
| ACCEPTANCE CRITERIA: choosing Modes of payment options. Entering otp for security. Click submit. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User story No:40 | Tasks:3 | | Priority: MEDIUM |
| AS A BUSINESS OWNER  I WANT TO VERIFY THE PAYMENTS SO THAT I CAN UPDATE TO RESTAURANTS AND DELIVERY BOYS. | | | |
| BV: 100 | | CP: 2 | |
| ACCEPTANCE CRITERIA:  Logging in and Verifying transaction in payment section from restaurants. Verifying payments from delivery boys in transaction section. Sorting and filtering successful and failed transactions. Verifying and updating to restaurants and delivery boys. | | | |

Question 3 – Epic

### Epic

An epic is a set of related user stories. They are also considered a "really big user story." They provide stakeholders with a clear understanding of what the end product will look like and why it’s essential.  
User stories break down the epic into smaller, manageable parts that can be implemented in iterations.  
Epics are high level, often spanning multiple sprints or iterations and they provide a way to organise and prioritize work in a product backlog.

2 Epics  
1.Ratings and reviews  
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 rating 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 restaurant detail page.  
-Users can read detailed reviews and comments left by the other customers.  
- User can sort and filter reviews based on criteria such as rating and relevance.  
- User can rate the restaurants and leave a review within a special timeframe.  
- 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.

2. Order tracking  
The real-time order tracking epic aims to provide users with a seamless and transparent experience by allowing them to track the status and location of their food orders in real-time. This feature enhances customer satisfaction, reduces support inquiries, and improves overall user engagement.  
  
User stories:  
As a customer, I want to see the live status of my order.  
- Display the current status of the order, such as “order confirmed,” “preparing,” ”out for delivery” and “delivered”.  
- Provide real-time updates as the orders progresses through various stages.  
  
As a customer, I want to track the location of my delivery.  
 -Integrate GPS or location services to show the delivery partner’s real-time location on a map  
 -Allow customers to view the estimated time of arrival (ETA) based on the delivery partner’s location.

As a customer, I want to provide feedback on the delivery experience.  
- Allow customers to rate the delivery partner and overall delivery experience after the order is delivered.  
- Implement a feedback system with written comments to gather valuable insights.

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.  
  
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.

Question 4 – Difference between BV and CP

# 4. Difference between BV and CP

* Business Value(BV):
* Business value refers to the perceived or quantifiable worth or benefit that a specific task, feature, or the requirement to the business or project.
* It is typically determined based on factors such as revenue generation, cost savings, customer satisfaction, market competitiveness, strategic alignment, and other business-related criteria.
* Business Value helps prioritize tasks or features based on their importance to the overall project goals and objectives
* Examples of Business Value considerations: Increased revenue, Improved user experience, compliance with industry regulations, competitive advantage.
* Complexity Points (CP) :
* Complexity points, also known as story points or function points, are a measure of the relative complexity or effort required to complete a task, feature or requirement.
* They are used to estimate the effort, time and resources needed to implement a specific item.
* Complexity Points are often assigned based on factors such as technical difficulty, development effort, integration challenges and other technical or development related criteria.
* Complexity Points help in assessing the workload and resource allocation needed for different tasks or features.
* Examples of Complexity points consideration: Integration with legacy systems, technical dependencies, data migration, algorithmic complexity.

In summary, Business Value focuses on the business impact and significance of tasks or features, while Complexity points focus on the technical effort and complexity involved in implementing those tasks or features. Both concepts are valuable in project management and software development, as they help prioritize and plan work based on both business goals and technical constraints.

Question 5 – Sprint

# Sprint:

In the context of software development and project management, a sprint is a time boxed, iterative development period during which a specific set of tasks and goals are worked on by a development team. Sprint is a core concept in Agile methodologies, such as Scrum, which emphasizes flexibility, collaboration and delivering value to the customer in shorter cycles.

Some key characteristics and components of a Sprint:

* Time Frame: A sprint typically has a fixed duration, often ranging from 1 to 4 weeks. The duration is consistent across all sprints to provide a predictable cadence for development and planning.
* Goals and objectives: At the beginning of each sprint, the development team, along with the stakeholders, selects a set of user stories, features, or tasks to work on during that sprint. These items are collectively referred to as the sprint backlog.
* Planning: During the sprint planning, the development team breaks down the selected items from the product backlog into smaller tasks and estimates the effort required for each task. The team commits to completing these tasks within the sprint duration.
* Daily Stand-ups: Throughout the sprint, the team holds daily stand-up meetings also known as daily scrums to discuss progress, obstacles and plans. Each team members shares what they have accomplished, what they are working on, and any challenges they are facing. These meetings foster communication and collaboration.
* Development: The development teams works on the tasks identified in the sprint backlog. They collaborate closely, often using techniques like pair programming and frequent code reviews to ensure high-quality work.
* Continuous Integration: Developers integrate their code changes into the main codebase regularly, ensuring that the software remains functional and stable throughout the sprint.
* Testing: Testing is an integral part of a sprint. Automated tests are run to validate code changes, and manual testing may be conducted to ensure the quality of the software.
* Review and Demo: At the end of sprint, the development team conducts a sprint review and demo. They showcase the completed work to stakeholders, gathering feedback and validation. This helps ensure that the delivered features align with expectation.
* Retrospective: Following the review and demo, the team holds a sprint retrospective. They reflect on what went well during the sprint, what could be improved, and actions to take in the next sprint. The retrospective encourages continuous improvement.
* Incremental Development: Each sprint results in a potentially shippable product increment, meaning that at the end of each sprint, a new version of the software is available with additional features or improvements.
* Adaptability: Agile methodologies emphasize adaptability and the ability to respond to changing requirements. If new priorities or insights emerge, adjustments can be made in subsequent sprints.

Sprints allow development teams to iteratively deliver value to customers and stakeholders in a controlled and predictable manner. By breaking down the work into manageable chunks and continuously seeking feedback. Agile teams can enhance collaboration, reduce risk and improve the overall quality of the software being developed.

Question 6 – Product backlog and sprint backlog

A Product backlog is a prioritized list of work for the development team that is derived from the roadmap and its requirements. 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 the project. It represents the entire scope of the product’s development and is managed by the Product owner (PO). The product backlog is continually refined and updated based on feedback, changing requirements, and new insights. The most important items are shown at the top of the product backlog so the team knows what to deliver first

Sprint backlog is the subset of product backlog.  
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 based on their capacity and the priorities set by the Product owner. A Sprint backlog is the set of items that a cross-functional product team selects from its product backlog to work on during the upcoming sprint. Typically the team will agree on these items during its sprint planning session. In fact, the sprint backlog represents the primary output of sprint planning.

|  |  |  |
| --- | --- | --- |
| S.no | Product backlog | Sprint backlog |
| 1 | Anything that needed to accomplish the project vision | Anything that needed to fulfill the sprint 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 meeting is to refine the sprint backlog items |
| 5 | Product backlog evolves and changes will be done by the PO through the product life cycle | NO changes are allowed to the sprint backlog items once the sprint has started |
| 6 | Product backlog refinement meeting is to refine the product backlog | Sprint planning meeting is to refine the 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 stand up meeting does not discuss product backlog items | Daily standup meeting discusses the sprint backlog in accordance with sprint goal |

Question 7 - Impediments log

# Impediments:

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

Here are the 2 impediments:

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

1. Delivery partner shortage in a specific region:

|  |  |
| --- | --- |
| Login ID | 1 |
| Description | Delivery partner shortage in a specific region |
| Impact | Delays in order deliveries and increases customer dissatisfaction |
| Priority | High |
| Assigned to | Operates team and HR team |
| Status | Open |
| Action taken | The operations team is actively recruiting new delivery partners in the regions. The HR team is working on fast-tracking the onboarding process. |
| Resolution | Delivery partner recruitment efforts are ongoing and the HR team is streaming the onboarding process to expedite new hires. Regular updates are being provided in team meetings. |

2. 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 |
| 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 order are now processing smoothly. |

Question 8 – Velocity of the team

In the context of **business analysis** and **Agile methodologies**, **team velocity** is a crucial metric.

* **Velocity** serves as an Agile metric for estimating the amount of work a Scrum team can complete within a given time frame, typically a single **sprint**.
* It provides insight into the team's work capacity and helps with continuous improvement, project planning, and managing stakeholder expectations.
* Velocity is expressed in **story points**, which are a unit of measure for sizing user stories or tasks based on complexity, risk, and uncertainty.
* Velocity is typically calculated at the end of each sprint by totaling the story points for all fully completed user stories.

At the end of each sprint, create a list of fully completed user stories.

These stories should meet acceptance criteria and be approved by the Scrum Master and Product Owner.

Team velocity is typically the **average story points completed per sprint**.

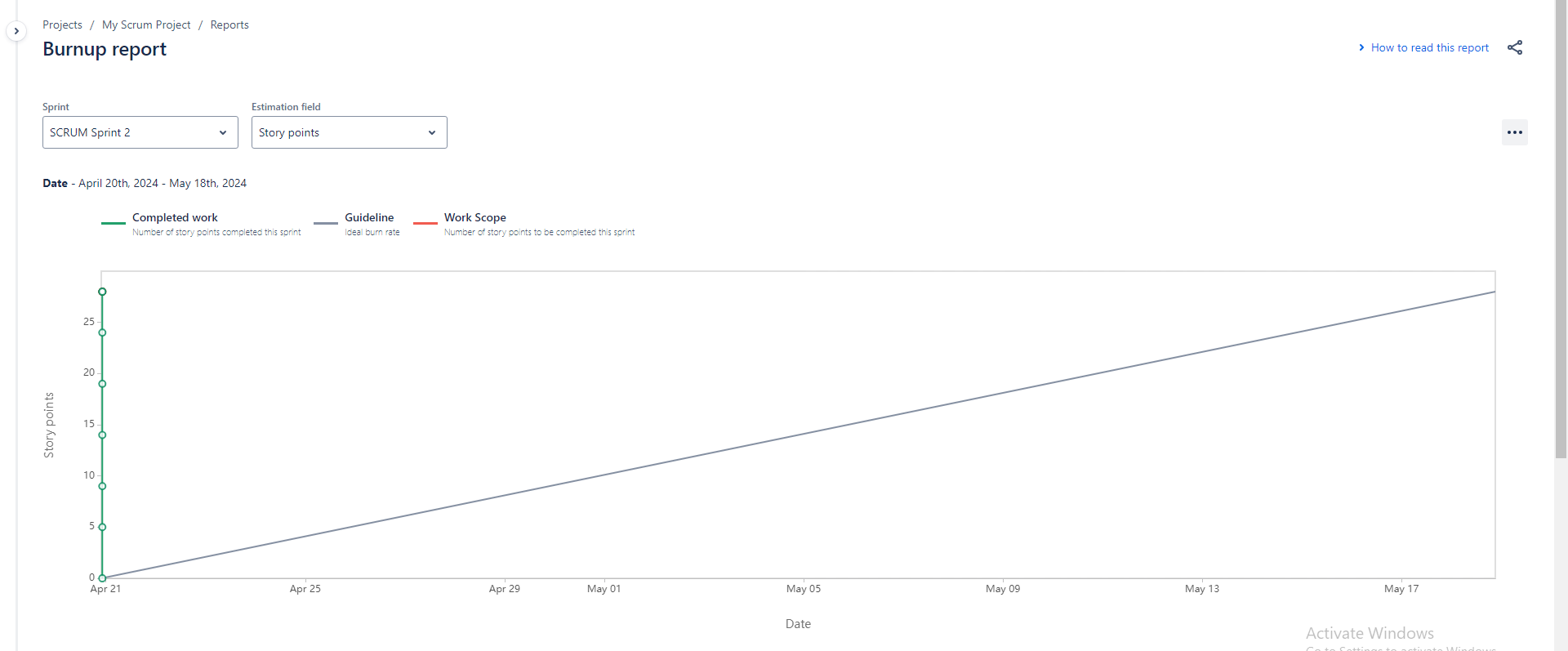
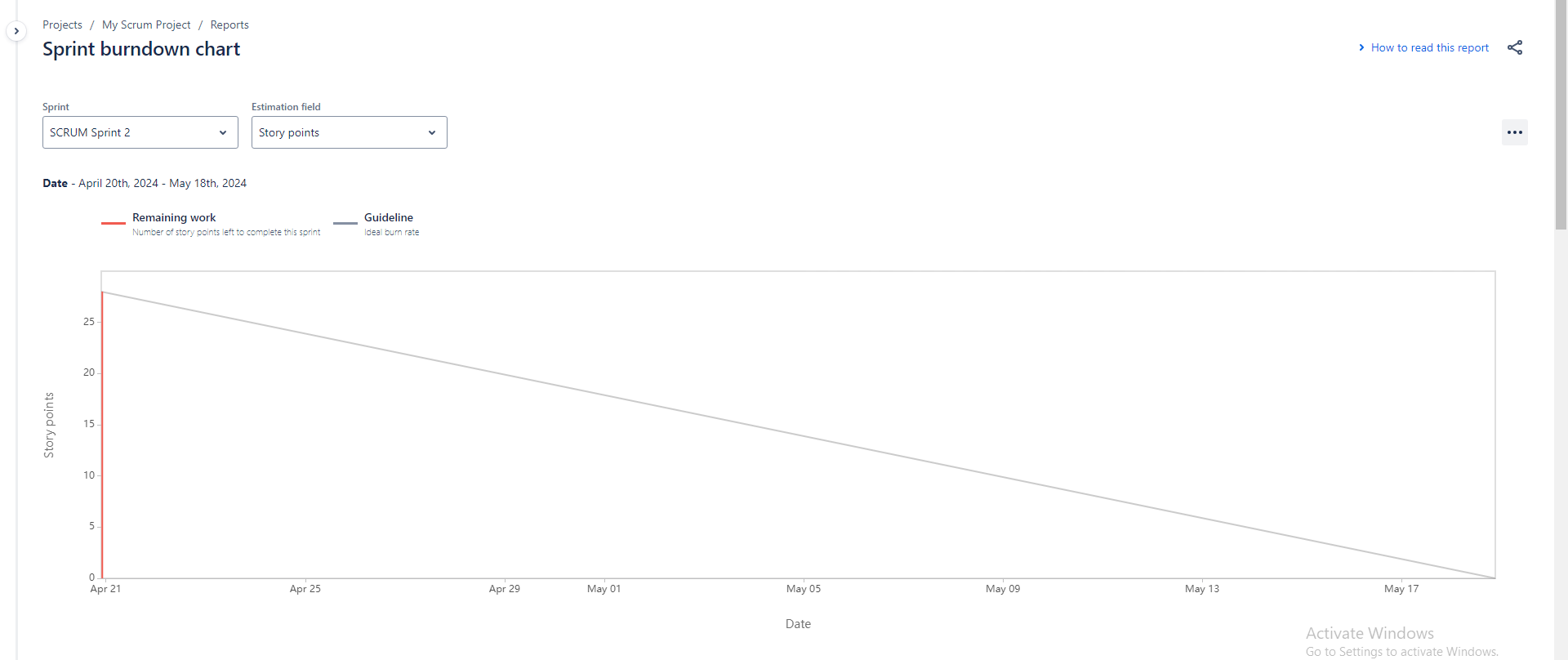
You can calculate it as follows:

**Team Velocity** = Total story points completed / Number of sprints

Velocity isn't about how fast the team works; it's about how much they can accomplish within each sprint. It helps teams predict future performance and maintain a stable work rhythm.

Question 9 – Sprint burn down charts

A burn down chart is a graphical view of the remaining work left versus the time in an iteration. A burn down chat is often used to determine when work will be completed on a project or iteration.



Question 10 – Product grooming

## Product grooming:

Product grooming, also known as backlog grooming or refinement, is a crucial activity in Agile development that involves and refining terms in the product backlog to ensure they are well- understood, prioritized, and ready for development. The process is as follows:

* 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 productbacklog. 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 values 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 the 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.

Question 11 – Roles of Scrum master and Product owner

|  |  |  |
| --- | --- | --- |
| **Criteria** | **Product Owner** | **Scrum Master** |
| Nature of Work | Collaborates with all the stakeholders and brings the vision of a product into the product backlog. | Acts as a team coach and is responsible for maintaining the quality of the product. |
| Responsibilities | Responsible for completing the project on time. Acts as an intermediary between development team and the customers. | Ensures the scrum framework is followed and helps the development team create a quality product. |
| Accountability | Responsible for the project backlog and the timely completion of the product and for providing updates to the clients and the stakeholders | Accountable for the quality of the entire project and for giving updates to the management about the completion of the product. |
| Reporting | Reports to top management and clients. | Reports to top management about the efficiency of the team and the quality of the product. |
| Qualities | Communication and the leadership skills, creativity, critical thinking and a sharp mind are key assets for any product owner. | Thorough knowledge of the scrum theory and practices. Being able to lead the team but without the sense of authority. |

Question 12 – All the meeting conducted in a Scrum project

Sprint Planning: This meeting kicks off each sprint, which is a time-boxed iteration of work, usually spanning 2-4weeks. During this meeting, the Scrum team, including the Product Owner, Scrum Master, and Development Team, collaborates to determine which backlog item ( user stories, features, etc. ) will be worked on this 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 the team members. Each team member answers three key questions. What did I accomplish since the last stand-up? 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 discusses 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.

Ad hoc meetings: These meetings may be scheduled as needed to address specific topics or issues such as revolving impediments, discuss technical challenges, or conducting additional planning or collaboration sessions.

Question 13 – 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 “the sprint duration” and is usually fixed throughout the project. Common sprint durations are 1to4 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.

Question 14 – DOR and DOD

# 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 successful 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.

Question 15 – Prioritization techniques and MVP

# 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 categories 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, 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 targets 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 subscription iterations, gradually adding more features.
* Early Value: The MVP allows the product to be released faster, gaining valuable insights and attracting early adopters.

Question 16 – Business Analyst and product owner

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

Question 17 - Sample resume of 3yrs exp Product owner

**Abhishek kondepogu**

**Phone:** +91 8500094898 | **Email: k.abhishek877@gmail.com** | **LinkedIn:** [Abhishek](https://www.linkedin.com/in/johndoe) k

Professional Summary:  
Dedicated and results-driven Product Owner with **3 years of experience** in business analysis. Skilled in translating business requirements into actionable product features, collaborating with cross-functional teams, and driving product development. Adept at Agile methodologies, user story creation, and stakeholder management. Passionate about delivering customer-centric solutions.

Work Experience:

\*\*Product Owner | XYZ Tech Solutions\*\*

*Hyd Telangana | Jan 2022 - Present*

* Led product development for a cloud-based SaaS platform, resulting in a **20% increase** in user engagement.
* Collaborated with UX designers, developers, and QA teams to define product vision, prioritize features, and create user stories.
* Conducted **user research** to identify pain points and gather feedback for iterative improvements.
* Facilitated **sprint planning**, backlog grooming, and daily stand-ups.
* Managed stakeholder expectations and communicated project progress effectively.

Business Analyst Intern | ABC Corp

*Hyd Telangana | May 2021 - Aug 2021*

* Assisted senior business analysts in gathering and documenting **functional requirements** for a CRM system upgrade.
* Conducted **gap analysis** to identify areas for process improvement.
* Created process flow diagrams and **data flow diagrams** to visualize system interactions.
* Collaborated with development teams to ensure accurate implementation of requirements.

Education:

JNTUK/ BTECH in Mechanical engineering

Skills:

* **Agile Methodologies**: Scrum, Kanban
* **Requirements Gathering**: User stories, use cases, acceptance criteria
* **Stakeholder Management**
* **Data Analysis**: SQL, Excel
* **Prototyping Tools**: Balsamiq, draw.io
* **Documentation**: Functional requirements, test case documents
* **Database Design**: ER diagrams, database schema
* **Change Management**: Handling enhancement requests, change requests
* **Project Closure**: Post-implementation reviews, lessons learned

Certifications:

* **Certified Scrum Product Owner (CSPO)** | Scrum Alliance