SCRUM PROJECT IMPLEMENTATION

CASE-2 PREP-1

**Q.1.write agile manifesto:**

* Agile manifesto s a document that outlines the values and principles of agile software development.
* Agile manifesto was created to improve software development process by making them more flexible and responsive to change

**Four values of agile manifesto:**

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

**12 Principles of agile:**

1. Satisfy the customer through early and continuous delivery of valuable software
2. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale
3. Welcome changing requirements, even late in development. Agile processes control something to change for the customer’s competitive advantage
4. Business people and developers must work together daily throughout the project
5. Build projects around motivated individuals, give them the 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 teams reflects on how to become more effective, then tunes and adjusts its behavior accordingly

**Q.2.User stories: Acceptance criteria along with BV and CV**

* A user story is an informal, general explanation of a software feature written from the user perspective.
* The purpose of a user story is to articulate how a piece of work will deliver a particular value back to the customer.
* It covey what user wants to achieve and states it simply, non-technically

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| User story no:1 | Tasks:2 | Priority: HIGHEST |
| AS A DELIVERY BOY |
| I WANT: TO REGISTER IN SCRUM FOODS |
| SO THAT: I CAN DELIVER ORDERS |
| BV:500 | CP:2 |
| ACCEPTANCE CRITERIA:Registration screenText boxes for user name, Password, Nation ID, Mobile No. , Email, Address, Phone number.Click on Register buttonSend Successful Notification to the user |

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| User story no:2 | Tasks:2 | Priority: HIGHEST |
| AS A RESTAURENT OWNER |
| I WANT: TO VIEW ORDERS |
| SO THAT: I CAN VIEW THE LIST OF ORDERS |
| BV:500 | CP:2 |
| ACCEPTANCE CRITERIA:View Order, Display List of orders in the tabular Form |

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| User story no:3 | Tasks:2 | Priority: HIGHEST |
| AS A CUSTOMER |
| I WANT: TO ADD TH ADDRESS |
| SO THAT: I CAN GET THE ORDER TO MY ADDRESS |
| BV:500 | CP:2 |
| ACCEPTANCE CRITERIA:Text box to enter,Business Rules: Within the radius of 5km |

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| User story no:4 | Tasks:2 | Priority: HIGHEST |
| AS A CUSTOMER |
| I WANT: TO SELECT THE PAYMENT MODE |
| SO THAT: I CAN MAKE PAYMENT OF MY CHOICE |
| BV:500 | CP:3 |
| ACCEPTANCE CRITERIA:Display payment modes, radio buttons to select payment modes, payment buttonsBusiness rule: can select only one payment mode |

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| User story no:5 | Tasks:2 | Priority: HIGHEST |
| AS AN ADMIN |
| I WANT: TO VIEW THE RESTAURENTS |
| SO THAT: I CAN APPROVE THEIR REGISTRATION |
| BV:500 | CP:2 |
| ACCEPTANCE CRITERIA:List of restaurant, select restaurant, verify restaurant details, approve button, reject button, notification to the restaurant. |

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| 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:Registration screenDisplay price in the list of menu item |

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| User story no:7 | Tasks:2 | Priority: LOW |
| AS A CUSTOMER |
| I WANT: TO VIEW THE CONTACT NUMBER OF DELIVERY BOY |
| SO THAT: I CAN CONTACT DELIVERY BOY FOR THE STATUS |
| BV:50 | CP:1 |
| ACCEPTANCE CRITERIA:Display delivery boy mobile numberDisplay delivery boy name in tracking fieldDisplay delivery boy picture |

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| User story no:8 | Tasks:2 | Priority: MEDIUM |
| AS A RESTAURENT OWNER |
| I WANT: TO PROVIDE TIME SLOTS |
| SO THAT: CUSTOMER CAN CHECK OPENING AND CLOSING TIME |
| BV:100 | CP:2 |
| ACCEPTANCE CRITERIA:Click on the restaurant dashboardAdd from time to timeClick on submitDisplay updated successfully |

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| User story no:9 | Tasks:2 | Priority: HIGHEST |
| AS A BUSINESS OWNER |
| I WANT: TO VIEW RESTAURENT REVENUE REPORT |
| SO THAT: I CAN VIEW RESTAURENT REVENUE |
| BV:200 | CP:3 |
| ACCEPTANCE CRITERIA:Select reportsSelect revenue reportsSelect to and from dateSelect regionGenerate reportDownload report in excel |

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| User story no:10 | Tasks:3 | Priority: HIGHEST |
| AS A REG ADMIN |
| I WANT: TO MANAGE REGIONAL RESTAURANTS |
| SO THAT: I CAN TRACK PERFORMANCE OF REGIONAL RESTAURENTS |
| BV:200 | CP:3 |
| ACCEPTANCE CRITERIA:Click on performance of restaurantsSelect from date to dateClick on generate report which include restaurant id, name and revenueClick on download report should be in excel |

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| User story no:11 | Tasks:2 | Priority: HIGHEST |
| AS A RESTAURENT OWNER |
| I WANT: TO VIEW ORDERS |
| SO THAT: I CAN VIEW LIST OF ORDERS |
| BV:500 | CP:2 |
| ACCEPTANCE CRITERIA:View orders, display list of orders in the tabular form |

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| User story no:12 | Tasks:2 | Priority: MEDIUM |
| AS ADMIN |
| I WANT: TO SEE THE REGIONAL REVENUE REPORTS |
| SO THAT: I CAN VIEW THE REGIONAL PERFORMANCE |
| BV:100 | CP:3 |
| ACCEPTANCE CRITERIA:View order, display list of orders in the tabular form |

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| User story no:13 | Tasks:2 | Priority: HIGHEST |
| AS A CUSTOMER |
| I WANT: TO CHAT WITH REG ADMIN |
| SO THAT: I CAN REQUEST FOR REFUND |
| BV:200 | CP:2 |
| ACCEPTANCE CRITERIA:Txt box fieldsDisplay order idText box for descriptionSubmit buttonGenerate issue idDisplay successful |

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| User story no:14 | Tasks:2 | Priority: HIGHEST |
| AS A CUSTOMER |
| I WANT: TO REGISTER IN SCRUM FOODS |
| SO THAT: I CAN LOGIN IN SCRUM FOODS APPLICATIONS |
| BV:100 | CP:2 |
| ACCEPTANCE CRITERIA:Registration screenText boxes for user name, Password, Mobile No. , Email, Address, Phone number.Click on Register buttonSend Successful Notification to the user |

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| User story no:15 | Tasks:2 | Priority: HIGHEST |
| AS A CUSTOMER |
| I WANT: TO LOGIN IN SCRUM FOODS |
| SO THAT: I CAN USE SCRUM FOOD APPLICATION |
| BV:200 | CP:4 |
| ACCEPTANCE CRITERIA:Login screenText boxes for user name, Password, Click on login button |

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| User story no:16 | Tasks:2 | Priority: HIGHEST |
| AS A CUSTOMER |
| I WANT: SEARCH OPTION IN SCRUM FOOD APPLICATION |
| SO THAT: I CAN SEARCH FOR RESTAURENT TO ORDER FOOD |
| BV:200 | CP:4 |
| ACCEPTANCE CRITERIA:Text boxes for search menu, show restaurant details, enable search option to display list of restaurants to order foods |

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| User story no:17 | Tasks:2 | Priority: HIGHEST |
| AS A CUSTOMER |
| I WANT: TO VIEW RESTAURENT MEENU IN SCRUM FOODS APPLICATION |
| SO THAT: I CAN SELECT FOOD TO ORDER FROM RESPECTIVE RESTAURENT |
| BV:500 | CP:4 |
| ACCEPTANCE CRITERIA:View list of restaurants and menu cards in tabular form, show available menu card of restaurants |

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| User story no:18 | Tasks:2 | Priority: HIGHEST |
| AS A CUSTOMER |
| I WANT: TO SELECT FOOD FROM RESTAURANTS LISTED IN SCRUM FOODS |
| SO THAT: I CAN ORDER FOOD TO ORDER FROM RESPECTIVE RESTAURANT |
| BV:200 | CP:2 |
| ACCEPTANCE CRITERIA:Login, show list of available restaurants, display menu cards, enable the customer to select item and place order in application |

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| User story no:19 | Tasks:3 | Priority: HIGHEST |
| AS A CUSTOMER |
| I WANT: TO MAKE ONLINE PAYMENT |
| SO THAT: I CAN MAKE ONLINE ADVANCE PAYMENT |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Login, show payment options net banking, UPI Payments, credit card.Enable the customer to select the mode of payment and proceed with the payment option. |

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| User story no:20 | Tasks:3 | Priority: HIGHEST |
| AS A CUSTOMER |
| I WANT: TO HAVE TRACKING OPTION |
| SO THAT: I CAN TRACK MY ORDER ONLINE |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Show status of delivery with the location details, and the expected time of delivery.Enable the customer to track the delivery of placed orders and expected time of delivery. |

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| User story no:21 | Tasks:3 | Priority: HIGHEST |
| AS A CUSTOMER |
| I WANT: TO CANCEL OPTION |
| SO THAT: I CAN CANCEL THE ORDER IN CASE OF REASON |
| BV:500 | CP:4 |
| ACCEPTANCE CRITERIA:Text box for cancel option, order can be cancelled mentioning the reason of cancellation.Display the status as cancelled and process for refund to customer |

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| User story no:22 | Tasks:2 | Priority: HIGHEST |
| AS A CUSTOMER |
| I WANT: THE FEEDBACK OPTION |
| SO THAT: I CAN RATE,GIVE FEEDBACK AND GIVE RATINGS |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Registration screenText box for feedback option, option to rate the delivery agent |

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| User story no:23 | Tasks:3 | Priority: HIGHEST |
| AS A DELIVERY BOY |
| I WANT: TO REGISTER IN SCRUM FOODS |
| SO THAT: I CAN ACCEPT THE ORDER AND DELIVERY |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Text boxes for user name, Password, Mobile No. , Email, Address, Phone number.Click on Register buttonSend Successful Notification to the user |

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| User story no:24 | Tasks:3 | Priority: HIGHEST |
| AS A DELIVERY BOY |
| I WANT: TO LOGIN IN SCRUM FOODS APPLICATION |
| SO THAT: I CAN VIEW AND ACCEPT THE ORDER FOR DELIVERY |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Registration screenText boxes for user name, Password, Mobile No. , Email, Address, Phone number.Click on login buttonSend Successful Notification to the user. |

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| User story no:25 | Tasks:3 | Priority: HIGHEST |
| AS A DELIVERY BOY |
| I WANT: TO UPDATE THE ORDER STATUS |
| SO THAT: I CAN VIEW AND UPDATE THE DELIVERY STATUS |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Text boxes for updating of delivery status and feedback. |

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| User story no:26 | Tasks:3 | Priority: HIGHEST |
| AS A DELIVERY BOY |
| I WANT: TO UPDATE THE PAYMENT STATUS |
| SO THAT: I CAN VIEW AND UPDATE THE PAYMENT STATUS FOR COD |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Text boxes for updating of payment status and feedback |

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| User story no:27 | Tasks:3 | Priority: HIGHEST |
| AS A DELIVERY BOY |
| I WANT: TO LOGIN  |
| SO THAT: I CAN VIEW THE FEEDBACK FOR MY DELIVERY |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Text boxes for user name, Password, Mobile No. , Email, Address, Phone number.Click on login buttonSend Successful Notification to the user and access to delivery boy |

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| User story no:28 | Tasks:2 | Priority: HIGHEST |
| AS A RESTAURANT OWNER |
| I WANT: TO VIEW DETAILS |
| SO THAT: I CAN VIEW LIST OF ORDERS AND RELATED FEEDBACK FROM CUSTOMERS |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Text boxes for user name, Password, Mobile No. , Email, Address, Phone number.Click on login buttonSend Successful Notification to the user and access to restaurant owner |

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| User story no:29 | Tasks:2 | Priority: HIGHEST |
| AS A CUSTOMER |
| I WANT: TO PAYMENT |
| SO THAT: I CAN VIEW MY ORDERS AND PAYMENT RECEIPTS |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Registration screenText boxes for reports of placed orders and payments. |

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| User story no:30 | Tasks:2 | Priority: HIGHEST |
| AS A BUSINESS OWNER |
| I WANT: TO REGISTER |
| SO THAT: I CAN LOGIN IN SCRUM FOOD APP |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Registration screenText boxes for user name, Password, Mobile No. , Email, Address, Phone number.Click on login buttonSend Successful Notification to the user. |

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| User story no:31 | Tasks:2 | Priority: HIGHEST |
| AS A BUSINESS OWNER |
| I WANT: TO LOGIN  |
| SO THAT: I CAN VIEW ORDERS THE PAYMENTS AND OTHER FOR DETAILS RESTAURANTS |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Text boxes for user name, Password, Mobile No. , Email, Address, Phone number.Click on login buttonSend Successful Notification to the user. |

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| User story no:32 | Tasks:2 | Priority: HIGHEST |
| AS A ADMIN |
| I WANT: TO LOGIN  |
| SO THAT: I CAN VIEW THE RESTAURANTS |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Text boxes for user name, Password, Mobile No. , Email, Address, Phone number.Click on login buttonSend Successful Notification to the user. |

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| User story no:33 | Tasks:2 | Priority: HIGHEST |
| AS A ADMIN |
| I WANT: TO VIEW REPORTS |
| SO THAT: I CAN VIEW THE REGIONAL REVENUES |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Generate the reports of orders and payment and calculate the revenue. |

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| User story no:34 | Tasks:2 | Priority: HIGHEST |
| AS A CUSTOMER |
| I WANT: TO RAISE ISSUES |
| SO THAT: I CAN UPDATE THE COMPLAINTS OF DELIVERY AGENT OR RESTAURANTS |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Enable to add comments for customer regarding the ratings or any complaints regarding the delivery boys or restaurants. |

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| User story no:35 | Tasks:2 | Priority: HIGHEST |
| AS A DELIVERY BOY |
| I WANT: TO LOGIN  |
| SO THAT: I CAN VIEW DELIVERIES REPORTS AND REVENUE GENERATED |
| BV:500 | CP:5 |
| ACCEPTANCE CRITERIA:Reports generated and view deliveries report and view revenue generated. |

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| User story no:36 | Tasks:2 | Priority: HIGHEST |
| AS A RESTAURANT OWNER |
| I WANT: TO LOGIN  |
| SO THAT: I CAN UPDATE THE LIST OF FOODS AND AVAILABILITY |
| BV:500 | CP:2 |
| ACCEPTANCE CRITERIA:Text boxes for user name, Password, Mobile No. , Email, Address, Phone number.Click on register button, Send Successful Notification to the user, update the available foods and status of availability. |

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| User story no:37 | Tasks:3 | Priority: HIGHEST |
| AS A CUSTOMER |
| I WANT: TO UPDATE THE ADDRESS |
| SO THAT: I CAN UPDATE THE NW ADDRESS AS CURRENT ADDRESS |
| BV:500 | CP:2 |
| ACCEPTANCE CRITERIA:Modify the address and set as current location |

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| User story no:38 | Tasks:2 | Priority: HIGHEST |
| AS A ADMIN |
| I WANT: TO ACCESS THE FOOD APP |
| SO THAT: I CAN ADD OR DELETE THE DELIVERY BOYS |
| BV:500 | CP:2 |
| ACCEPTANCE CRITERIA:User box to update the comments for addition or deletion of the delivery boys. |

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| User story no:39 | Tasks:2 | Priority: HIGHEST |
| AS A ADMIN |
| I WANT: TO VIEW REPORTS |
| SO THAT: I CAN VIEW REGIONAL REVENUE |
| BV:500 | CP:2 |
| ACCEPTANCE CRITERIA:Generate the reports regional wise and view reports |

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| User story no:40 | Tasks:2 | Priority: MEDIUM |
| AS A CUSTOMER |
| I WANT: TO VIEW THE ORDER LIST |
| SO THAT: I CAN REORDER LAST ORDER |
| BV:500 | CP:2 |
| ACCEPTANCE CRITERIA:Display order list and enable user to recorder if order is in the stock |

**Q.3. WHAT IS EPIC? WRITE 2 EPICS?**

Answer:

EPIC: epic is the set of user stories or the big user story consisting of number of small user stories to complete the milestone known as Epic.

Epic can be said to be sent of user stories completed to achieve one task.

Examples:

1. REGISTRATION:

 AS A CUSTOMER,

I WANT TO REGISTER IN SCRUM FOOD APP

SO THAT I CAN LOGIN AND PLACE ORDER

1. LOGIN:

AS A CUSTOMER,

I WANT TO LOGIN IN SCRUM FOOD,

SO THAT I CAN ORDER THE FOOD AND MAKE PAYMENT

**Q.4. WHAT IS DIFFERENCE BETWEEN BV AND CV?**

Business value (BV): Business value measures the benefit or impact a feature or task deliveries to the organization or end users.

It focuses on the importance and outcome of completing a task.

Complexity points (CP):

Complexity points estimate the effort and technical difficulty required to complete a feature or task.

They focus on how challenging it is to implement.

Difference between BV and CP

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| **Aspect** | **Business value (BV)** | **Complexity points(CP)** |
| Definition | Measures the benefit or impact a task deliveries to the organization | It estimates the effort and technical difficulty required to complete a task |
| Focus | Value delivered to the business or user | Effort and difficulty of implementation |
| purpose | Helps prioritize tasks based on importance and impact | Assists in planning and resource allocation |
| Who defines it | Product owner , stakeholders or business leaders | Development team during estimation |
| Measurement scale | Strategic or numerical scale eg:1-10, 1-100 | Relative sizing eg: Fibonacci 1,2,3,5,8 |
| examples | Revenue generation, compliance, customer satisfaction | Technical challenges, unknowns, skill requirement |
| When used | During prioritization of the backlog | During sprint planning or backlog refinement |
| Impact on work | Determines what is most valuable to deliver | Influences how much work can be accomplished in a sprint |
| Key question | How valuable is this task? | How hard the task is to complete |

**Q.5. Explain about sprint?**

Sprint:

* A sprint is a core component of the scrum framework, used in agile software development.
* It is a time-boxed iteration, usually lasting 1 to 4 weeks, during which a scrum team works to deliver potentially shippable product increment.
* Sprints are designed to provide consistent, repeatable progress toward the projects goals

Key feature:

**Fixed time duration:**

A sprint typically lasts between 1 and 4 weeks, depending on the teams preferences and project needs.

The duration is consistent through the project.

**Goal oriented:**

Each sprint has a sprint goal, which is a clear, achievable objective for the iteration.

**Incremental delivery:**

By the end of the sprint, the team delivers a working increment of product, adding value to the overall project.

**Time boxing:**

Sprints are time-boxed, they cannot be extended.

Any incomplete work is moved to the backlog for future sprints.

**Sprint activities:**

1. Sprint planning:

The team plans the sprint by selecting items from the product backlog to work on and defining the sprint goal. Tasks are broken down into smaller, manageable pieces

2. Daily scrum meeting:

A short meeting to discuss what was done yesterday, what will be done today, any blocker or issues

3. Sprint execution:

The development team works collaboratively to complete the tasks committed to during sprint planning

4. Sprint review:

At the end of the sprint, the team demonstrates the completed work to stakeholders to gather feedback.

5. Sprint retrospective:

The team reflects on the sprint to identify areas for improvement and discuss what went well, what didn’t how to improve in the next sprint.

**Sprint artifacts:**

1. Sprint backlog:

A subset of the product backlog, the team commits to completing during the sprint.

Contains tasks and stories selected for the sprint

2. Product increment:

The output of the sprint should be a potentially shippable product increment.

**Benefits:**

1. Focused work: encourages teams to work toward clear, short-term goals.

2. Flexibility: allows for iterative development and adaption to changing requirements.

3. Transparency: frequent reviews ensure stakeholders are kept informed of progress

4. Continuous improvement: retrospective foster an environment of ongoing enhancement in processes and teamwork.

**What is sprint duration**: 2 weeks-your print value 15 ?

1. Sprint duration:

Sprint duration refers to the fixed length of time allocated for a sprint in the scrum framework.

During this period, a scrum team works to complete a defined set of tasks or to achieve a specific sprint goal, completing backlog items, and delivering a potentially shippable product increment.

**What is scrum duration**: 1 day- your scrum value 7?scrum value defines

Scrum value:

Scrum value defines to the topics or the team size or the number we are going to any issue or blocker while discussing the scrum call.

**Sprint backlog:**

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| --- | --- | --- | --- |
| **PBI** | **TASKS** | **WIP** | **ZONE** |
| Registration | 3 | 2 | 1 |
| Login  | 2 | 2 | 0 |
| Add restaurants | 3 | 2 | 1 |
| Order food | 3 | 0 | 3 |
| Make payment | 3 | 3 | 0 |
| Track delivery | 3 | 3 | 0 |
| Customer feedback | 3 | 3 |  |

**Q.6. Explain product backlog and sprint back log:**

Product backlog:

Product backlog is a key artifact in the scrum framework, representing a prioritized list of work items that the scrum team needs to complete to deliver a product or project.

It serves as the single source of truth for all the features, enhancements, bug fixes, technical requirements and other deliverables are required for achieving the products goals.

**Key characteristics:**

1. Dynamic and evolving:

The product backlog is not static; it evolves over time based on changing requirements, market needs or feedback from stakeholders.

2. Prioritized:

Items are ordered by priority, with the most important and valuable items placed at the top. These are usually addressed first in sprints.

3. Refined:

Items in the backlog are regularly refined or groomed to ensure they are ready for future sprints.

4. Owned by the product:

The product owner is responsible for maintaining the backlog ensuring it aligns with thr product vision and stakeholder needs.

5. Detailed as needed:

Items near the top are more detailed, while those further down can remains less defined until they approach implementation.

**Benefits:**

1. Clarity and focus: it provides a clear roadmap of work to be done.

2. Transparency: it keeps the team and stakeholders aligned on priorities

3. Flexibility: adapts to changing requirements or feedback.

4. Facilities planning: helps team plan sprints effectively by pulling items from the top.

**Example:**

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| Backlog item | priority | description | Effort (story points) |
| User authentication | high | Implement login with email and password | 8 |
| Password reset | medium | Enable users to reset their password | 5 |
| Performance optimization | low | Improve page load times under heavy traffic | 13 |
| Analytics dashboard | medium | Build a dashboard for tracking user behavior | 8 |

**Sprint backlog:**

The sprint backlog is a key artifact in the scrum framework that represents a subset of the product backlog items selected for a specific sprint, along with the plan to deliver them it is the teams working to-do-list during the sprint includes all tasks required to meet the sprint goal.

**Key characteristics**:

1. Subset of the product backlog:

The sprint backlog is delivered from the product backlog during sprint planning.

It contains only the items the team commits to completing during the current sprint.

2. Owned by the development team:

The development team is responsible for managing and updating the sprint backlog throughout the sprint

3. Detailed and clear:

Each backlog items is broken into smaller tasks with sufficient detail for the team to understand and work on them.

4. dynamic but stable:

The sprint backlog may evolve slightly as tasks are refined , but the scope of the spreint goal should not change.

5. Linked to the sprint goal:

Every item in the sprint backlog contributes directly to achieving the sprint goal.

**Benefits:**

1. Focus:

Provides the team with a clear and actionable plan for the sprint

2. Transparency:

Helps everyone understand what the team is working on and the progress being made.

3. Adaptability:

Allows the team to manage their work dynamically while maintaining alignment with the sprint goal

4. Accountability:

Ensures the team takes ownership of their commitments and progress.

Example:

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| --- | --- | --- | --- |
| Backlog item | Task  | Status  | Effort(hours) |
| User login functionality | Design login page UI | In progress | 5 |
|  | Implement login API | To do | 8 |
|  | Write unit tests for login logic | To do | 3 |
| Password reset | Create password reset workflow | done | 6 |
|  | Send email for password reset | In progress | 4 |

**Q.7.What is impediments log? Write 2 impediments**

**Impediment log:**

An impediment log in agile is a tool or document used to track and manage obstacles, blockers or issues that hinder the progress of an agile team during a project.

It helps ensure that impediments are identified, prioritized and addressed promptly to maintain the team’s productivity and alignment with the project goals.

**Key characteristics:**

1. Centralized tracking:

It is a single place to record and monitor all impediments affecting team.

2. Transparency:

It Makes impediments visible to all team members, like the scrum master and stakeholders.

3. Prioritization:

Impediments are prioritized based on their impact on the sprint goal or team performance

4. Accountability:

Each impediment is assigned an owner responsible for resolving it.

5. Dynamic nature:

The log evolves as new impediments are identified and existing ones are resolved

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| --- | --- | --- | --- | --- | --- | --- |
| ID | Description  | Reported by  | Impact  | Owner  | Status  | Resolution date |
| 001 | Server is down | developer | Cannot test new code | Scrum master | In progress | NA |
| 002 | Lack of clarity on requirements | Product owner | Feature development | Product owner | resolved | 05-02-2025 |

**What is the Product increment we made now?**

Based on the information provided product increment we have created in this sprint is the 10 done tasks represented by the PBI (product backlog item) with 10 tasks marked as done in the sprint backlog

**Sprint retrospective**

During a sprint retrospective, teams should gather insights and feedback on the effectiveness of their collaboration and communication processes.

They should also focus on identifying any obstacles r challenges faced during the sprint and explore potential improvements.

**Sprint review meeting**:

During sprint review meeting purpose is to gather feedback on newly added features and feedback on the product backlog and project schedule.

**Q.8.Explain velocity of the team:**

According to the scrum, team velocity is a measure of amount of work a team can tackle during a single sprint and is the key metric in scrum.

When you complete a sprint, total points are completed fully for user stories and over the time find the average number of points you complete per sprint.

So velocity means how many complexity points are covered in this sprint and team has covered 8 complexity points, hence velocity of team is 8.

**Q.9. Draw sprint burn charts and product burn down charts?**

Sprint burn charts:

A sprint burn charts is a visual tool used in agile project management to track progress within a sprint.

It helps teams understand how much work remains and whether they are on track to meet their sprint goals.

**Types of sprint burn charts:**

**Sprint burn down chart:**

Tracks the remaining work overtime during a sprint, shows a download slope as tasks are completed.

Key goals are to ensure the team is completing tasks at a pace to finish the sprint on time.

**Sprint burn up chart:**

Tracks the completed work overtime during a sprint shows an upward slope as more tasks are completed.

Key goal is to monitor progress toward the sprints total scope.

**Product burn down chart:**

It is a visual tool used in agile project management to track the progress of a project toward completing all the work in the product backlog.

It helps teams and stakeholders monitor the remaining work overtime, providing a clear picture of whether the project is on track to meet its deadlines and goals.

**Q.10. explain about product grooming?**

Product grooming also known as backlog refinement is a collaborative agile practice aimed at preparing and prioritizing the product backlog to ensure that it is well organized, up-to date and ready for upcoming sprints.

The goal includes clarity requirements, prioritize work, estimate effort, remove obsolete items, and break down large items.

Benefits of product grooming include improved clarity, smoother sprint planning, increased productivity, focus on value.

**Q.11. Explain the roles of scrum master and product owner?**

The scrum master is accountable for establishing scrum as defined in the scrum guide.

They do this by helping everyone understand scrum theory and practice, both within the scrum team and organization.

The scrum master is accountable for the scrum team’s effectiveness. They do this by enabling the scrum team to improve its practices, within the scrum framework. The day to day activity of a scrum master involves servant leadership where they are involved in performance planning, coaching and self-organization.it is removing obstacles, resolving conflicts.

The scrum master ensures project success by assisting the product owner and the team is using the right scrum processes for creating the end product and establishing the agile principles.

**Key responsibilities:**

**1. Facilitating scrum events:**

Organize and ensure the effectiveness of daily stand-ups, sprint planning, reviews and retrospectives.

**2. Removing impediments**:

Identify and resolve any obstacles that may hinder the teams progress

**3. Coaching the team:**

Guide the development team in adopting and improving agile practices. Mentor the team on self-organization and cross-functionality.

**4. Promoting collaboration:**

Foster communication between team members, the product owner and stakeholders.

**5. Shielding the team:**

Protect the team from external distractions and interruptions.

**6. Ensuring continuous improvement:**

Help the team inspects and adapt processes to improve efficiency and quality.

* Product owner is accountable for maximizing the value of the product resulting from the work of the scrum team. The product owner is one person, not a committee.
* The product owner may represent the needs of many stakeholders in the product backlog. Those wanted to change the product backlog can do so by trying to convince the product owner.
* The first responsibility of product owner is customer satisfaction and they carry out by ensuring that customer requirements are given priority and there is transparency between development team and stakeholders.
* The product owner interacts with users, customers and stakeholders, the development team and the scrum master to deliver a successful product

**Key responsibilities:**

**1. Defining the vision:**

Clearly articulates the products goals and how they align with business objectivies

**2. Managing the product backlog:**

Create, refine and prioritize backlog items, ensure that backlog items are well-defined, clear and ready for development.

**3. Prioritizing work:**

Decide what team works on next, based on business value, customer needs and strategic goals.

**4. Stakeholder collaboration:**

Communicate with stakeholder to gather requirements and share progress. Act as the primary liaison between the business and team.

**5. Acceptance of work:**

Define and agree on acceptance criteria for backlog items.

Review and accept completed work to ensure it meets requirements.

**6. Maximizing value:**

Focus on delivering features and functionalities that provide the highest value to customers and the business.

|  |  |  |
| --- | --- | --- |
| **Aspect**  | **Scrum master**  | **Product owner** |
| focus | Process and team | Product and value |
| Primary role | Facilitator and coach | Decision-maker and backlog manager |
| Works with | Development team and product owner | Stakeholders and development team |
| Key concern | Ensuring agile practices are followed | Delivering the most valuable product |
| Authority  | No direct authority over the team | Owns the product backlog and priorities |

Product owner and the scrum master are both invaluable members of a scrum project team, as they build the perfect relation with the development team and strive to the deliver the best results.

**Q.12 explain all meetings conducted in scrum project**

There are five types of scrum meetings held during scrum process which are as follows:

**1. Sprint planning meeting:**

This meeting begins with the product owner.

In this meeting the product owner explains their vision and how the team should go about completing this step of the project. During this meeting, team members decide the amount of work they can complete within the sprint.

When the team moves work from the product backlog to the sprint backlog. This step requires a lot of planning and can take several hours for the group to decide on a finalized sprint.

**2. Daily scrum meeting:**

From the planning meeting, we move into the daily scrum meetings. every single day for 15 minutes, the team gathers to report any issues or progress on their tasks. Through brief this meeting is an essential part of the scrum process.

It is designed to keep all group members on track in a cohesive manner. Normally the product owner is present during all daily scrum meetings to assist in any way daily stand-up meeting end of every scrum.

Scrum developers will participate in scrum meeting; here they must answer 3 questions

* What task did you work in this scrum?
* What task will you work on next scrum?
* Any challenges/impendent? When will you complete the user story?

**3. Sprint review meeting:**

This meeting is used to showcase a live demonstration of the work completed. During this meeting the product owner, scrum master and stakeholders are present to review the product and suggest changes or improvements.

They will see the velocity means how many complexity point is covered in this sprint burn down chart.

**4. Sprint retrospective meeting:**

This meeting is held to facilitate a team’s reflection on their progress.

The team speaks openly about their organizational concerns and teamwork.

During this meeting no judgmental and partial only friendly talk, this review session is a key part of team building and development and its also very important for future scrum projects.

In this meeting team will discuss about challenges faced and come up with lessons learnt. We can use these lessons learnt in sprint planning meeting to select user stories for the next sprint.

**5. Backlog refinement meeting:**

Last is the backlog refinement meeting, in this meeting team members focus on the quality and skill of the work involved during the sprints.

This meeting is necessary for business owners to connect with the development team and used to assess the quality of the final product.

**Q.13. explain sprint size and scrum size:**

Sprint size is refers to the amount of work that scrum team commits to completing during a single sprint. It typically measured in terms of:

1. **Story points:**

A relative measures of complexity, effort or size for backlog items.

1. **Hours:**

The estimated time is required to complete the tasks.

1. **number of tasks/user stories:**

A count of items the team plans to complete

**Scrum size:**

Scrum size refers to the composition and capacity of the scrum team, encompassing the number of team members, their roles and their collective ability to deliver work within a sprint.

While there is no strict rule for scrum team size, certain guidelines exist to ensure efficiency and collaboration.

**Q.14. Explain DOR and DOD:**

Definition of ready (DOR):

It is asset of criteria that a user story or product backlog item must meet before it can be considered ready for the team to start working on it during a sprint.

Essentially it is a checklist that ensures the backlog item is sufficiently clear, detailed and understood by the team so that they can begin development without any ambiguity or uncertainty

**Common criteria** for DOR includes clear acceptance criteria, well-defined user story, dependencies identified, estimate, prioritized, no blockers, stakeholder availability

**Definition of Done (DOD):**

It is asset of criteria that must be met for a product backlog item

E.g.: user story, features or an entire sprint to be considered complete.

The DOD ensures that all work is fully finished, meets quality standards and is ready for release or deployment.

It provides clarity on what constitutes done, reducing ambiguity and ensuring consistency in quality across the scrum team.

**Common criteria** for DOD include code complete, peer review, automated tests, manual testing, no critical bugs, integrated, documentation complete performance standards met, no pending tasks, reviewed by product owner, ready for release.

**Q.15. Explain prioritization Techniques and MVP**

* Prioritization techniques in agile are methods used to determine the order in work items (such as product backlog items or user stories) should be completed based on their value, impact and urgency.
* These techniques help product owners and teams focus on the most important tasks, ensuring the delivery of maximum value to stakeholders.

**Common prioritization techniques used in scrum and agile methodologies**:

**1. Moscow method**: Moscow stands for must have, should have, could have, and would have. This technique categorizes work into 4 priority levels:

* Must have: critical for the success of the project and essential for release
* Should have: It is Important but not critical. It can be delayed without affecting delivery.
* Could have: desirable but not necessary. It can be included if there is time or resources
* Would have: features that are not necessary for current project or sprint but can be considered in future requirement

**2.100-point method:**

* In this technique, each stakeholder or team member is given 100 points to allocate across different features or user stories based on their perceived importance or value.
* The idea is to distribute the points to indicate priority, with more points allocated to the higher-priority items

**3. Value vs. complexity/effort matrix (impact vs. effort matrix):**

This technique helps prioritize work by evaluating the value a feature delivers against the effort required to implement it.

The matrix is divided into 4 quadrants:

* High value, low effort: prioritize these items as they provide maximum return for minimal effort.
* High value, high effort: these are important but may require significant resources, so they should be planned carefully.
* Low value, low effort: consider doing these quickly if there’s spare capacity.
* Low value, high effort: avoid prioritizing these unless there is a strong reason
1. Cost of delay (COD):

The cost of delay refers to the potential loss of revenue, opportunities, or business value those results from delaying a feature or decision.

This technique helps prioritize features that will have the most impact on revenue or market opportunities if delayed

**Minimum viable product (MVP):**

It is a concept in product development that refers to the simplest version of a product that can be released to users, with just enough features to satisfy early adopters.

T is designed to gather feedback, test hypotheses and validate the products core assumptions with minimal effort and resources before further development and investment.

**Key characteristics**:

* Basic functionality
* Quick launch
* User feedback
* Focus on learning, not perfection
* Iterative development

Benefits of MVP includes cost-effective, reduced time to market, real –world validation, early engagement, iterative improvement

**Q.16. Difference between Business Analyst and Product Owner**

* Business analyst:
* It is a professional who plays a key role in bridging the gap between business needs and technology solutions.
* They work closely with stakeholders, including business leaders, project managers, developers and other team members, to understand the organizations needs and translate them in to technical requirements for product development or process improvement.
* The BA’s primary goal is to ensure that the business requirements are clearly defined, understood and met through effective solutions.

**Product owner:**

* A product owner is a key role in agile frame works, especially in scrum, responsible for defining and prioritizing the features, functionalities and deliverables of a product.
* Product owner acts a primary liaison between stakeholders and scrum team.

**Q.17. Prepare sample resume of 3 yrs exp product owner:**

BN Shoba

8247623536 / shobasukruthi@gmail.com

**SUMMARY**

Having experience as product owner with 3 years of hands on experience in agile development environments. proven ability to manage product backlogs, prioritize features and collaborate with cross-functional teams to deliver high-quality products which are aligned with business goals and needs, expertise in gathering the requirements.

**PROFESSIONAL EXPERIENCE**

Product owner

Technology it solutions, Hyderabad

February 2024- present

* Owned and managed the product backlog, ensuring the product development team worked on high-priority features and user stories.
* Collaborated with stakeholders, including customers, business leaders and development teams to define and prioritize product features based on business goals and customer feedback.
* Worked closely with the scrum master to facilitate sprint planning and backlog refinement sessions
* Coordinated and executed user acceptance testing (UAT), ensuring product increments met acceptance.
* Participated in sprint reviews to gather feedback, demonstrating new features to stakeholders
* Assisted in building a customer-centric product, improving user experience based on feedback of customer.

Key achievements:

* Managed a cross-functional team of 10 plus developers, designers and marketers ensuring product delivery with on-time launches
* Successfully launched a application which increase in profits within 4 months of launch

**ASSOCIATE PRODUCT OWNER**

**Power tech it solutions, Hyderabad**

January 2022- February 2024

Assisted the senior product owner in managing the product backlog, collaborating with stakeholders to define product requirements and translating them in to user stories

Conducted market research and gathering requirements, delivering according to timelines and need

Worked with developers and design teams, delivered according to their timelines and requirement

Actively participated in many meetings, providing updates on project

Organized many meetings

**Key Achievements:**

Contributed in successfully completing of major projects which leads to increase of sales

Improved team’s managing ability to prioritize features which aligned with user needs and expectations.

**EDUCATION**

**ELECTRONIC AND COMMUNICATION ENGINEERING (2014-2018)**

**Post graduation of diploma and management (2018-2020)**

**CERTIFICATIONS**

Certified with IIBA CERTIFICATION

Agile product management

**SKILLS**

Agile & scrum methodologies

User story mapping & prioritization

User research and analysis

Wire framing and prototyping

User acceptance testing

Market analysis & competitive research

**PROJECTS**

**Application development for Technology it solutions, Hyderabad**

**Major project success launch in Power tech it solutions, Hyderabad**

**ADDITIONAL INFORMATION**

Fluent in English

Actively involved in product management meet-ups and agile communities

**DECLARATION**

Place: HYDERABAD

Date: **(BN SHOBA)**

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