**1.AGILE MANIFESTO**

➢ Agile Manifesto is what are the values and Principles to be considered while working in Agile.

➢ It is nothing but a document that outlines the 4 basic Values of Agile and 12 Principles of Agile.

➢ It’s not only for Scrum but also for all the frameworks that come under Agile like Scrum, XP, Kanban

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| **AGILE MANIFESTO**We are committed to discovering new ways to better deliver our products. In doing so, we value:

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| **Individuals and Interactions  Working Products** Over  Over Processes and Tools  Comprehensive Documentation**Customer Collaboration  Responding to Feedback** Over  OverContract negotiation  Following a plan |

**AGILE PRINCIPLES**1.Our highest priority is to satisfy the customer through early and continuous delivery2.welcome changing requirements, even late in development3.Deliver Working Product frequently4. Business-people and cross-discipline teams must work together daily5.Build projects around motivated individuals and trust them to get the job done6. The most effective and efficient method of conveying information is face-to-faceconversation7.Working product is primary measure of progress8.Maintain a sustainable pace indefinitely9. Give continuous attention to technical excellence10.Simplicity- the art of maximizing the amount of work done is essential11. Teams self-organize12.Teams regularly reflect and adjust to become more effective |

Question2:

Answer: User Stories- Acceptance Criteria-BV-CP (Business Value and Complexity points)

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| User Story No: 1 | Tasks: 2 | Priority: Highest |
| AS A DELIVERY BOYI WANT TO REGISTER IN SCRUM FOODSSO THAT I CAN DELIVER ORDERS |
| BV: 500 | CP: 02 |
| ACCEPTANCE CRITERIARegistration ScreenText Boxes for User Name, Password, Nation ID,Mobile No, Email, Address, Phone Number.Click on Register Button. Send Successful Notification to the user  |

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| User Story No: 2 | Tasks: 2 | Priority: Highest |
| AS A RESTAURANT OWNER I WANT TO VIEW ORDERSSO THAT I CAN VIEW THE LIST OF ORDERS |
| BV: 500 | CP: 02 |
| ACCEPTANCE CRITERIAView Order, Display List of orders in the tabular Form |

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| User Story No: 3 | Tasks: 2 | Priority: Highest |
| AS A CUSTOMERI WANT TO ADD THE ADDRESSSO THAT I CAN GET THE ORDER TO MY ADDRESS |
| BV: 500 | CP: 02 |
| ACCEPTANCE CRITERIAText Box to enter.Business Rules: Within the radius of 5 km |

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| User Story No: 4 | Tasks: 2 | Priority: Highest |
| AS A CUSTOMERI WANT TO SELECT THE PAYMENT MODESO THAT I CAN MAKE PAYMENT OF MY CHOICE |
| BV: 500 | CP: 02 |
| ACCEPTANCE CRITERIADisplay payment modes, radio buttons to select payment modes, payments button.Business Rule. Can select only one payment mode |

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| User Story No: 5 | Tasks: 1 | Priority: Highest |
| AS AN ADMINI WANT TO VIEW THE RESTAURANTSSO THAT I CAN APPROVE THEIR REGISTRATION |
| BV: 500 | CP: 02 |
| ACCEPTANCE CRITERIARegister in the platform with the details |

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| User Story No: 6 | Tasks: 1 | Priority: Highest |
| AS A CUSTOMERI WANT TO VIEW THE PRICESO THAT I CAN ORDER THE FOOD |
| BV: 50 | CP: 01 |
| ACCEPTANCE CRITERIADisplay price in the list of menu items |

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| User Story No: 7 | Tasks: 2 | Priority: Highest |
| AS A CUSTOMERI WANT TO VIEW THE CONTACT NUMBER OFDELIVERY BOYSO THAT I CAN CONTACT DELIVERY BOY FOR THE STATUS |
| BV: 50 | CP: 01 |
| ACCEPTANCE CRITERIA1. Display delivery boy mobile number 2. Display delivery boy name in tracking field3. Display delivery boy picture |

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| User Story No: 8 | Tasks: 2 | Priority: Highest |
| AS A RESTAURANT OWNERI WANT TO PROVIDE TIME SLOTSSO THAT CUSTOMER CAN CHECK OPENING ANDCLOSING HOURS |
| BV: 100 | CP: 02 |
| ACCEPTANCE CRITERIA1. Click on restaurant dashboard2. Add from time to time3. Click on submit4. Display updated successfully |

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| User Story No: 9 | Tasks: 2 | Priority: High |
| AS A Business OWNERI WANT TO VIEW RESTAURANT REVENUE REPORTSO THAT I CAN VIEW THE RESTAURANT’SREVENUE |
| BV: 200 | CP: 03 |
| ACCEPTANCE CRITERIASelect ReportsSelect Revenue ReportsSelect to and from dateSelect Region (can select all)Generate ReportDownload Report in EXCEL |

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| User Story No: 10 | Tasks: 3 | Priority: High |
| AS A REG ADMINI WANT TO MANAGE REGIONAL RESTAURANTSSO THAT, I CAN TRACK THE PERFORMANCE OFREGIONAL RESTAURANTS. |
| BV: 200 | CP: 03 |
| ACCEPTANCE CRITERIACLICK ON PERFORMANCE OF RESTAURANTSSELECT FROM DATE TO DATECLICK ON GENERATE REPORT WHICH INCLUDESRESTAURANTS ID, NAME, REVENUECLICK ON DOWNLOAD REPORT SHOULD BE INEXCEL |

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| User Story No: 11 | Tasks: 2 | Priority: Medium |
| AS ADMINI WANT TO SEE THE REGIONAL REVENUE REPORTS,SO THAT I CAN VIEW THE REGIONAL PERFORMANCE |
| BV: 100 | CP: 03 |
| ACCEPTANCE CRITERIASelect regional dropdownView performance of each rest of that region in tabularform which includes rest name, revenue, generatedDownload in excel or PD |

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| User Story No: 12 | Tasks: 2 | Priority: High |
| AS A CUSTOMERI WANT TO CHAT WITH REG ADMIN SO THAT I CAN REQUEST FOR REFUND |
| BV: 200 | CP: 02 |
| ACCEPTANCE CRITERIA1)BR-ALL MANDATORY2)TEXT BOX FIELDS3)DISPLAY ORDER ID4)TEXT BOX,FOR DESCRIPTION5)SUBMIT BUTTON6)GENERATE ISSUE ID7)DISPLAY SUCCESSFUL |

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| User Story No: 13 | Tasks: 2 | Priority: High |
| AS A HUNGRY USERI WANT TO BROWSE NEARBY RESTAURANTSSO THAT I CAN ORDER THE FOOD |
| BV: 200 | CP: 02 |
| ACCEPTANCE CRITERIA1)Each restaurant entry displays its name, cuisine type, and rating2)This list can be sorted by distance or rating |

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| User Story No: 14 | Tasks: 2 | Priority: High |
| AS A CUSTOMERI WANT TO BROWSE DIFFERENT RESTAURANTS AND MENUSSO THAT I CAN FIND A PLACE TO ORDER FOOD |
| BV: 200 | CP: 02 |
| ACCEPTANCE CRITERIA1)The menu includes dishes, prices and descriptions2)Show the restaurant is open or closed |

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| User Story No: 15 | Tasks: 2 | Priority: High |
| AS A CUSTOMERI WANT TO BROWSE FOR SPECIFIC DISHES ANDCUISINESSO THAT I CAN FIND A PLACE TO ORDER FOOD |
| BV: 200 | CP: 02 |
| ACCEPTANCE CRITERIA1)App displays relevant restaurant and dishes matching the query |

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| User Story No: 16 | Tasks: 1 | Priority: High |
| AS A CUSTOMERI WANT TO FILTER RESTAURANTSSO THAT I CAN FIND A PLACE TO ORDER FOOD |
| BV: 200 | CP: 02 |
| ACCEPTANCE CRITERIA1)Filter restaurants by cuisine type and dietary options (vegan, veg,nonveg,egg) |

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| User Story No: 17 | Tasks: 2 | Priority: High |
| AS A CUSTOMERI WANT TO TRACK MY ORDERSO THAT I KNOW THE TIME OF DELIVERY |
| BV: 200 | CP: 02 |
| ACCEPTANCE CRITERIA1)App shows real time update on the order status2)Display estimated delivery time |

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| User Story No: 18 | Tasks: 1 | Priority: HIgh |
| AS A USERI WANT TO RATE AND REVIEW RESTAURANTSSO THAT I CAN RATE AND REVIEW THERESTAURANTS I HAVE VISITED |
| BV: 200 | CP: 02 |
| ACCEPTANCE CRITERIA1)Can see reviews from other users to help me make dining decisions |

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| User Story No: 19 | Tasks: 1 | Priority: High |
| AS A USERI WANT TO VIEW PAST ORDER HISTORYSO THAT I CAN ORDER AGAIN |
| BV: 200 | CP: 02 |
| ACCEPTANCE CRITERIA1)Can see the details such as order items, total cost and order date |

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| User Story No: 20 | Tasks: 3 | Priority: High |
| AS A USERI WANT TO RECEIVE NOTIFICATIONSSO THAT I CAN RECEIVE UPDATES |
| BV: 200 | CP: 02 |
| ACCEPTANCE CRITERIA1)Notifications for order confirmation2)Notification for dispatch3)Notification for delivery |

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| User Story No: 21 | Tasks: 1 | Priority: Medium |
| AS A CUSTOMERI WANT TO CONTACT CUSTOMER SUPPORTSO THAT I CAN SUBMIT QUERIES OR ISSUES |
| BV: 200 | CP: 02 |
| ACCEPTANCE CRITERIA1)Customer support section with contact information |

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| User Story No: 22 | Tasks: 2 | Priority: High |
| AS A RESTAURANT OWNERI WANT TO RECEIVE AND MANAGE ORDERSSO THAT I CAN UPDATE ORDER STATUS |
| BV: 200 | CP: 02 |
| ACCEPTANCE CRITERIA1)Manage order status2)Notify restaurants about incoming orders |

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| User Story No: 23 | Tasks: 2 | Priority: High |
| AS A RESTAURANT OWNERI WANT TO ACCESS TO CUSTOMER REVIEWSSO THAT I CAN VIEW AND RESPOND TO CUSTOMERREVIEWS |
| BV: 200 | CP: 02 |
| ACCEPTANCE CRITERIA1)Owners can address feedback2)Owners can improve their services |

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| User Story No: 24 | Tasks: 1 | Priority: Medium |
| AS A CUSTOMERI WANT TO APPLY PROMOCODES AND DISCOUNTSSO THAT I CAN ORDER AT LOWER PRICE |
| BV: 100 | CP: 03 |
| ACCEPTANCE CRITERIA1)Active Promocodes |

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| User Story No: 25 | Tasks: 1 | Priority: Medium |
| AS A CUSTOMERI WANT TO APPLY PROMOCODES AND DISCOUNTSSO THAT I CAN ORDER AT LOWER PRICE |
| BV: 100 | CP: 03 |
| ACCEPTANCE CRITERIA1)Active Promocodes |

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| User Story No: 26 | Tasks: 7 | Priority: High |
| AS A DELIVERY BOYI WANT TO VIEW THE ORDERSSO THAT I ACCEPT THE ORDER |
| BV: 200 | CP: 03 |
| ACCEPTANCE CRITERIA1)Order visibility2)Real-time updates3)Order details4)Order filtering and sorting5)Order map view6)Order navigation7)Order completion and confirmation |

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| User Story No: 27 | Tasks: 5 | Priority: High |
| AS A DELIVERY BOYI WANT TO LOGINSO THAT I CAN ACCEPT THE ORDER |
| BV: 200 | CP: 03 |
| ACCEPTANCE CRITERIA1)User Authentication2)Error Handling3)Password security4)Multi-factor Authentication5)Compatibility and Usability |

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| User Story No: 28 | Tasks: 1 | Priority: Medium |
| AS A DELIVERY BOYI WANT TO VIEW FEEDBACKSO THAT I CAN KNOW THE CUSTOMERS FEEDBACK |
| BV: 200 | CP: 03 |
| ACCEPTANCE CRITERIA1)Access to feedback system2)Feedback Visibility3)Feedback sorting and filtering4)Response Mechanism5)User Support |

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| User Story No: 29 | Tasks: 5 | Priority: Medium |
| AS A ADMINI WANT TO VIEW FEEDBACKSO THAT I CAN KNOW THE CUSTOMERS FEEDBACK |
| BV: 200 | CP: 03 |
| ACCEPTANCE CRITERIA1)Access to feedback system2)Feedback Visibility3)Feedback sorting and filtering4)Response Mechanism5)User Support  |

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| User Story No: 30 | Tasks: 5 | Priority: Medium |
| AS A RESTAURANT OWNERI WANT TO VIEW FEEDBACKSO THAT I CAN KNOW THE CUSTOMERS FEEDBACK |
| BV: 100 | CP: 03 |
| ACCEPTANCE CRITERIA1)Access to feedback system2)Feedback Visibility3)Feedback sorting and filtering4)Response Mechanism5)User Support  |

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| User Story No: 31 | Tasks: 3 | Priority: High |
| AS A ADMINI WANT TO KNOW THE ISSUESSO THAT I CAN RESOLVE THEM |
| BV: 100 | CP: 03 |
| ACCEPTANCE CRITERIA1)Display issue section2)Sorting and filtering of issues list3)Editing and modifying the issues |

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| User Story No: 32 | Tasks: 3 | Priority: High |
| AS A REGIONAL ADMINI WANT TO KNOW THE ISSUESSO THAT I CAN RESOLVE THEM |
| BV: 200 | CP: 03 |
| ACCEPTANCE CRITERIA1)Display issue section2)Sorting and filtering of issues list3)Editing and modifying the issues |

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| User Story No: 33 | Tasks: 6 | Priority: High |
| AS A RESTAURANT OWNERI WANT TO VIEW REVENUE GENERATEDSO THAT I VIEW RESTAURANTS REVENUE |
| BV: 200 | CP: 03 |
| ACCEPTANCE CRITERIASelect ReportsSelect Revenue ReportsSelect to and from dateSelect Region (can select all)Generate ReportDownload Report in EXCEL |

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| User Story No: 34 | Tasks: 2 | Priority: High |
| AS A RESTAURANT OWNERI WANT TO KNOW DELIVERY BOYSO THAT I VERIFY THE DELIVERY BOY |
| BV: 200 | CP: 02 |
| ACCEPTANCE CRITERIAID proof Punctuality and reliability |

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| User Story No: 35 | Tasks: 2 | Priority: Low |
| AS A CUSTOMERI WANT TO VIEW THE CONTACT NUMBER OFDELIVERY BOYSO THAT I CAN CONTACT DELIVERY BOY FOR THE STATUS |
| BV: 50 | CP: 01 |
| ACCEPTANCE CRITERIA1. Display delivery boy mobile number
2. Display delivery boy name in tracking field
3. Display delivery boy picture
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| User Story No: 36 | Tasks: 2 | Priority: Medium |
| AS A RESTAURANT OWNERI WANT TO PROVIDE TIME SLOTSSO THAT CUSTOMER CAN CHECK OPENING ANDCLOSING HOURS |
| BV: 100 | CP: 02 |
| ACCEPTANCE CRITERIA1. Click on restaurant dashboard2. Add from time to time3. Click on submit4. Display updated successfully |

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| User Story No: 37 | Tasks: 3 | Priority: High |
| AS A USERI WANT TO RECEIVE NOTIFICATIONSSO THAT I CAN RECEIVE UPDATES |
| BV: 200 | CP: 02 |
| ACCEPTANCE CRITERIA1)Notifications for order confirmation2)Notification for dispatch3)Notification for delivery |

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| User Story No: 38 | Tasks: 1 | Priority: Medium |
| AS A CUSTOMERI WANT TO CONTACT CUSTOMER SUPPORTSO THAT I CAN SUBMIT QUERIES OR ISSUES |
| BV: 200 | CP: 02 |
| ACCEPTANCE CRITERIA1)Customer support section with contact information |

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| User Story No: 39 | Tasks: 4 | Priority: Medium |
| AS A CUSTOMERI WANT TO VIEW THE ORDERSO THAT I CAN CANCEL IT |
| BV: 100 | CP: 03 |
| ACCEPTANCE CRITERIAOrder statusMethod of cancellationRefund policyTime frame  |

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| User Story No: 40 | Tasks: 4 | Priority: High |
| AS A REGIONAL ADMINI WANT TO TRACK THE DELIVERYSO THAT I CAN VIEW THE STATUS OF THE DELIVERY |
| BV: 100 | CP: 03 |
| ACCEPTANCE CRITERIAReal time trackingSecurity and data privacyUser friendly Interface |

Adding BV and CP to User stories

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

**CP – Complexity Points** CP is also known as Story Points (SP). CP is the effort required by the Scrum Developers to develop this feature (user story) using technology. Efforts include time taken to solve the complexity and write the code. CP is estimated by the Scrum Developers by using Poker cards. We provide pokers with values “?”, 1, 2, 3, 5, 8, 13, 20, 40, 100 and BIG. If the entire Project development takes 200 points, then this user story coding effort will be… how many points? … Thinking in this way, Scrum Developers will give CP to the User story. ). If different values are selected by the Scrum Developers, then discussions will happen, and they agree to one CP value to that user story. fibnosis

Question3: What is epic? Write 2 epics

Answer:

Epic is a large user story or a collection of related user stories that represents a significant feature or functionality. Epics are high level, often spanning multiple sprints or iterations, and they provide a way to organize and prioritize work in a product backlog.

2 Epics1.Ratings and reviews: As a user,I want to view ratings and reviews for restaurants on scrum foods, so that I can make informed decisions about where to order food from. As a user, I want to provide ratings and reviews for restaurants on scrum foods, so that Ican share my experiences with other users and contribute to the community. Acceptance Criteria

● Users can view average ratings and reviews for each restaurant on the restaurant’s details page

● Users can read detailed reviews and comments left by the other customers

● Users can sort and filter reviews based on criteria such as rating and relevance

● Users can rate the restaurants and leave a review after placing the order

 ● User can edit or delete their own reviews within a specified timeframe

● Reviews are displayed in a way that provides helpful insights to other users

● The rating and review system maintains the integrity and authenticity of user feedback

2.Epic: Real-Time Order Tracking for Food Delivery App Description: The real-time order tracking epic aims to provide users with a seamless and transparent experience by allowing them to track the status and location of their food orders in real-time. This feature enhances customer satisfaction, reduces support inquiries, and improves overall user engagement. User Stories: As a customer, I want to see the live status of my order.

● Display the current status of the order, such as "order confirmed,""preparing," "out for delivery," and "delivered."

● Provide real-time updates as the order progresses through various stages. As a customer, I want to track the location of my delivery.

● Integrate GPS or location services to show the delivery partner's real-time location on a map

● Allow customers to view the estimated time of arrival (ETA) based on the delivery partner's location. As a customer, I want to receive notifications for order updates.

● Send push notifications or SMS updates to inform customers about order confirmation, preparation, and delivery status changes.

● Provide delivery partner details, including name, contact information, and a profile picture. As a customer, I want to contact the delivery partner directly.

● Enable in-app chat or call functionality to allow customers to communicate with the assigned delivery partner.

● Ensure privacy by using masked phone numbers or secure messagingchannels. As a customer, I want to view the delivery route.

● Display the delivery route on the map, showing the path the delivery partner will take to reach the destination.

● Allow customers to track the progress of the delivery in real-time along theroute. As a customer, I want to provide feedback on the delivery experience.

● Allow customers to rate the delivery partner and overall delivery experience after the order is delivered.

● Implement a feedback system with written comments to gather valuableinsights. As a customer, I want to see estimated delivery time adjustments.

● Account for real-time traffic conditions and other factors that may affect the delivery time.

● Update the estimated delivery time accordingly and inform the customer promptly. As a customer, I want to have a seamless tracking experience across platforms.

● Ensure the real-time order tracking feature is available and consistent on all supported platforms (e.g., mobile app, web). As an admin, I want to monitor order tracking performance.

● Provide analytics and reporting on order tracking metrics, such as average delivery time and customer satisfaction ratings.

● Use data to identify areas for improvement and optimize the delivery process.

Acceptance Criteria: Real-Time Order Updates:

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

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

● The map should update at regular intervals to reflect the driver'smovement accurately.

Estimated Delivery Time:

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

Delivery Notifications:

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

Map Zoom and Interaction:

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

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

Delivery Status History:

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

Accuracy and Reliability:

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

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

Privacy and Security:

● The real-time tracking feature should adhere to data privacy regulations and ensure that user location data is handled securely and used only for order tracking purposes.

Compatibility:

● The real-time order tracking should work smoothly across various platforms, including iOS and Android devices, as well as web browsers.

Opt-Out Option:

● Users should have the option to disable real-time order tracking if they prefer not to share their location information.

User Education:

● Provide clear instructions or tooltips to educate users on how to use the real-time order tracking feature effectively.

Support for Multiple Orders:

● If a user places multiple orders, the app should allow them to track each order individually with its own status and location updates.

By meeting these acceptance criteria, the food delivery app can successfully implement real-time order tracking, providing users with a transparent and convenient way to monitor their orders from the moment they are placed until they are delivered to their doorstep.

**Question 4- Difference between BV and CP**

**Answer:**

● Business Value (BV):

● Business Value refers to the perceived or quantifiable worth or benefit that a specific task, feature, or requirement brings to the business or project.

● It is typically determined based on factors such as revenue generation, cost savings, customer satisfaction, market competitiveness, strategic alignment, and other business-related criteria.

● Business Value helps prioritize tasks or features based on their importance to the overall project goals and objectives.

Examples of Business Value considerations: Increased revenue, improved user experience, compliance with industry regulations, competitive advantage.

**Complexity Points (CP):**

● Complexity Points, also known as story points or function points, are a measure of the relative complexity or effort required to complete a task, feature, or requirement.

● They are used to estimate the effort, time, and resources needed to implement a specific item.

● Complexity Points are often assigned based on factors such as technical difficulty, development effort, integration challenges, and other technical or development-related criteria.

● Complexity Points help in assessing the workload and resource allocation needed for different tasks or features.

● Examples of Complexity Points considerations: Integration with legacy systems, technical dependencies, data migration, algorithmic complexity.

Techniques used: Planning poker Planning poker: Planning Poker is a consensus-based technique commonly used in Agile and Scrum methodologies for estimating the effort or complexity of user stories or tasks. It helps teams collaborate and arrive at a shared understanding of the work involved in a particular item. The term "CP" in your question likely stands for "Complexity Points,"which are used in Planning Poker to represent the relative effort or complexity of a task.

Here's how the Planning Poker technique works:

**Preparation:**

● The team gathers to estimate the effort or complexity of user stories or tasks that need to be completed in a sprint or iteration.

**Estimation Cards:**

Estimation cards are used, each containing a number representing a predefined range of Complexity Points (e.g., 0, 1, 2, 3, 5, 8, 13, 20, 40,100).

● The cards are often designed such that the numbers increase non-linearly, reflecting that as tasks become more complex, the uncertainty in estimates also increases.

**Facilitator:**

● A facilitator (often the Scrum Master or Agile Coach) leads the session and explains the process to the team.

**Estimation Process:**

● For each user story or task, the team discusses the requirements, assumptions, and any relevant information.

● Each team member selects an estimation card representing their individual view of the Complexity Points required to complete the task. The card is kept face down.

**Reveal and Discussion:**

● After everyone has selected a card, all team members reveal their chosen cards simultaneously.

● If there's a wide variation in estimates, team members have a discussion to share their reasoning and insights. This helps clarify assumptions and leads to a shared understanding.

**Re-Estimation and Consensus:**

● After the discussion, team members may revise their estimates by selecting a different card based on the insights gained.

● The process of discussion and re-estimation continues until a consensus is reached. The goal is to align the team's estimates.

**Repeat for Each Task:**

● The process is repeated for each user story or task in the backlog.

**Final Estimate:**

● The final estimate for each user story or task is often determined by the mode or median of the estimates chosen by the team members

Planning Poker helps mitigate individual biases and provides a collaborative and transparent way to estimate work. It encourages discussions, helps identify potential challenges, and allows the team to make informed decisions about how much work can be taken on in a sprint or iteration. In summary, Business Value focuses on the business impact and significance of tasks or features, while Complexity Points focus on the technical effort and complexity involved in implementing those tasks or features. Both concepts are valuable in project management and software development, as they help prioritize and plan work based on both business goals and technical constraints.

Question5: Explain about Sprint

Answer:

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

●**Time Frame:**

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

●**Goals and Objectives:**

 At the beginning of each sprint, the development team, along with stakeholders, selects a set of user stories, features, or tasks to work on during that sprint. These items are collectively referred to as the sprint backlog.

● **Planning:**

 During sprint planning, the development team breaks down theselected items from the product backlog into smaller tasks and estimates theeffort required for each task. The team commits to completing these tasks withinthe sprint duration.

●**Daily Stand-ups:**

 Throughout the sprint, the team holds daily stand-up meetings (also known as daily scrums) to discuss progress, obstacles, and plans. Each team member shares what they've accomplished, what they're working on, and any challenges they're facing. These meetings foster communication and collaboration

**Development:**

 The development team works on the tasks identified in the sprint backlog. They collaborate closely, often using techniques like pair programming and frequent code reviews to ensure high-quality work.

●**Continuous Integration:**

 Developers integrate their code changes into the main codebase regularly, ensuring that the software remains functional and stable throughout the sprint.

●**Testing:**

 Testing is an integral part of a sprint. Automated tests are run to validate code changes, and manual testing may be conducted to ensure the quality of the software.

●**Review and Demo:**

 At the end of the sprint, the development team conducts a sprint review and demo. They showcase the completed work to stakeholders, gathering feedback and validation. This helps ensure that the delivered features align with expectations.

●**Retrospective:**

 Following the review and demo, the team holds a sprint retrospective. They reflect on what went well during the sprint, what could be improved, and actions to take in the next sprint. The retrospective encourages continuous improvement.

●**Incremental Development:**

 Each sprint results in a potentially shippable product increment, meaning that at the end of each sprint, a new version of the software is available with additional features or improvements.

●**Adaptability:**

 Agile methodologies emphasize adaptability and the ability to respond to changing requirements. If new priorities or insights emerge, adjustments can be made in subsequent sprints. Sprints allow development teams to iteratively deliver value to customers and stakeholders in a controlled and predictable manner. By breaking down the work into manageable chunks and continuously seeking feedback, Agile teams can enhance collaboration, reduce risk, and improve the overall quality of the software being developed.

**Question6:** Explain Product backlog and sprint back log

Answer:

Product Backlog and Sprint backlog:

The Product Backlog is a dynamic, prioritized list of all the features, user stories, enhancements, bug fixes, and other work items that need to be addressed over the course of a project. It represents the entire scope of the product's development and is managed by the Product Owner. The Product Backlog is continually refined and updated based on feedback, changing requirements, and new insights. The Sprint Backlog is a subset of the Product Backlog that represents the work that the development team commits to completing during a specific time period called a "Sprint." A Sprint is a fixed-duration iteration, usually lasting two to four weeks, in which the team

works on a set of items from the Product Backlog.

The Sprint Backlog is created during the Sprint Planning meeting, where the development team selects a set of items to work on based on their capacity and the priorities set by the Product Owner.

Question 7 – What is impediments log? write 2 impediments

Answer: It is a tool to document any obstacles or issues that prevent team members from making progress on their tasks.

Eg: All challenges faced by the team will be logged in this impediment log

**Tracking completed work:**

Tracking completed work in Agile development typically involves calculating the total story points completed by the team over a specific time frame, usually a sprint or iteration. Here's how you can calculate completed work:

●**Identify Completed Stories**

: At the end of the sprint or iteration, review the user stories or tasks that were completed and accepted as done.●

**Sum Story Points**

: Add up the story points assigned to all the completed user stories. Exclude any story points that were not fully finished or accepted during the sprint.

●**Calculate Total Completed Work**

: The sum of story points completed represents the total completed work for that sprint. This completed work can be used to calculate the team's velocity for that specific sprint, as mentioned in the previous response. It provides insights into the team's capacity and helps with future sprint planning and estimation.

**Summing story points:**

Summing story points involves adding up the numerical values assigned to individualuser stories or tasks during the estimation process in Agile development. Story pointsare used to represent the effort, complexity, and size of a piece of work relative to other items on the backlog. Here's how you can sum story points:

●**List Completed User Stories**

: Gather a list of user stories or tasks that have been completed during a specific sprint or iteration.

●**Identify Story Point Values**

: Each user story or task should have a story point value assigned to it during the estimation process. These values are usually relative, such as 1, 2, 3, 5, 8, 13, etc., representing increasing levels of complexity or effort.

●**Add Up Story Point Values**

: Sum up the story point values for all the completed user stories or tasks. For example, if you completed user stories with story point values of 3, 5, and 8, the sum would be 16. The sum of story points provides a quantitative measure of the work completed by the team during a sprint. This sum is often used to calculate the team's velocity, which helps in future sprint planning and estimation

Question 8 – Explain Velocity of the Team

Answer: Velocity refers to the rate at which a project team can deliver completed work items over a specific period of time.- Calculated by scrum master

It is defined as the measure of the productivity rate of the project team with respect to the produced, validated and accepted deliverables. It is usually measured within a pre-defined interval.

**Average velocity:**

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

●**Select a Time Frame**

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

●**Sum Completed Story Points**

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

●**Calculate Average**

: Divide the total completed story points by the number of sprints or iterations you selected. This will give you the average velocity for that period. Formula: Average Velocity = Total Completed Story Points / Number of Sprints

**Use for Planning**

: The average velocity can serve as a guideline for future sprint planning. It helps the team estimate how much work they can commit to in upcoming iterations based on their historical performance. Keep in mind that average velocity is a rough estimate and can fluctuate based on various factors. It's important to consider the team's capacity, any changes in team composition, and improvements in estimation accuracy over time.

**Question9: SPRINT BURNDOWN CHART:**

Answer:





**Product Burndown chart:**





Question 10 – Explain about Product Grooming

Answer:

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

●**Setting the Context**

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

●**Backlog Review**

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

●**Prioritization**

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

●**Refinement and Estimation**

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

●**Dependency Analysis**

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

●**Acceptance Criteria**

: Well-defined acceptance criteria are established for each backlog item. These criteria outline the conditions that must be met for the item to be considered complete and ready for delivery. Clear acceptance criteria help prevent misunderstandings and ensure a shared understanding of what is expected.

●**Backlog Grooming Meetings**

: These are recurring meetings where the product owner and the development team come together to perform the activities mentioned above. These meetings often occur before sprint planning sessions to ensure that the upcoming sprint backlog is well-prepared. Backlog grooming is an iterative process that helps maintain a healthy and well-organized product backlog. It ensures that the development team always has a prioritized list of well-defined, estimated, and ready-to-develop items. This, in turn, supports the efficient planning and execution of sprints and helps the team deliver value to customers in a more predictable and effective manner.

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

Answer: Scrum Master- A ScrumMaster is a key facilitator in the Agile framework, responsible for ensuring that the Scrum methodology is properly implemented and followed by the team. They act as a coach, mentor, and servant leader, guiding the team through the Scrum process and helping them achieve their goals.

Product Owner: A product owner is a role in product development responsible for managing the product backlog and maximizing the value of a product. The product owner connects the business side (identifying value needed) with the development team (implementing it)

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

Question 12 – Explain all Meetings Conducted in Scrum Project

Answer:

**Sprint Planning:**

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

**Daily Stand-up (Daily Scrum):**

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

**Sprint Review:**

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

**Sprint Retrospective:**

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

**Backlog Refinement (Grooming)**

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

**Product Backlog Refinement**

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

**Release planning:**

This meeting occurs at the start of the project or major release and involves the product owner, development team, and stakeholders. It aims to discuss and plan the high- level scope, timeline, and goals for the project.

**Ad hoc meetings:**

These meetings may be schedules as needed to address specific topics or issues, such as resolving impediments, discuss technical challenges, or conducting additional planning or collaboration sessions

Question 13: Explain Sprint Size and Scrum Size

Answer:

**Explain Sprint Size and Scrum SizeSprint Size:**

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

**Scrum Team Size:**

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

Question14: Explain DOR and DOD

**Answer:**

**Definition of Ready (DOR):**

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

● Clear description and acceptance criteria: The item's requirements are clearly stated, and the conditions for its successful completion are well-defined.

● Dependencies identified: Any dependencies on external factors, teams, or resources are identified and addressed.

● Estimable: The team has enough information to provide a reasonable estimate of the effort required.

● Testable: It's possible to determine whether the item has been successfully implemented through testing.

● Minimal ambiguity: The item's details are clear, and any uncertainties are resolved.

**Definition of Done (DOD):**

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

 ● Code complete: All development work is finished, including coding, testing, and integration.

● Peer-reviewed: Code has been reviewed by other team members for quality and adherence to coding standards.

 ● Automated tests passed: Automated tests (unit tests, integration tests, etc.) have been successfully executed and passed.

● Functional requirements met: The item meets all specified acceptance criteria and functional requirements.

● Documentation updated: Any necessary documentation, user guides, or technical documentation has been updated

**Question 15: Explain Prioritization Techniques and MVP Prioritization Techniques:**

Answer:

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

**MoSCoW:**

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

**Weighted Shortest Job First (WSJF):**

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

**Kano Model:**

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

**Value vs. Effort Matrix:**

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

**Relative Prioritization:**

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

**Buy a Feature:**

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

**Minimum Viable Product (MVP):**

 An MVP is the smallest version of a product that includes just enough features to provide value to early adopters and gather feedback. The MVP approach helps validate assumptions, learn from users, and iteratively build upon a product's foundation. It involves:

●**Core Functionality:**

 An MVP focuses on delivering the core functionalities that address the primary needs or pain points of the target users.

●**Minimal Features:**

 The MVP omits non-essential features to avoid unnecessary complexity and expedite development.

●**Testing Hypotheses:**

 The MVP tests assumptions and hypotheses about user behavior, market demand, and product viability.

●**Iterative Development:**

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

**Early Value:**

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

Question16: **Difference between Business Analyst and Product Owner**

Answer:

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

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

**Answer:**

**Neha Thorat**

**Product Owner**

Hyderabad,India,5000869963303229

Neha.thorat@abc.com

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**Skills**

* Experienced Product Owner with a successful track record of driving product development and deliveryincross-functional Agile teams using Agile development principles.
* Proﬁcient in Scrum project management methodologies, exceling guiding teams through iterative development cycles to ensure efﬁcient and effective product releases.
* I am adept at utilizing Excel /Google Sheets and PowerPoint to analyze data and create compelling presentations that communicate product vision and strategy. Also, my skillset includes crafting detailed user stories and creating comprehensive product roadmaps that align with business objectives. I am highly proﬁcient in utilizing JIRA as a project management tool to facilitate seamless collaboration, track progress, and ensure timely delivery.

**Experience**

 Microsoft / Product Owner

Feb2018-PRESENT, Hyderabad

➢ Created user story acceptance criteria to get buy-in from stakeholders and reﬁned those stories with Scrum teams.

➢ Owned the planning and scheduling of two-week sprints and articulated the product vision to engineering, resulting in hitting 98% of the product goals deﬁned at the beginning of the year in 2021.

➢ Managed and re- prioritized the product backlog, resulting incoming under budget by an average of 40 lakhs on projects.

➢ Directed vendor relationship and 30% of contracts, including execution and ﬁnancial payments.

**Certiﬁcations**

➢ AgileCertiﬁedPractitioner(PMI-ACP)

➢ CertiﬁedScrumProductOwner(CSPO)

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**Education**

 JNTUKakinada /

B.TechCivilEngineering

September2010-April2014, Kakinada