Question 1 – Write Agile Manifesto

Answer:

The Agile Manifesto is a document that outlines the central values and principles of Agile software development. Officially referred to as the Manifesto for Agile Software Development, the guide aims to provide an effective model for teams to successfully adopt the philosophy of Agile project management and use it to improve their work process.

The lightweight framework of the Agile Manifesto was designed to improve upon existing software development processes, which were more complex and contained a lot of documentation. The founders wanted to speed up these processes and create a more efficient working model for teams.

Put simply, the Agile Manifesto is an alternative to traditional software development methodologies.

Agile Values:

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

Agile Principles:

1. Satisfy customer through early and continuous delivery pf valuable software.
2. Welcome changing requirements, even late on development. Agile processes harness change for the customer’s comprehensive advantage.
3. Deliver working software frequently, from a couple of weeks to a copule of months, with a preference to the shorter timescale.
4. Business people and developers must work together daily throughout the project.
5. Builds projects around motivated individual. 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 software 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, them tunes and adjusts its behaviour accordingly.

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

Write minimum 40 User stories and their Acceptance Criteria along with their BV and CP.

Answer:

What is user stories? A user story is the smallest unit of work in an agile framework. It's an end goal, not a feature, expressed from the software user's perspective.

BV – Business Value is not the cost of Development or the complexity of the feature. Business Value is how important is this feature (user Story) to the Business.

CP – Complexity Points 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.

Sprint 1

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| User Story ID. 1 | Tasks: 2 | Priority: Highest |
| As a delivery boy, I want to register in scrum foods so that I can log in. | | |
| BV: 500 | CP: 02 | |
| Acceptance criteria:  Delivery boy should be able to enter his details like Name, Nation ID, Mobile No, Email, Address to register himself.  After successful registration a delivery boy should get a notification indicating his registration is successful. | | |

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| User Story ID. 2 | Tasks: 2 | Priority: Highest |
| As a restaurant owner, I should be able to view the current queue of orders so that I can able to prepare order. | | |
| BV: 500 | CP: 02 | |
| Acceptance criteria:  Display List of orders in queue for acceptance, View detailed order. | | |

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| User Story ID. 3 | Tasks: 2 | Priority: Highest |
| As a customer, I want to add the delivery address so that I can get the orders to my address. | | |
| BV: 500 | CP: 02 | |
| Acceptance criteria:  User should be able to see add address button  User should be able to enter address details  User should be able to select location via GPS | | |

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| User Story ID. 4 | Tasks: 2 | Priority: Highest |
| As a customer, I want select the payment mode, so that I can make payment of my choice. | | |
| BV: 500 | CP: 03 | |
| Acceptance criteria:  Display payment modes, radio buttons to select payment modes, payments button  Can select only one payment mode | | |

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| User Story ID. 5 | Tasks: 4 | 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 restaurant, select Restaurants, verify restaurant details, approve button, reject button, notification to the restaurant. | | |

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| User Story ID. 6 | Tasks: 2 | Priority: Low |
| As a customer, I want to view the price so that I can order the food. | | |
| BV: 50 | CP: 01 | |
| Acceptance criteria:  Search Menu bar  Display price in the list of menu items | | |

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| User Story ID. 7 | Tasks: 4 | Priority: Low |
| As a customer, I want to view the contact number of delivery boy so that I can contact delivery boy for the status of my order. | | |
| BV: 500 | CP: 01 | |
| Acceptance criteria:  Display Delivery Boy Contact Number  Contact Number Accessibility  Clickable Call Option  Delivery Boy Contact Information Availability | | |

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| User Story ID. 8 | Tasks: 4 | Priority: Medium |
| As a restaurant owner, I want to provide time slots so that customer can check opening & closing hours. | | |
| BV: 500 | CP: 02 | |
| Acceptance criteria:  Display of Opening and Closing Hours  Online Accessibility  Holiday and Special Hours  Real-Time Updates | | |

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| User Story ID. 9 | Tasks: 6 | Priority: High |
| As a, business owner I want to view restaurant revenue report so that I can analyse my business. | | |
| BV: 500 | CP: 03 | |
| Acceptance criteria:  Access to Revenue Reports  Report Customization  Comprehensive Financial Data  Comparative Analysis  Export Functionality  Real-Time Data Updates | | |

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| User Story ID. 10 | Tasks: 3 | Priority: High |
| As a registered admin, I want to manage regional restaurants, so that I can track the performance of regional restaurants. | | |
| BV: 200 | CP: 03 | |
| Acceptance criteria:  Access to Regional Restaurant Data  Restaurant Performance Metrics  view key performance indicators | | |

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| User Story ID. 11 | Tasks: 2 | Priority: Medium |
| As an admin, I want to see the regional revenue reports, so that I can view the regional performance | | |
| BV: 100 | CP: 03 | |
| Acceptance criteria: Select regional dropdown View performance of each rest of that region in tabular form which includes rest name, revenue, generated Download in excel or PDF. | | |

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| User Story ID. 12 | Tasks: 5 | Priority: High |
| As a customer, I want to chat with registered admin so that I can request for refund | | |
| BV: 200 | CP: 02 | |
| Acceptance criteria:  Access to chat feature  Chat Availability  Refund Request Process  Confirmation of Refund Request  Feedback Mechanism | | |

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| User Story ID. 13 | Tasks: 5 | Priority: Highest |
| As a customer, I should be able to browse the menu and look at the various food options available in the restaurant along with the price for each item so that I can order. | | |
| BV: 500 | CP: 02 | |
| Acceptance criteria:  Access Menu  Categorization of Items  Display of Item Details  Pricing Information  Search and Filter Functionality (name/category) | | |

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| User Story ID. 14 | Tasks: 5 | Priority: Highest |
| As a customer, I should be able to select items from the menu and add them to my cart/order so that I can place order. | | |
| CBV: 500 | CP: 02 | |
| Acceptance criteria:  Item Selection  Add to cart  Cart update  Cart Summary  Proceed to checkout | | |

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| User Story ID 15 | Tasks: 4 | Priority: Highest |
| As a customer, I should have cart containing all the chosen items so far, accessible all the time so that I can view my cart. | | |
| CBV: 500 | CP: 03 | |
| Acceptance criteria:  Persistent Cart Access  Cart Visibility  Cart Summary Details  Cart Updates | | |

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| User Story ID. 16 | Tasks: 4 | Priority: Medium |
| As a customer, I should be able to remove items from my cart or increase item count so that I can manage my cart. | | |
| CBV: 500 | CP: 04 | |
| Acceptance criteria:  Remove Items from Cart  Increase Item Count  Decrease Item Count  Cart Summary Update | | |

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| User Story ID. 17 | Tasks: 2 | Priority: Medium |
| As a customer, I want to apply discount coupons and promo codes so that I can get food at lower price. | | |
| CBV: 500 | CP: 03 | |
| Acceptance criteria:  Display active discount coupons and Promo codes  Display it before payment completion. | | |

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| User Story ID. 18 | Tasks: 5 | Priority: Medium |
| As a customer, I should be able to view customised bill for my order along with the prices for each item and the tax applied so that I can view final priced bill. | | |
| CBV: 100 | CP: 04 | |
| Acceptance criteria:  View Detailed Item Prices  View Item Quantities  Subtotal Display  Tax Applied  Final Total Price | | |

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| User Story ID. 19 | Tasks: 5 | Priority: Highest |
| As a customer, I want to cancel my order so that I can get refund. | | |
| CBV: 100 | CP: 04 | |
| Acceptance criteria:  Cancel Order Button Availability  Confirmation Prompt  Cancellation Timeframe  Refund Notification  Updated Order Status | | |

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| User Story ID. 20 | Tasks: 4 | Priority: Highest |
| As a customer, I want to give feedback & rating to favourite restaurant and food so that it can help other customers as well. | | |
| CBV: 500 | CP: 04 | |
| Acceptance criteria:  Rating System Visibility  Feedback Text Box  Rating Scale  Submit Button | | |

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| User Story ID. 21 | Tasks: 4 | Priority: Highest |
| As a customer, I should be able to see my approximate delivery time so that I can get update on my delivery. | | |
| CBV: 500 | CP: 04 | |
| Acceptance criteria:  Display Approximate Delivery Time  Real-time Updates  Delivery Time Change Notification  Visibility of Delivery Time Throughout the Order Process | | |

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| User Story ID. 22 | Tasks: 4 | Priority: Medium |
| As a customer, I should be able to see top selling items in the restaurant while choosing my order items so that I can make order in less time. | | |
| CBV: 500 | CP: 02 | |
| Acceptance criteria:  Top Selling Items Display  Icon or Label for Top Selling Items  Availability of Top Selling Items  Sort by Top Sellers Option | | |

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| User Story ID. 23 | Tasks: 4 | Priority: Highest |
| As a delivery boy, I want to login in scrum foods so that I can deliver orders. | | |
| BV: 500 | CP: 04 | |
| Acceptance criteria:  Login Screen Availability  Valid Login Credentials  Forgot Password Functionality  Login via Authentication | | |

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| User Story ID. 24 | Tasks: 6 | Priority: Highest |
| As a delivery boy, I want to see the order placed by customer so that I can check delivery location. | | |
| BV: 1000 | CP: 03 | |
| Acceptance criteria:  Order Overview Display  Delivery Address Visibility  Order Status  Customer Contact Information  Map View for Delivery Location  Clear Display of Delivery Information | | |

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| User Story ID. 25 | Tasks: 3 | Priority: Highest |
| As a delivery boy, I should be able to view the current order queue to see the ready order for pickup so that I will go for the delivery pick up. | | |
| BV: 1000 | CP: 03 | |
| Acceptance criteria:  Current Order Queue Display  Ready Orders Highlighted  Pickup Button for Ready Orders | | |

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| User Story ID. 26 | Tasks: 4 | Priority: Highest |
| As a delivery boy, I want to update my delivery status on Scrum food application so that buyer can see actual status of delivery using tracking live location. | | |
| BV: 500 | CP: 04 | |
| Acceptance criteria:  Delivery Status Update Option  Tracking Live Location  Delivery Progress Notifications  Order Delivered Confirmation | | |

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| User Story ID. 27 | Tasks: 4 | Priority: Highest |
| As a delivery boy, I need to collect the payment if payment mode is COD so that order can be completed. | | |
| BV: 1000 | CP: 03 | |
| Acceptance criteria:  COD Payment Option  Amount to Collect  Payment Confirmation  Payment Status Update | | |

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| User Story ID. 28 | Tasks: 4 | Priority: Medium |
| As a delivery boy, I want to view my feedback & reviews of my services so that I can select best product. | | |
| BV: 100 | CP: 02 | |
| Acceptance criteria:  Access to Feedback & Reviews.  Detailed Review Information  Positive and Negative Feedback Separation  Review Interaction | | |

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| User Story ID. 29 | Tasks: 4 | Priority: Highest |
| As a delivery boy, I want to report of deliveries report and revenue generated so that I can analyse my work. | | |
| BV: 1000 | CP: 03 | |
| Acceptance criteria:  Access to Delivery Reports  Revenue Breakdown  Filter Options for Report  Downloadable Report | | |

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| User Story ID. 30 | Tasks: 3 | Priority: Highest |
| As a delivery boy, I want to view the contact number of customer so that I can contact customer regarding delivery or any issues. | | |
| BV: 1000 | CP: 03 | |
| Acceptance criteria:  Access to Customer Contact Information  Visibility of Contact Number  Delivery Status Update | | |

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| User Story ID. 31 | Tasks: 4 | Priority: Medium |
| As a delivery boy, I want to see the list of my deliveries so that I can see my work history. | | |
| BV: 500 | CP: 02 | |
| Acceptance criteria:  Access to Delivery List  Delivery Information  Sorting and Filtering  Delivery Details View | | |

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| User Story ID. 32 | Tasks: 3 | Priority: Medium |
| As a delivery boy, I want to logout from web application so that I can exit from application. | | |
| BV: 500 | CP: 02 | |
| Acceptance criteria:  Logout Button Visibility  Logout Action  Logged Out Successfully | | |

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| User Story ID. 33 | Tasks: 4 | Priority: Highest |
| As a restaurant, I want to see feedback and rating of my restaurant so that I can analyse the view of my food. | | |
| BV: 1000 | CP: 04 | |
| Acceptance criteria:  Access to Feedback and Ratings  Sorting and Filtering Options  Detailed Review Information  Export Feedback Data | | |

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| User Story ID. 34 | Tasks: 4 | Priority: Highest |
| As a restaurant, I want to verify delivery boy so that I can handover product to right person for delivery. | | |
| BV: 1000 | CP: 04 | |
| Acceptance criteria:  Access to Delivery Boy Information  Verify Delivery Boy Identity  Option for ID Verification  Confirmation of Verification | | |

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| User Story ID. 35 | Tasks: 3 | Priority: Highest |
| As a restaurant, I want to view revenue generated from Scrum Food Application so that I can analyse my business. | | |
| BV: 500 | CP: 04 | |
| Acceptance criteria:  Access to Revenue Dashboard  Filters for Time Period  Export Revenue Data | | |

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| User Story ID. 36 | Tasks: 3 | Priority: Medium |
| As a restaurant owner, I should be able to accept orders so that I can prepare & deliver the food to delivery boy. | | |
| BV: 100 | CP: 01 | |
| Acceptance criteria:  Order Notification  Access to Order Details  Accept/Reject Options | | |

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| User Story ID. 37 | Tasks: 2 | Priority: Highest |
| As a restaurant owner, I should be able to update the order status to ready once the order is prepared so that delivery boy should collect. | | |
| BV: 500 | CP: 03 | |
| Acceptance criteria:  Order Status Update Functionality  Action for Updating Status | | |

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| User Story ID. 38 | Tasks: 4 | Priority: Highest |
| As a Regional Admin, I want to view regional revenue so that I get details so that I can access my business. | | |
| BV: 1000 | CP: 04 | |
| Acceptance criteria:  Regional Revenue Access  Revenue Breakdown  Filter and Sorting Options  Export Option | | |

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| User Story ID. 39 | Tasks: 4 | Priority: Highest |
| As a Regional Admin, I want to view payment mode selected by customer so that I get payment at the time of delivery, if customer has selected COD. | | |
| BV: 1000 | CP: 04 | |
| Acceptance criteria:  Payment Mode Visibility  COD Payment Identification  Payment Mode Notifications  Customer Contact Details | | |

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| User Story ID. 40 | Tasks: 4 | Priority: Highest |
| As an Admin, I want to view restaurant and regional admin request so that I can deliver the product. | | |
| BV: 500 | CP: 04 | |
| Acceptance criteria:  Request Visibility  Request Details  Search and Filter Options  Delivery Confirmation | | |

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| User Story ID. 41 | Tasks: 4 | Priority: Highest |
| As an Admin, I want to register so that I can login in Scrum Food Application so that I can access orders. | | |
| BV: 1000 | CP: 03 | |
| Acceptance criteria:  Registration Page Access  Required Fields for Registration  Account Creation Confirmation  Successful Login After Registration | | |

Question 3– What is epic? Write 2 epics.

Answer:

Epic is a set of user stories or the big user story consisting of number of small user stories to complete the milestone known as epic. Also, Epic can be said to be set of user stories completed to achieve one task.

Epics are usually delivered over a set of sprints. As a team learns more about an epic through development and customer feedback, user stories will be added and removed as necessary.

**Epic 1: Order Creation:-**

Description:

Customer want to view the menu for order placing which should have restaurant details, food items, price, availability, delivery time and can able to create the order.

User Stories:

1. As a customer, I should be able to browse the menu and look at the various food options available in the restaurant along with the price for each item.

2. As a customer, I should be able to select items from the menu and add them to my cart/order.

3. As customer, I should have cart containing all the chosen items so far, accessible all the time.

4. As a customer, I should be able to remove items from my cart or increase item count.

5. As a customer, I should be able to cancel my entire order.

6. As a customer, I should be able to view customised bill for my order along with the prices for each item and the tax applied.

7. As a customer, I should be able to see my approximate delivery time.

8. As a customer, I should be able to see top selling items in the restaurant while choosing my order items.

Acceptance Criteria: Categorised menu with prices is visible and enabled with selection choices, as soon as the customer choose items, the order is created in the database and is visible to the customer.

**Epic 2: Order Queue and delivery:-**

Descriptions:

User Stories:

1. As a restaurant owner, I should be able to view the current queue of orders.

2. As a restaurant owner, I should be able to accept orders.

3. As a restaurant owner, I should be able to update the order status to ready once the order is prepared.

4. As a delivery boy, I should be able to view the current order queue to see the ready order for pickup.

5. As a delivery boy, I should be able to pick up the order and see customer delivery details (address, mobile number & location) deliver the food to the customer.

Acceptance criteria: The order queue should be visible and accepted by the restaurant owner as well as delivered to the delivery boy for food delivery.

Question 4 –What is the difference between BV and CP.

Answer:

Business Value – Business Value is not the cost of Development or the complexity of the feature. Business Value is how important is this feature (user Story) to the Business.

Complexity Point – Complexity Points 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.

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| Sr. No. | Business Value (BV) | Complexity Points (CP) |
| 1. | It measures benefit or impact of a task, which delivers to the organization. | It Estimates the efforts and technical difficulty required to complete task. |
| 2 | It focus on value delivered to the business or user. | It focus on effort and difficulty level for implementation. |
| 3 | The purpose of business value is to prioritise tasks based on importance and impact. | It focus on assists in planning and resource allocation. |
| 4 | Product owner, stakeholder and business leaders defines business value. | Development team define complexity during development. |
| 5 | It measures in numbers like 1-10, 1-100. | It measures in relative sizing like 1,2,3,4,5 |
| 6 | Business value like revenue generation, compliance, customer satisfaction. | Complexity points like challenges, unknowns, skills requirements. |
| 7 | Business value used during prioritization of backlog. | Complexity points used during sprint planning or backlog refinement. |
| 8 | Determine what is most valuable to deliver. | Influence how much work can be accomplished in a sprint. |
| 9 | Techniques used like MOSCOW, Currency Note technique | Planning Poker. |
| 10 | It is also known as business valuation. | It is also known as story points or function points, which are measure of complexity. |

Question 5 –Explain about Sprint

Answer:

**What is a Sprint?**

Sprint is a short and fixed time frame during which a specific set of tasks are meant to be performed. An Agile project will be broken down into a certain number of sprints, each sprint lasting for a fixed duration of time. Usually, each sprint runs for 2–4 weeks. A Sprint Planning Meeting occurs before the start of every sprint. That meeting defines what set of items could be developed and delivered in the upcoming sprint.

**Characteristics Of Sprint:-**

A. Daily Stand up: Throughout the sprint, the team holds daily stand up meetings to discuss progress, obstacles and plans. Each team member shares what they have accomplished, what they are working on and any challenges they are facing.

B. Time frame: A sprint typically has fixed duration, often ranging from 1 to 4 weeks. The duration is consistent across all sprints to provide a predictable cadence for development & planning.

C. Planning: During sprint planning, the development team breaks down the selected items from product backlog into smaller tasks and estimates the effort required for each task. The team commits to completing these tasks within the sprint duration.

D. Goal Oriented: Each sprint has a Sprint goal, which is clear, achievable and objective for that iteration.

**Benefits of Sprint:-**

A. Focused execution: The sprint goal and scope of work are defined and locked at the beginning of the sprint

B. Increased productivity: Every team member is focusing on one task, keeping their attention on attaining sprint goals

C. Increased transparency: Teams work on a common vision — they collaborate often and consistently through sprint ceremonies to discuss progress and impediments. This also helps reduce risks, as any blockers are taken care of upfront by the scrum team

D. Improved morale: Indeed, everyone on the team knows what to deliver and what their role is in the execution of the sprint. Agile doesn’t enforce any organizational structure and states scrum teams as autonomous decision-making entities. This builds individual morale as each team member is valued

E. Huge cost reduction: Large projects without sprint-based planning and execution would take more time (and therefore money) to launch

F. Early feedback: Receiving feedback from customers and stakeholders benefits the product and enables faster releases and sprint reviews

G. Capability to make changes quickly: Teams can implement change quickly based on feedback and swiftly deliver the next stable increment

H. Better quality: Quality improves as the team holds sprint reviews and incorporates those changes into the product

I. Higher customer satisfaction. Customers get to use features faster

**Sprint workflow and process:-**

A. Backlog

The backlog it is a list of tasks need to do before the product is ready. The product owner makes this list, and after that, they gives it to the scrum master and team. It is made up of user stories, all about what features and requirement list will gave the client.

B. Sprint Planning

In this team will focus on to the top things which are needs in user stories and decides what can be delivered in the sprint after discussing. Sprint Planning means these meeting is usually done before the start of every sprint. During this meeting, all the team members select some set of items (also called User Stories) from the Product Backlog. These items are collectively termed Sprint Backlog and are the ones that will be developed during this sprint. A sprint meeting involves:

The Scrum Master

Scrum Product Manager

Scrum Team Members.

C. Sprint backlog

The all team will be agrees on this list, which decides what the tasks which, development team will finish in the sprint.

D. Sprint

Sprint is basically the timeframe in which the work must be completed, like is around 30 days. after the end of each sprint, all the team members present their work to the clients/stakeholders. The iteration product is operated in a real-world organization environment. In this meeting, the team gathers review and feedback from the clients and tend to rectify the changes, if any.

E. Daily scrum

In the Daily Scrum the team will lead by the Scrum Master which collects every day for small meetings. All they talk about What they have done?, what are they currently working on?, and Any problems which they are facing during the work.

The meetings typically last 15 mins and the discussions revolve around all team members. Each member stands and answers some key questions:

What I did yesterday?

Are there any problems I am facing?

What I will do today?

F. Outcome

In a sprint, we are aiming to produce something that will be used. The product owner then decides if all good to go or if we need to add more features in the same.

G. Sprint end: There are two meeting will be taken at the end point which are

1. Sprint review: In these, meeting the team will shows their work to the product owner.

2. Sprint retrospective: In these meeting the team will be discussing about the improvement of the product in all perspective. This meeting is held after the sprint review meeting. In this meeting, all the team members including the Scrum Master and Manager discuss the following topics:

The key takeaways from the sprint.

What things went well and what things didn’t?

What problems were faced during the sprint?

What other possible decisions could have been taken at that point.

Analysing the merits and demerits faced during the sprint.

The Retrospective meetings usually last for 1 - 2 Hrs.

H. Delivery of Incremental Product

At the end of each sprint, a fully functioning increment of the product is shipped for delivery. In Agile, the priority always remains customer satisfaction and fast delivery. The product increment must have satisfied all the quality standards and client requirements. The clients then look into the increment and address the changes they require, if any. These changes then will be discussed in the sprint planning meeting of the next sprint.

Sprint Goal: Each sprint has a clear, overarching objective called the sprint goal, which is a specific outcome the team aims to achieve during the sprint. It provides the team with a focus and direction for the work they are completing.

Sprint Value - Sprint Value refers to the measurable benefit or contribution that a Sprint delivers to the overall project, stakeholders, or end-users. It represents the value created during a Sprint in terms of achieving the Sprint Goal, completing backlog items, and delivering a potentially shippable product increment.

What is sprint Duration: 2 Weeks - Your sprint Value

Scrum is a subunit of Sprint.

What is scrum Duration: 1 day – Your scrum Value ?

PBI: Product Backlog, Item Task: Unit of Work done by 1 Developer in 1 Scrum, WIP: Work In Progress

Example of Sprint Backlog:-

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| --- | --- | --- | --- |
| Product backlog Items | Tasks | WIP | Done |
| Registration | 4 | 1 | 3 |
| Login | 5 | 2 | 3 |
| Add Restaurants | 5 | 3 | 2 |
| Order Foods | 4 | 2 | 2 |
| Make Payment | 5 | 3 | 2 |
| Track Delivery | 6 | 4 | 2 |
| Customer feedback | 4 | 2 | 2 |

Scrum vs. Sprint

Scrum and sprint are the same interleaved things, but they do have some differences. Let us understand the key differences between scrum and sprint.

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| Sr. no. | Scrum | Sprint |
| 1 | Scrum is a framework in agile development methodology. | Sprint is just a time-boxed process within the scrum framework. |
| 2 | Scrum involves the complete development of software. | Sprint involved the development and delivery of a working iterative product. |
| 3 | Scrum lasts for many months. | Sprint lasts for 2–4 weeks. |
| 4 | The objective is to develop a fully functioning complex software product while ensuring team collaboration, budget, and project deadlines. | The objective is to complete and deliver the iterative product to clients at the end of every sprint. |
| 5 | Scrum meetings are held before every sprint to inspect the overall progress of the project. | Daily sprint meetings are conducted every 24 hours to analyze activities done by individual members. |
| 6 | There are 3 artifacts in Scrum: Product backlog, Sprint backlog, and Product increment. | Since sprint is just a process in the scrum, there is no such artifact other than the releasable increment product. |
| 7 | A Fully functioning complex software product gets developed within budget and deadline and completely transparent working phases. | Regular feedback from customers and daily meetings ensure rapid change management and faster release of the product by continuous rectification of mistakes. |

Question 6 – Explain Product backlog and Sprint back log.

Answer:

Sprint Backlog: The Sprint Backlog is a plan by and for the Developers. It is a highly visible, real-time picture of the work that the Developers plan to accomplish during the Sprint in order to achieve the Sprint Goal. Consequently, the Sprint Backlog is updated throughout the Sprint as more is learned. It should have enough detail that they can inspect their progress in the Daily Scrum.

Product backlog: A product backlog is a list of the new features, changes to existing features, bug fixes, infrastructure changes, or other activities that a team may deliver in order to achieve a specific outcome. The product backlog is the single authoritative source for things that a team works on.

|  |  |  |
| --- | --- | --- |
| Sr. No. | Product Backlog | Sprint Backlog |
| 1. | Anything that needed to accomplish the project vision. | Anything that is needed to fulfil the sprint goal. |
| 2. | Product owner owns | Development teams owns. |
| 3. | Contains requirements, defects, and tasks. | A subset of the product backlog items defined as a priority by the product owner. |
| 4. | Everyone contribute to the product backlog. | Only the development team contributes to the sprint backlog. |
| 5. | Product backlog refinement meeting is to refine the product backlog. | Sprint planning meeting is to refine the sprint backlog items. |
| 6. | Product backlog evolves and the product owner thorough will do changes the product life cycle. | No changes are allowed to the sprint backlog items once the sprint has started. |
| 7. | Release burn down metric is used. | Sprint burn down metric is used. |
| 8. | Estimation is done at the user story level. | Estimation is done at the activity or task level. |
| 9. | Daily stand up meeting does not discuss product backlog items. | Daily stand up meeting discusses the sprint backlog in accordance with sprint goal. |

Question 7 – What is impediments log? Write 2 impediments.

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

1. Delivery partner shortage in a specific region.

|  |  |
| --- | --- |
| Log ID | 1 |
| Description | Delivery partner shortage in a specific region. |
| Impact | Delays in order deliveries and increased customer dissatisfaction. |
| Priority | High |
| Assigned to | Operations team and HR Team |
| Status | Open |
| Action take | The operation team is actively recruiting new delivery partners in the region. The HR team is working on fast tracking the on boarding process. |
| Resolutions | Recruitment of delivery partners is ongoing and the HR team is streamlining the on boarding process to speed up the hiring process.  In team meetings, regular updates are provided. |

2. Inability for the customer to log in to the scrum food application due to technical issues.

|  |  |
| --- | --- |
| Log ID | 2 |
| Description | Inability for the customer to log in to the scrum food application due to technical issues. |
| Impact | Delays in login and potential revenue loss. |
| Priority | High |
| Assigned to | Technical Team & QA Team |
| Status | In progress |
| Action taken | In order to fix the issue, the team has identified the root cause. To ensure the issue is resolved, the QA team is conducting extensive testing. |
| Resolutions | The tech team has implemented a fix and conducted through testing. The issue has been resolved and customer are able to login successfully. |

Question 8 – Explain Velocity of the Team

Velocity – How many CP is covered in this sprint?

Answer:

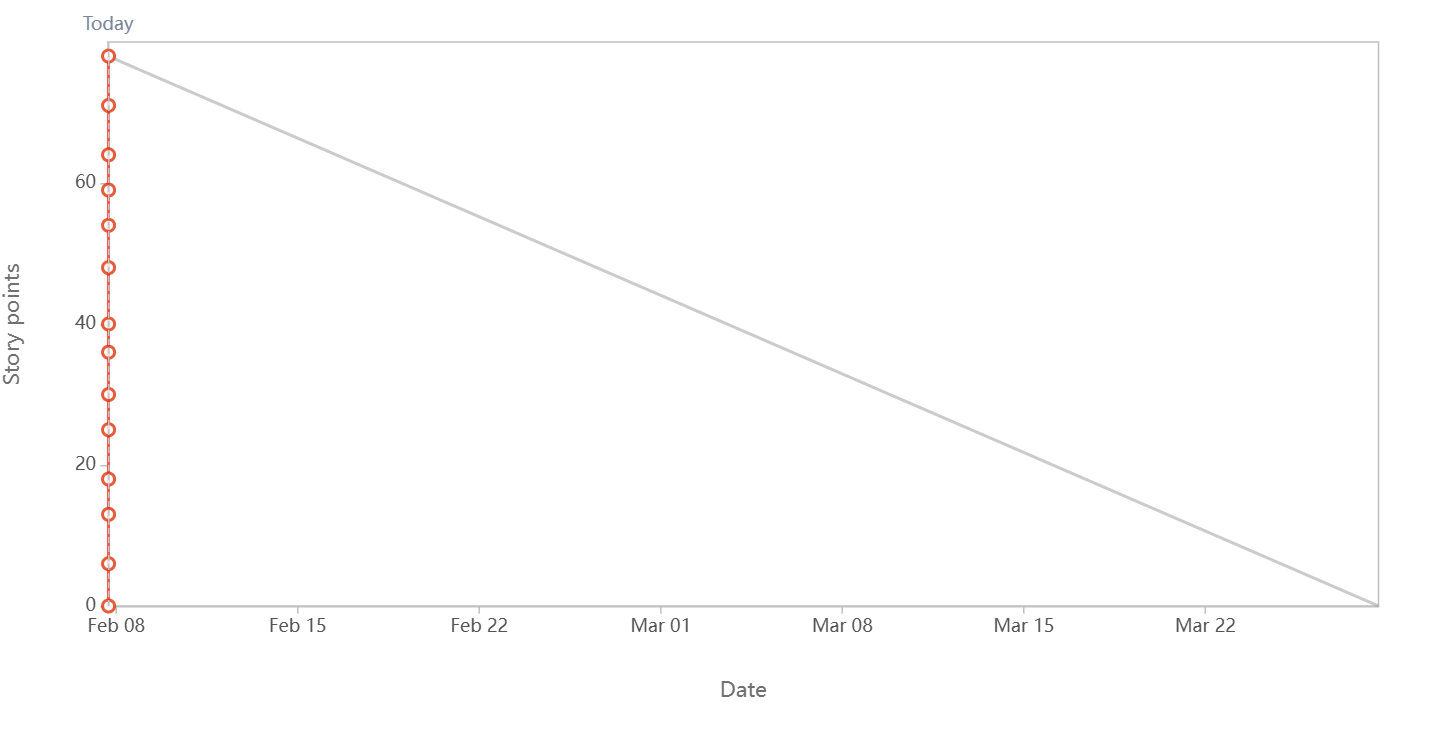
Velocity refers to the measurement of the amount of work a development team can complete during the sprint.

The development team itself performs the calculation of velocity, as they are responsible for estimating the effort required to complete each user story or backlog item.

Team Velocity = Total Story Points Completed Per Sprint / Number of Sprints.

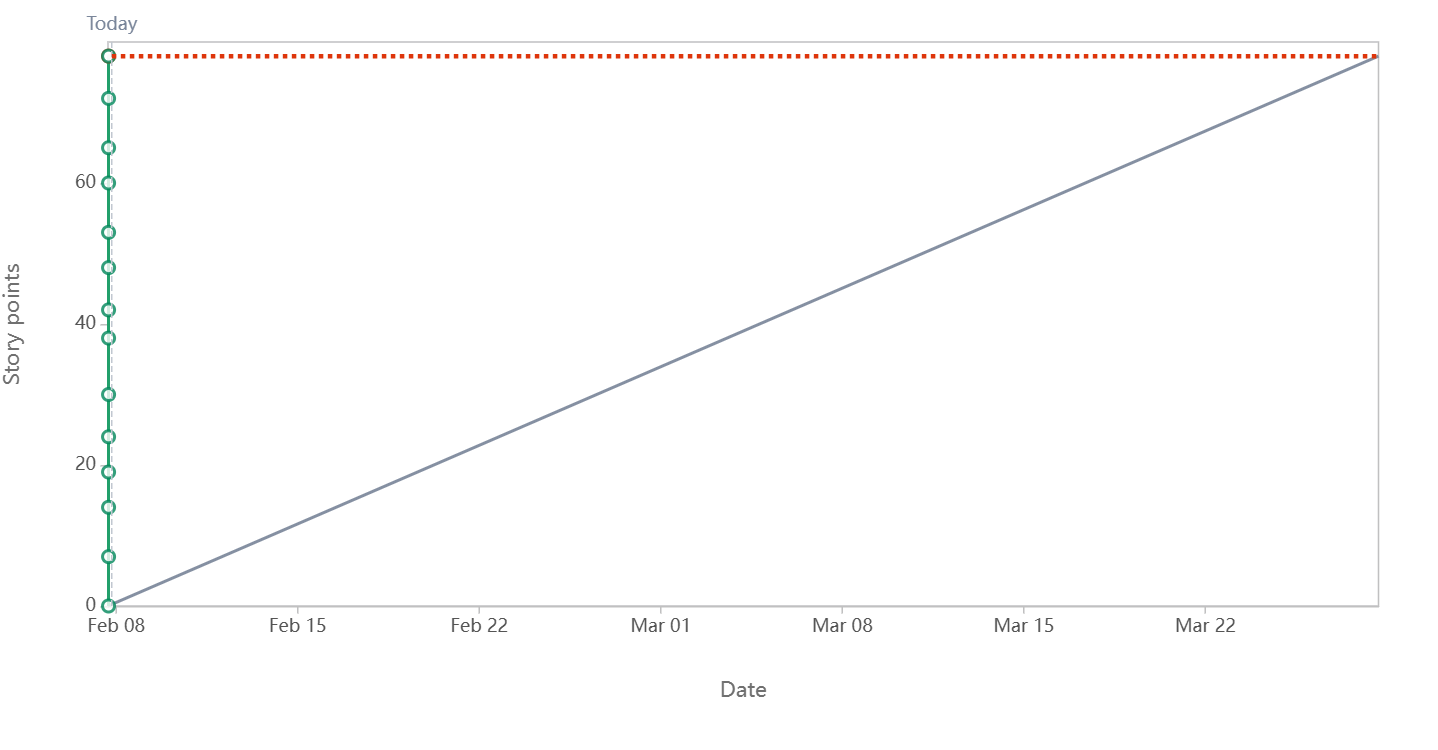
Question 9 – Draw Sprint Burn Charts n Product Burn Down Charts

Sprint Burn down Chart

This report shows the amount of work to be done in a sprint. It can be used to track the total work remaining in the sprint, and to project the likelihood of achieving the sprint goal.

Product Burn up Chart

The Burnup chart provides a visual representation of a sprint's completed work compared with its total scope.



Product Burndown Chart:

Product burndown charts provide a visual representation of the overall progress of the project, showcasing the number of product or project goals accomplished by the team and the remaining work within the project.



Question 10 – Explain about Product Grooming

Answer: Product Grooming is also commonly referred to as backlog refinement. It is an important activity in Agile software development that involves reviewing, prioritizing and refining items in the product backlog. Additionally, it is used to refine user stories and prioritize them for the next development sprint.

The goal of the project grooming is to ensure that the backlog is well prepared, organised and ready for implementation in upcoming sprints.

Typically a collaborative effort involving the product owner, development team and other relevant stakeholder.

A product backlog grooming session can include the following activities:

* Eliminating user stories that are no longer relevant or needed
* Developing and adding new user stories based on changing customer needs
* Reprioritizing user stories for the next sprint
* Providing estimates for stories
* Re-evaluating story estimates based on new or updated information
* Splitting user stories that are too large or complicated for one sprint into smaller, more manageable ones

It is helpful in effective sprint planning, better collaboration and increased result.

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

|  |  |  |
| --- | --- | --- |
| Criteria | Product Owner | Scrum Master |
| Primary Responsibility | Facilitate the Scrum process, ensure team efficiency and remove obstacles. | Define the product vision, prioritise features and maximize the product’s value. |
| Focus | Scrum process, team facilitation and continuous improvement. | Product vision, feature prioritization and value maximization. |
| Stakeholder Engagement | Engage with stakeholders to address impediments and facilitate communication. | Collaborate closely with stakeholders to gather requirements, validate product increments and align with business needs. |
| Decision making Authority | Does not possess decision-making authority over the team or the product. | Holds final decision-making authority on product features, prioritize and accepting or rejecting work results. |
| Skill Set | Strong facilitation, coaching and leadership skills, Conflict resolution and self-organization. | Excellent communication, negotiation and stakeholder management skills. Product vison and requirements understanding. |

Question 12 – Explain all Meetings Conducted in Scrum Project

Answer:

Primarily scrum meetings must include 5 different meetings as mentioned below. These 5 meetings planned ahead and executed will lead to successful product delivery.

1. Sprint Planning Meeting – This meeting scheduled before start of every sprint. Scrum master, product owner and scrum developers participate in this meeting to discuss top things, which are needs in user stories, and decides what can be delivered in the sprint. All Scrum developers select user stories from the product backlog.
2. Daily Scrum Meeting – This meeting leads by Scrum Master every day, They discuss about what they have done? What currently working on? Any problem facing? What they will do today? Scrum Master spent 15 – 20 minutes with every team member.
3. Sprint Review Meeting - Here a review is done after the sprint by the entire team to explain the product functionality and the product performance is measured.
4. Sprint Retrospective Meeting - After the sprint review meeting, a retrospective is done to understand what went wrong, improvement needed and how to correct it in future sprints.
5. Backlog Refinement Meeting - In this meeting, the product backlog items are arranged based on their priority. This will let the team focus on their deliverables in the upcoming sprints.

Question 13 – Explain Sprint Size and Scrum Size

Answer:

Sprint Size:

The duration of a sprint is called Sprint length. A Sprint is a time boxed period during which the development team works to deliver a potentially shippable product increment. Sprint size determined during the project-planning phase and typically rages from one week to four weeks. Most common duration is two weeks but it can be vary on project’s need, complexity and team dynamics.

Scrum Size:

The Scrum size refers to the number of individuals who collaborate to deliver the product increment in Scrum. The Scrum team is self-organizing and cross functional typically consisting of Product Owner, Scrum Master & Development Team. Recommended team member is between five to nine members having effective communication skills, collaboration and flexibility. Srum Team size is depending on size of the project requirements.

Question 14 – Explain DOR and DOD

Answer:

Definition of Ready (DoR): The Definition of Ready outlines the criteria that user story must meet before it is considered ready to be included in a sprint. It ensures that team member has sufficient information and clarity about user stories, reducing the likelihood of misunderstandings or delays during sprint. It is more functional.

The user story has a clear and conscious description, including the expected behaviour or functionality. The acceptance criteria for the user story are well defined and agreed upon bt the product owner and development team.

Any necessary design or wireframes related to the user story are available. The user story is appropriately sized or estimated in story points or other relevant units.

Any dependencies or external resources needed for the user story are identified and accessible.

Definition of Done (DoD): The Definition of Done defines the criteria that a user story or any other backlog item must meet to be considered complete and ready for release. It establishes a shared understanding of what it means for work to be considered “done” and ensures that all necessary aspects, such as quality, testing and documentation are addressed. It is more technical.

User story is thoroughly tested and validated against the defined acceptance criteria.

The product owner has reviewed and accepted the user story as meeting the expected criteria.

Question 15 – Explain Prioritization Techniques and MVP

Answer:

What is Prioritization Techniques?

Prioritization is the process by which a set of tasks are aligned in order of importance. In agile development, establishing priorities helps employees accomplish work faster to deliver maximum business results on time.

The main purpose of agile prioritization techniques is to allocate resources to the projects that matter. Because agile product development can be more complex than regular development processes, prioritization techniques can make entire projects run more smoothly. Additionally, agile techniques involve four levels of priority—urgent, high, medium, and low—which force teams to take things one important task at a time.

**MoSCoW:-**

MoSCoW is a popular prioritization technique for managing requirements. Here’s how it’s applied:

Must Have (M): These are the requirements needed for the project's success.

Should Have (S): These are important requirements for the project but not necessary.

Could Have (C ): These requirements are “nice to have.” But don’t have as much impact as the others.

Will Not Have (W): These requirements are not a priority for the project.

**RICE framework**

Reach, impact, confidence, and effort (RICE) are the four factors used to evaluate a product idea:

Reach: Identify the number of people or events over time, such as transactions per quarter or conversions per month.

Impact: Determine whether an idea achieves business goals or meets customer needs.

Confidence: Measure the team’s confidence level in executing ideas with a percentage scale of high (100%), medium (80%), and low (50%).

Effort: Calculate the time it will take the team to execute the idea.

**Kano model**

The Kano Model is a customer satisfaction-based prioritization framework. It help product managers prioritize features and updates based on customer needs. It has three parts:

Basic features: Customers expect these essential functions in your product’s performance, such as the ability to share a post on a social network.

Performance features: These features increase customer satisfaction and make your product more enjoyable to use, like faster load times.

Delighters: Unexpected features make customers happy. Examples of delighters include whimsical in-app messaging or the ability to use GIFs in posts.

**100-dollar test**

In the 100-dollar test method, teammates assign a relative value to a list of items by spending imaginary money together. Each person receives an imaginary $100 cash to spend on specific priorities. All individuals then go shopping with their “dollars” and use them to “buy” the tasks that are important to them. The result is usually a well-spread priority list. Using the concept of cash can be more engaging than an arbitrary ranking system, making this framework useful for large groups with conflicting priorities!

**What is MVP?**

A Minimum Viable Product (MVP) is a development strategy in product management where a new product or service is created with the minimum features necessary to satisfy early adopters and gather feedback for future development.

The purpose of a Minimum Viable Product (MVP) lies in efficiently bringing a product to market with the minimum set of features necessary to meet the needs of early adopters.

Types of MVP(Minimum Viable Product)

There are several types of Minimum Viable Products (MVPs), each serving different purposes and stages of product development:

**Types of MVP:-**

* High-fidelity MVP: Although a high-fidelity MVP has few features, it offers an interface that is very interesting to use.
* Low-fidelity MVP: it has a very simple user interface.
* Single-feature MVP: as name suggests, it has only one feature.
* Concierge MVP: Instead of having an automated procedure like in a full-fledged software solution, a concierge MVP uses a human (or human team) to execute tasks.
* Piecemeal MVP: An incomplete MVP connects to external services and programmes to complete certain functions that will eventually be handled by the app itself.
* Digital MVP: It allows for rapid iteration and testing of key hypotheses with real users.
* Hybrid MVP: combines components from several MVP kinds to develop a unique strategy that is most appropriate for the target market and the particular requirements and objectives of the product.

16 – Difference between Business Analyst n Product Owner

Answer:

Who is a product owner?

A product owner is in charge of a project’s direction, making sure the team is working on the right things. They prioritize tasks, communicate with the team, and make sure the final product meets the needs of the client. Backlog management and maximizing product value are under the purview of a PO. They are the ones who own the product and are responsible for making sure that all of its features and technological aspects satisfy the needs of the user. Product owners regularly collaborate and communicate with the agile team as part of their daily tasks.

Who is a business analyst?

A business analyst (BA) makes sure what the client wants matches what the product delivers. Their main job is to check that the team creates the products that the client asks for and that all the requirements are fulfilled. They act as a bridge between the technical and business sides of a company, finding solutions and understanding how they affect things. Business analysts work closely with stakeholders, including product owners, to understand business requirements and translate them into actionable insights for the organization.

|  |  |  |
| --- | --- | --- |
| Aspect | Business Analyst | Product Owner |
| Role | Analyzing business needs and requirements, proposing solutions. | Planning, executing and delivering projects within defined constraints. |
| Focus | Business processes, systems and stakeholders | Project goals, scope, budget and timeline. |
| Skillset | Analytical thinking, gathering requirements and data analysis | Leadership, communication, risk management |
| Activities | Eliciting and documenting requirements, conducting gap analysis, creating functional specifications. | Defining project objectives, creating project plans, co ordinating resources, monitoring progress. |
| Deliverables | Requirement documents, use cases, process flow. | Project charters, project plan, status report |
| Interactions | Collaborating with stakeholders, developers and testers | Engaging with project team members, stakeholders and sponsors. |
| Scope | Focusing on specific business processes and system improvements. | Managing overall project from initiation to closure. |
| Success Criteria | Successful delivery of requirements and solutions to address business needs. | Project implementation within budget, schedule and quality parameters. |

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

**Nikita Sharma** +919648978607

**Product Owner** nkita\_07@gmail.com

Experienced product owner with demonstrated history of working on transformative initiatives and achieving results. Proven record of leadership skills with an ability to develop high performing team and team members.

* Multi-sector product expertise, with experience working with users across publishing, financial, technical, and customer sectors.
* Proficient at leveraging key data from stakeholders through guided workshop in Miro.
* Dedicated to meeting and exceeding expectations for product launches and sprint updates.
* Expertise in executing A/B testing and drafting technical user stories for product development.

**Employment History:**

Product Owner

Netomi, Mumbai

2018-2021.

* Facilitate project meetings to capture testing and project updates within credit risk reporting processes.
* Created project plan/timelines in Microsoft projects, resolved issues to promote efficient and successful project releases across multiple teams.
* Lead multiple tasks to implement best practices by documenting, tracking, end to end life cycle review and sign off processes.
* Collaborated closely with technology, business partners to develop business requirement documents and test scripts during multiple release phases.

Product Owner:

Impetus, Pune

2015-2018

* Provided roadmap baseline, prioritise projects, implemented requirement change control, and synchronized cross-functional teams.
* Provided market analysis, design recommendations.
* Managed quarterly releases of the product, supported strategic planning, designing, and delivering new features, within the product.
* Oversaw the product team and guided them on issues related to product development.
* Served as liaison between customer and multiple teams to establish business requirements and create functional specifications.

**Extra-Curricular Activities:**

Volunteering: Volunteer once a month as clothes intake assistant at goodwill.

Blood Donation: Donated blood at the blood donation camp organised by the rotary club.

**Education:** Bachelor Of Engineering, Electronics and communication, University of Mumbai.

**Social links:** <http://www.linkedin.com/in/nikita>

**Skills:**

User Centred Design Processes

Design Quality Standard

User Validation

Product Roadmap

Product design methodologies

Agile & Scum

**Additional Courses:**

Certified Scrum Owner – IIBA

Certified Product Owner

AIPMM

**Languages:** Marathi, English, French.