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| Question 1 – write Agile Manifesto – 8 Marks |

**Answer :**

**Question 1 – Write Agile Manifesto – 8 Marks**

**Ans:**

**4 Main values of agile**

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

**12 Principles of Agile**

1. Customer satisfaction through early and continuous delivery of valuable software.
2. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
3. Deliver working software frequently, with a preference to the shorter timescale (weeks rather than months).
4. Business people and developers must work together daily throughout the project.
5. Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.
6. Face-to-face conversation is the most efficient and effective method of conveying information within a development team.
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. Regularly, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

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| Question 2 – User Stories- Acceptance Criteria-BV-CP – 40 Marks |

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

Answer : SPRINT-1

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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: 02 | |
| ACCEPTANCE CRITERIA  Registration Screen  Text 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: 02 | Tasks: 2 | | Priority: HIGHEST |
| AS A RESTAURANT 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 THE 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 5 km | | | |

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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, payments button.  Business 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 RESTAURANTS  SO THAT I CAN APPROVE THEIR REGISTRATION | | | |
| BV: 500 | | CP: 2 | |
| ACCEPTANCE CRITERIA  List of restaurant, select Restaurants, verify restaurant details, approve button, reject button, notification to the restaurant. | | | |

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| User Story No: 6 | Tasks:2 | | Priority: LOW |
| AS ACUSTOMER  I WANT TO VIEW THE PRICE  SO THAT I CAN ORDER THE FOOD | | | |
| BV: 50 | | CP: 1 | |
| Acceptance Criteria :  1. Display price in the list of menu items | | | |

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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 :   1. 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: 8 | Tasks:2 | | Priority: MEDIUM |
| AS A RESTAURANT OWNER  I WANT TO PROVIDE TIME SLOTS  SO THAT CUSTOMER CAN CHECK OPENING AND CLOSING HOURS | | | |
| BV: 100 | | CP: 2 | |
| Acceptance Criteria :   1. Click on restaurant dashboard 2. Add from time to time 3. Click on submit 4. Display updated successfully | | | |

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| User Story No: 9 | Tasks:2 | | Priority: HIGH |
| AS A BUSINESS OWNER  I WANT TO VIEW RESTAURANT REVENUE REPORT SO THAT I CAN VIEW THE RESTAURANT’S REVENUE | | | |
| BV: 200 | | CP: 3 | |
| Acceptance Criteria : Select Reports  Select Revenue Reports Select to and from date Select Region (can select all) Generate Report  Download Report in EXCEL | | | |

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| User Story No: 10 | Tasks: 03 | | Priority: High |
| AS A REG ADMIN  I WANT TO MANAGE REGIONAL RESTAURANTS,  SO THAT, I CAN TRACK THE PERFORMANCE OF REGIONAL RESTAURANTS. | | | |
| BV: 200 | | CP: 03 | |
| Acceptance Criteria :  CLICK ON PERFORMANCE OF RESTAURANTS SELECT FROM DATE TO DATE  CLINCK ON GENERATE REPORT WHICH INCLUSES RESTAURANTS ID, NAME, REVENUE  CLICK ON DOWNLOAD REPORT SHOULD BE IN EXCEL | | | |

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| User Story No: 11 | Tasks: 02 | | Priority: Medium |
| AS ADMIN  I WANT TO SEE THE REGIONAL REVENUE REPORTS, SO THAT I CAN VIEW THE REGIONAL PERFORMANCE | | | |
| BV: 100 | | CP: 03 | |
| Acceptance Criteria :  Select regional dropdown  View performance of each rest of that region in tabular form which includes rest name, revenue, generated  Download in excel or PDF | | | |

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| User Story No: 12 | Tasks: 02 | | Priority: High |
| AS A CUSTOMER  I WANT TO CHAT WITH REG ADMIN SO THAT I CAN REQUEST FOR REFUND | | | |
| BV: 200 | | CP: 02 | |
| Acceptance Criteria :   1. BR-ALL MANDATORY 2. TEXT BOX FIELDS 3. DISPLAY ORDER ID 4. TEXT BOX,FOR DESCRIPTION 5. SUBMIT BUTTON 6. GENERATE ISSUE ID 7. DISPLAY SUCCESSFUL | | | |

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| User Story No: 13 | Tasks: 02 | | Priority: High |
| AS A HUNGRY USER  I WANT TO BROWSE NEARBY RESTAURANTS  SO THAT I CAN ORDER THE FOOD | | | |
| BV: 200 | | CP: 02 | |
| ACCEPTANCE CRITERIA  1)Each restaurant entry displays its name, cuisine type,and rating  2)This list can be sorted by distance or rating | | | |

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| User Story No: 14 | Tasks: 02 | | Priority: High |
| AS A CUSTOMER  I WANT TO BROWSE DIFFERENT RESTAURANTS AND  MENUS  SO THAT I CAN FIND A PLACE TO ORDER FOOD | | | |
| BV: 200 | | CP: 02 | |
| Acceptance Criteria   1. The menu includes dishes, prices 2. Shoe the restaurant is open or close | | | |

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| User Story No: 15 | Tasks: 02 | | Priority: High |
| AS A CUSTOMER  I WANT TO BROWSE FOR SPECIFIC DISHES AND CUISINES  SO THAT I CAN FIND A PLACE TO ORDER | | | |
| BV: 200 | | CP: 02 | |
| Acceptance Criteria :   1. App displays relevant restaurant and dishes matching the query User | | | |

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| User Story No: 16 | Tasks: 02 | | Priority: High |
| AS A CUSTOMER  I WANT TO FILTER RESTAURANTSSO THAT I CAN FIND A PLACE TO ORDER | | | |
| BV: 200 | | CP: 02 | |
| Acceptance Criteria :  1)Filter restaurants by cuisine type and dietaryoptions(vegan, veg,nonveg,egg) | | | |

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| User Story No: 17 | Tasks: 02 | | Priority: High |
| AS A CUSTOMER  I WANT TO TRACK MY ORDER  SO THAT I KNOW THE TIME OF DELIVERY | | | |
| BV: 200 | | CP: 02 | |
| Acceptance Criteria :  1)App shows real time update on the order status  2)Display estimated delivery time | | | |

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| User Story No: 18 | Tasks: 02 | | Priority: High |
| AS A CUSTOMER  I WANT TO RATE AND REVIEW RESTAURANTS  SO THAT I CAN RATE AND REVIEW THE RESTAURANTS I HAVE | | | |
| BV: 200 | | CP: 02 | |
| Acceptance Criteria :   1. Can see reviews from other users to help me make dining decisions | | | |

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| User Story No: 19 | Tasks: 02 | | Priority: High |
| AS A CUSTOMER  I WANT TO VIEW PAST ORDER HISTORY  SO THAT I CAN ORDER AGAIN | | | |
| BV: 200 | | CP: 02 | |
| Acceptance Criteria :  1)Can see the details such as order items, total cost andorder date | | | |

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| User Story No: 20 | Tasks: 02 | | Priority: High |
| AS A CUSTOMER  I WANT TO RECEIVE NOTIFICATIONS  SO THAT I CAN RECEIVE UPDATES | | | |
| BV: 200 | | CP: 02 | |
| Acceptance Criteria :  1)Notifications for order confirmation  2)Notification for dispatch  3)Notification for delivery | | | |

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

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| User Story No: 22 | Tasks: 02 | | Priority: High |
| AS A CUSTOMER  I WANT TO RECEIVE AND MANAGE ORDERS  SO THAT I CAN UPDATE ORDER STATUS | | | |
| BV: 200 | | CP: 02 | |
| Acceptance Criteria :  1)Manage order status  2)Notify restaurants about incoming orders | | | |

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| User Story No: 23 | Tasks: 02 | | Priority: High |
| AS A RESTAURANT OWNER  I WANT TO ACCESS TO CUSTOMER REVIEWS  SO THAT I CAN VIEW AND RESPOND TO CUSTOMERREVIEWS | | | |
| BV: 200 | | CP: 02 | |
| Acceptance Criteria :   1. Owners can address feedback 2. 2. Owners can improve their service | | | |

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| User Story No: 24 | Tasks: 02 | | Priority: Medium |
| AS A CUSTOMER  I want to apply promocode and discount  So that I can order at lower price | | | |
| BV: 100 | | CP: 04 | |
| Acceptance Criteria :   1. Active promocodes | | | |

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| User Story No: 25 | Tasks: 02 | | Priority: Medium |
| AS A Delivery boy  I want to view order  So that I can can accept order | | | |
| BV: 100 | | CP: 04 | |
| Acceptance Criteria :  1) Order visibility  2)Real-time updates  3)Order details  4)Order filtering and sorting  5)Order map view  6)Order navigation  7)Order completion and confirmation | | | |

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| User Story No: 26 | Tasks: 02 | | Priority: High |
| AS A deliver boy  I want to login  So that I can accept order | | | |
| BV: 200 | | CP: 04 | |
| Acceptance Criteria :  1)User Authentication  2)Error Handling  3)Password security  4)Multi-factor Authentication  5)Compatibility and Usability | | | |

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| User Story No: 27 | Tasks: 02 | | Priority: High |
| AS A CUSTOMER  I WANT TO CHAT WITH REG ADMIN SO THAT I CAN REQUEST FOR REFUND | | | |
| BV: 200 | | CP: 04 | |
| Acceptance Criteria :   1. BR-ALL MANDATORY 2. TEXT BOX FIELDS 3. DISPLAY ORDER ID 4. TEXT BOX,FOR DESCRIPTION 5. SUBMIT BUTTON 6. GENERATE ISSUE ID 7. DISPLAY SUCCESSFUL | | | |

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| User Story No: 28 | Tasks: 02 | | Priority: Medium |
| AS A CUSTOMER  I want to View feedback  SO THAT I CAN VIEW CUSTOMER FEEDBACK | | | |
| BV: 200 | | CP: 04 | |
| Acceptance Criteria :  1)Access to feed back system  2)Feedback Visibility  3)Feedback sorting and filtering  4)Response Mechanism  5)User Support | | | |

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| User Story No: 29 | Tasks: 02 | | Priority: Medium |
| AS A ADMIN  I WANT TO VIEW FEEDBACK  SO THAT I CAN KNOW THE CUSTOMERS FEEDBACK | | | |
| BV: 200 | | CP: 04 | |
| Acceptance Criteria :  1)Access to feed back system  2)Feedback Visibility  3)Feedback sorting and filtering  4)Response Mechanism  5)User Support | | | |

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| User Story No : 30 | Tasks: 02 | | Priority: Medium |
| AS A BUSINESS OWNER  I WANT TO VIEW FEEDBACK  SO THAT I CAN KNOW THE CUSTOMERS FEEDBACK | | | |
| BV: 200 | | CP: 04 | |
| Acceptance Criteria :  1)Access to feed back system  2)Feedback Visibility  3)Feedback sorting and filtering  4)Response Mechanism  5)User Support | | | |

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| User Story No: 31 | Tasks: 02 | | Priority: High |
| AS A Admin  I want to Know issues  SO THAT I CAN RESOLVE ISSUES | | | |
| BV: 100 | | CP: 03 | |
| Acceptance Criteria :   1. Display Issue section 2. Sorting and filtering issues list 3. Editing and modifying the issues | | | |

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| User Story No: 32 | Tasks: 02 | | Priority: High |
| AS A Regional Admin  I WANT TO KNOW ISSUES  SO THAT I CAN RESOLVE ISSUES | | | |
| BV: 200 | | CP: 04 | |
| Acceptance Criteria :   1. Display Issue section 2. Sorting and filtering issues list 3. Editing and modifying the issues | | | |

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| User Story No: 33 | Tasks: 02 | | Priority: High |
| AS A Restaurant owner  I want to View revenue generated  So that I can view restaurant revenue | | | |
| BV: 200 | | CP: 04 | |
| Acceptance Criteria :  Select Reports  Select Revenue Reports  Select to and from date  Select Region (can select all)  Generate Report  Download Report in EXCEL | | | |

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| User Story No: 34 | Tasks: 02 | | Priority: High |
| AS A RESTAURANT OWNER  I WANT TO KNOW DELIVERY BOY  SO THAT I VERIFY THE DELIVERY BOY | | | |
| BV: 200 | | CP: 04 | |
| Acceptance Criteria :  ID Proof | | | |

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| User Story No: 35 | Tasks: 02 | | Priority: Low |
| AS A CUSTOMER  I want to view contact No of deliver boy  So that I can contact delivery boy | | | |
| BV: 50 | | CP: 01 | |
| Acceptance Criteria :   1. Display Delivery boy Name 2. 2. Display Delivery boy Mobile Number 3. 3. Display Delivery boy picture | | | |

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| User Story No:36 | Tasks: 02 | | Priority: Medium |
| AS A RESTAURANT OWNER  I WANT TO PROVIDE TIME SLOTS  SO THAT CUSTOMER CAN CHECK OPENING ANDCLOSING HOURS | | | |
| BV: 100 | | CP: 02 | |
| Acceptance Criteria :  1. Click on restaurant dashboard  2. Add from time to time  3. Click on submit  4. Display updated successfully | | | |

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| User Story No: 37 | Tasks: 02 | | Priority: High |
| AS A USER  I WANT TO RECEIVE NOTIFICATIONS  SO THAT I CAN RECEIVE UPDATES | | | |
| BV: 200 | | CP: 02 | |
| Acceptance Criteria :  1) Notifications for order confirmation  2)Notification for dispatch  3)Notification for delivery | | | |

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| User Story No: 38 | Tasks: 02 | | Priority: Medium |
| AS A CUSTOMER  I WANT TO CONTACT CUSTOMER SUPPORT  SO THAT I CAN SUBMIT QUERIES OR ISSUES | | | |
| BV: 200 | | CP: 02 | |
| Acceptance Criteria :   1. Customer support section with contact information | | | |

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| User Story No: 39 | Tasks: 02 | | Priority: Medium |
| AS A CUSTOMER  I WANT TO CHAT VIEW  SO THAT I CAN CANCEL IT | | | |
| BV: 100 | | CP: 03 | |
| Acceptance Criteria :  Order status  Method of cancellation  Refund policy  Time frame | | | |

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| User Story No: 40 | Tasks: 02 | | Priority: High |
| AS A REGIONAL ADMIN  I WANT TO TRACK THE DELIVERY  SO THAT I CAN VIEW THE STATUS OF THE DELIVERY | | | |
| BV: 100 | | CP: 03 | |
| Acceptance Criteria :  Real time tracking  Security and data privacy  User Friendly Interface | | | |

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| Question 3– What is epic? Write 2 epics – 5 Marks |

Answer : An epic is a set of related user stories. They are also considered as really big user story. 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 Epics**

**1**.Ratings and reviews:

 As a user,

I want to view ratings and reviews for restaurants on scrum foods, so that I can make informed decisions about where to order food from.

 As a user, I want to provide 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 restaurants 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 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 messaging channels.

 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 the route.

 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's movement 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 whenit 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 to see 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.

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| Question 4 –What is the difference between BV and CP – 2 Marks |

Answer :

| **Aspect** | **Business Value (BV)** | **Complexity Points (CP)** |
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| **What it is** | Measures how **important** or **beneficial** a task is to the business. | Measures how **difficult** or **time-consuming** a task is for the development team. |

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| **Assigned by** | **Product Owner** or stakeholders. | **Development team** during estimation. |

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| **Purpose** | Helps prioritize tasks based on **business impact**. | Helps estimate team effort and **plan sprint capacity**. |

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| **Focus** | Value delivery to users/customers. | Technical effort, complexity, and unknowns. |

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| **Scale** | Custom scale (e.g., 1–10 or S, M, L). | Fibonacci sequence (1, 2, 3, 5, 8...). |

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| **Example** | A new checkout feature = high BV if it increases sales. | Same feature = low CP if easy to implement. |

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| **Used For** | Deciding **what to build first**. | Deciding **how much can be built** in a sprint. |

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| Question 5 –Explain about Sprint– 5 Marks |

## Answer: 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 the selected items from the product backlog into smaller tasks and estimates the effort required for each task. The team commits to completing these tasks within the sprint duration.

## **Daily Stand-ups:**

## Throughout the sprint, the team holds daily stand-up meetings(also known as daily scrums) to discuss progress, obstacles, and plans. Each team 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 sprintbacklog. They collaborate closely, often using techniques like pair programmingand frequent code reviews to ensure high-quality work.

## **Continuous Integration:**

## Developers integrate their code changes into the main code base 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 as print 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.

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| Question 6 – Explain Product backlog and sprint back log– 5 Marks |

Answer :

| **Aspect** | **Product Backlog** | **Sprint Backlog** |
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| Definition | A prioritized list of all features, enhancements, fixes, and requirements for the product. | A subset of the Product Backlog selected for a specific sprint. |
| Owner | Product Owner | Development Team |
| Scope | Covers the entire product development | Covers work for the current sprint only |
| Content | User stories, features, bugs, technical tasks, etc. | Detailed tasks needed to complete selected user stories |
| Time Frame | Long-term view (evolves throughout the project) | Short-term view (specific to the 1-4 week sprint) |
| Updates | Continuously refined (Product Backlog Refinement) | Updated daily during the sprint (e.g., during Daily Scrum) |
| Goal | Deliver the best possible product over time | Deliver a working increment by the end of the sprint |

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| Question 7 – What is impediments log? write 2 impediments – 5 Marks |

Answer : An Impediments Log is a document or tool used in Agile/Scrum to track and manage obstacles (impediments) that are blocking the team’s progress. It's usually maintained by the Scrum Master, who ensures that these issues are addressed and resolved as quickly as possible.

**2 Impediments :**

Login ID: 1  
Description: Delivery partner storage in specific region  
Impact: Delays in order deliveries and increases customer dissatisfaction  
Priority: High (due to its impact on customer experience)  
Assigned to: Operations team and HR team  
Status: Open  
Action taken: The operations team is actively recruiting new delivery partners in the region. The HR team is working on fast-tracking the onboarding process.  
Resolution: Delivery partner recruitment efforts are ongoing and the HR team is streamlining the onboarding process to expedite new hires. Regular updates are being provided in team meetings.

Login ID: 2  
Description: Technical issue causing intermittent order processing failures  
Impact: Delays in order processing and potential revenue loss  
Priority: High (due to its impact on revenue and customer experience)  
Assigned to: Tech team and QA team  
Status: In progress  
Action taken: The tech team has identified the root cause and is working on a fix. The QA team is conducting extensive testing to ensure the issue is resolved  
Resolution: The tech team has implemented a fix and conducted through testing. The issue has been resolved, and orders are now processing smoothly.

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| Question 8 – Explain Velocity of the Team – 1 Marks |

Velocity – How many CP is covered in this sprint

Answer : Velocity refers to the measure of the amount of work a development team can complete during a sprint. The calculation of velocity is performed by the development team itself, as they are responsible for estimating the effort required to complete each user story or back log item.

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| Question 9 – Draw Sprint Burn Charts n Product Burn Down Charts– 3 Marks |

### Sprint Burn down Chart Product

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| Question 10 – Explain about Product Grooming – 2 Marks |

**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

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| Question 11 – Explain the roles of Scrum Master and Product Owner – 3 Marks |

Answer :

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 the 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 Scrum Master ensures project success, by assisting the product owner and the team in using the right Scrum processes for creating the end product and establishing the Agile principles.

The 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 wanting to change the Product Backlog can do so by trying to convince the Product Owner.

Scrum Master - The day to day activity of a Scrum Master involves servant leadership where they are involved in performance planning, coaching, self-organization, removing obstacles, resolving conflicts and serving the team.

Product Owner - The first responsibility of the product owner is customer satisfaction and this they carry out by ensuring that customer requirements are given priority and there is transparency between development team and stakeholders. The product owner guarantees stakeholder satisfaction by ensuring product success, and building a product which meets business requirements.

The Product Owner interacts with the users and customers, Stakeholders, the Development team and the Scrum Master to deliver a successful product.

The 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 deliver the best results.

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| Question 12 – Explain all Meetings Conducted in Scrum Project – 8 Marks |

Answer :

**Daily Scrum Meeting :**

 Held daily during the sprint, this short meetingaims to facilitate quick and focused communication among team members. Eachteam member answers three key questions: What did I accomplish since the laststand-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 andinformed about the progress and challenges.

**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.

**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

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| Question 13 – Explain Sprint Size and Scrum Size– 2 Marks |

Answer :

**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 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.

**Sprint Size:** In Scrum, a "sprint" is a time-boxed iteration during which the development team works to deliver a potentially shippable product increment. The length of a sprint is referred to as the "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.

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| Question 14 – Explain DOR and DOD – 2 Marks |

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:

**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:

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| Question 15 – Explain Prioritization Techniques and MVP – 3 Marks |

Answer : Prioritization Technique is a technique for queuing the requirements for the development process.

It is 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.

**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.

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| Question 16 – Difference between Business Analyst n Product Owner – 3 Marks |

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|  | Business Analyst | Product Owner |
| **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 |
| **Vision and strategy** | Focuses on specific project or process improvements. | Has a holistic vision for the product and its strategic direction. |
| **Backlog management** | Not typically responsible for managing a product backlog. | Manages and prioritizes the product backlog items. |
| **Prioritization** | Does not have a primary role in prioritizing features. | Prioritizes features based on business value, user needs, and market trends. |
| **Role focus** | Understand business needs, processes, and requirements. | Define, prioritize, and convey requirements for the product. |
| **Requirement gathering** | Gathers and documents detailed business requirements. | Creates user stories and defines product features. |
| **Decision making** | Provides input but not responsible for final product decisions. | Makes final decisions on product features, enhancements, and priorities. |
| **Iterative Development** | May or may not be involved in iterative development cycles. | Actively participates in sprint planning, reviews, and retrospectives. |

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

**Ruchika Hiwarale**

[**Ruchikahiwarale4@gmail.com**](mailto:Ruchikahiwarale4@gmail.com)

**Mobile No :**

**Product Owner | Agile | Scrum | Business Analysis**

**💼 Professional Summary**

Certified and results-driven **Product Owner** with 3+ years of experience driving product vision, defining user stories, and managing cross-functional Agile teams. Proven ability to deliver customer-centric solutions, prioritize backlog items effectively, and align product strategy with business goals. Adept at stakeholder management, sprint planning, and continuous product improvement.

**🧠 Key Skills**

* Agile & Scrum Methodology
* Product Road mapping & Backlog Management
* User Story Writing & Acceptance Criteria
* Stakeholder Communication
* Sprint Planning & Review
* Business Value Prioritization
* Jira, Confluence, Trello
* Wireframing (Figma, Balsamiq)
* Data Analysis (Excel, SQL basics)

**💼 Professional Experience**

**Product Owner**

**TechNova Solutions Pvt. Ltd., Bangalore**  
*Mar 2022 – Present*

* Led Agile Scrum team of 8+ developers for a SaaS-based CRM platform.
* Owned and prioritized product backlog; ensured clear, concise user stories with defined acceptance criteria.
* Collaborated with cross-functional stakeholders to define MVPs and launch two major feature sets that increased user retention by 20%.
* Conducted sprint reviews and retrospectives to gather feedback and continuously improve product delivery.
* Used **Jira and Confluence** to manage epics, stories, sprints, and documentation.

**Associate Product Owner**

**InnovaTech Solutions, Pune**  
*Jan 2021 – Feb 2022*

* Assisted in backlog management, refining user stories, and maintaining clear acceptance criteria to ensure smooth development processes.
* Collaborated with Scrum Masters to facilitate sprint planning, backlog grooming, and sprint reviews, adhering to Agile methodologies.
* Conducted User Acceptance Testing (UAT) and gathered feedback from stakeholders to ensure product quality and alignment with requirements.
* Supported the Product Owner in market research and competitive analysis, contributing insights for strategic decision-making.

**🎓 Education**

**Bachelor of Engineering (BE) in Information Technology**  
XYZ University, Pune — *2016 – 2020*

**📜 Certifications**

* **Certified Scrum Product Owner (CSPO)** – Scrum Alliance
* Agile Product Management – Coursera
* Business Analysis Fundamentals – Udemy

**🏆 Achievements**

* Successfully launched 5+ major features leading to a 15% boost in user engagement.
* Reduced product development cycle time by 25% through improved sprint planning.
* Recognized as “Agile Champion” of the quarter for consistent delivery and team collaboration.