## F:\COEPD\COEPD Activity\IIBA\Sessions\17030202 Scrum Process.pngCOEPD - Scrum Project Implementation – 100 Marks – Pass is 60%

Instructions to follow:

1. Copy paste (either image, diagram or text) is not entertained. If done, the document will not be evaluated.
2. After submission of the answers of this prep exam, You should be prepared to attend viva and justify your answers in the prep exams. If in Viva, participant is NOT justifying the answers, Viva
3. will be repeated until Candidates justify 60% correctness.
4. Mentor calls are scheduled only if the participant have submitted their task at least for one time.

(should apply their knowledge in this task first)

1. For attempting prep exams participant should be thorough on the topics using their references.
2. Please format the document properly (Always have a question no., question and answer).
3. Have a consistent format (Font name: Arial/ Calibri -Font size 12, Font Color: Black ).
4. Few Questions are related to the case study, check Questions thoroughly before you answer.
5. Answers should be elaborated in detail(\*not as per the allotted marks).
6. Please focus on learning and applying the knowledge as this knowledge will be helpful in contributing at your BA job.
7. In the evaluation, students must answer all questions and should be able to justify at least 60% content and correctness of each answer.

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| Question 1 – write Agile Manifesto – 8 Marks |

**Scrum Project Name:** Scrum Foods (Foods Delivery Applications)

#### Scrum Project Description:

Scrum Foods provides fast, reliable online food delivery application targeting customers of all age group offering 24/7 service along with tracking of the delivery real time.

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| --- |
| Client: **COEPD IT Solutions** |
| Stakeholder List: |
| 1. Business Owner |
| 2. Administrator |
| 3. Regional Administrator |
| 4. Restaurant |
| 5. Delivery boy |
| 6. Customer |
|  |

# Product Vision

### – Meeting – Discussion – Document -

|  |
| --- |
| Scrum Project Name: **Scrum Foods** |
| Venue: |
| Date: Start Time: End Time: Duration: |
| **Client: COEPD IT Solutions** |
| **Stakeholder List:** |
| 1. Business Owner |
| 2. Administrator |
| 3. Regional Administrator |
| 4. Restaurant |
| 5. Delivery boy |
| 6. Customer |
|  |
| **Scrum Team** |
| Scrum Master: **Satya Rathnakar** |
| Product Owner: **YOU** |
| Scrum Developer 1: **Linesh Vegad** |
| Scrum Developer 2: **Yogender** |
| Scrum Developer 3: **Gowri** |
| Scrum Developer 4: **A.Lakshmikala** |
| Scrum Developer 5: **Madhuri** |
| Scrum Developer 6: **Varun** |
| Scrum Developer 7: **Rakesh** |
| Scrum Developer 8: **Rajesh** |
|  |
|  |

You are the Product Owner



|  |
| --- |
| **VISION: Customers of any age group who want to have top-rated restaurant’s delicious food in one- go at their doorstep with lighting fast delivery, 24/7 availability and reliable services are SCRUM FOODS. Unlike any other food delivery app in market, our utmost priority is customer need and****customer satisfaction which makes us stand out of any other food delivery app in this industry.** |
| **Online food delivery industry is our target segment.****Users/Customers: People who want food deliveries within stipulated time at their required place** | **Scrum foods provide guaranteed safe food delivery in one-go of top rated licensed restaurants.****Customers can receive with safe packaged food within expected time to clear their hunger.** | **Scrum foods will be on mobile, tablets and desktop application.****Real time tracking and providing 24/7 services and customer support****Product feasibility can be complex and require attention in every aspect** | **Open up revenue stream****Be leading online food delivery app in country****Create reputed brand image for other business opportunities.** |

### Product Vision – Description – Notes

**Customer:** Registration, Login, Search and View restaurants, View restaurant's menu, Order food, Payment, Tracking, Cancel order, Feedback & Rating and Logout.

**Delivery Boy:** Registration, Login, View orders, Select and accept orders, Order pickup and delivery, Status updates, Payment (COD), View Feedback, Raise Issues, View Deliveries report and revenue generated, Logout.

**Restaurants:** Registration, Login, View Orders, Delivery Boy Verification, Payment, View Feedback, Raise Issues, View revenue generated through Scrum Food app, Logout.

**Regional Admin:** Admin Login, Tracking/status, Customer feedback, Managing Regional delivery boys and restaurant, View regional revenue, Issues, Refunds, View payment made to regional restaurant and Logout.

**Admin:** Login, Managing Regional Admin, Issues, Customer Feedback, Approval/Rejections privileges on restaurants, Delivery boy, Restaurants and Regional Admin requests, Resolve Issues and Logout

**Business Owner**: Login, Issues, Reports, Update payments for restaurants and delivery boys and Logout

**End of Product Vision**

# User Story Workshop

How to write a User story:

Take a Sticky Note and take a contract color Sketch Pen and write the user story in CAPITAL letters only. Make sure the user story is short, clear and unambiguous and one Scrum Developer can develop in one agreed sprint.

If you come across complex, big User stories… these are called epics. We can divide the epics into Themes and then into User Stories

Finalized User Stories | Count:

**USER STORIES**

SPRINT-1

|  |  |  |
| --- | --- | --- |
| User Story No: 1 | Tasks: 2 | Priority: HIGHEST |
| AS A DELIVERY BOYI WANT TO REGISTER IN SCRUM FOODS SO 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 |

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

|  |  |  |
| --- | --- | --- |
| 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: 2 |
| Acceptance Criteria :Text Box to enter.Business Rules: Within the radius of 5 km |

|  |  |  |
| --- | --- | --- |
| 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: 3 |
| Acceptance Criteria :Display payment modes, radio buttons to select payment modes, payments button.Business Rule. Can select only one payment mode |

|  |  |  |
| --- | --- | --- |
| User Story No: 5 | Tasks:2 | Priority: HIGHEST |
| AS AN ADMINI WANT TO VIEW THE RESTAURANTSSO THAT I CAN APPROVE THEIR REGISTRATION |
| BV: 500 | CP: 2 |
| ACCEPTANCE CRITERIAList 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 ACUSTOMERI WANT TO VIEW THE PRICESO THAT I CAN ORDER THE FOOD |
| BV: 50 | CP: 1 |
| Acceptance Criteria :1. Display price in the list of menu items |

|  |  |  |
| --- | --- | --- |
| User Story No:7 | Tasks:2 | Priority: LOW |
| AS A CUSTOMERI 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
 |

|  |  |  |
| --- | --- | --- |
| User Story No: 8 | Tasks:2 | Priority: MEDIUM |
| AS A RESTAURANT OWNERI WANT TO PROVIDE TIME SLOTSSO 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 OWNERI WANT TO VIEW RESTAURANT REVENUE REPORT SO THAT I CAN VIEW THE RESTAURANT’S REVENUE |
| BV: 200 | CP: 3 |
| Acceptance Criteria : Select ReportsSelect Revenue Reports Select to and from date Select Region (can select all) Generate ReportDownload Report in EXCEL |

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| --- | --- | --- |
| User Story No: 10 | Tasks: 03 | Priority: High |
| AS A REG ADMINI 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 DATECLINCK ON GENERATE REPORT WHICH INCLUSES RESTAURANTS ID, NAME, REVENUECLICK ON DOWNLOAD REPORT SHOULD BE IN EXCEL |

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

|  |  |  |
| --- | --- | --- |
| User Story No: 12 | Tasks: 02 | Priority: High |
| AS A CUSTOMERI 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
 |

## 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). 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.

|  |
| --- |
| 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

**1. User Registration**

**User Story:** As a farmer, I want to register on the platform so that I can access agricultural products.
**Acceptance Criteria:**

* The system should allow users to sign up with email, phone number, and password.
* Users should receive a verification OTP on their phone/email.
* Registration should be completed only after successful OTP verification.
**BV:** 10 | **CP:** 5

**2. User Login**

**User Story:** As a registered farmer, I want to log in so that I can access my account.
**Acceptance Criteria:**

* Users should be able to log in using their registered email/phone and password.
* The system should allow password reset via OTP verification.
**BV:** 8 | **CP:** 4

**3. Product Browsing**

**User Story:** As a farmer, I want to browse through available agricultural products so that I can choose the best ones.
**Acceptance Criteria:**

* Users should be able to see all available products categorized by type.
* Users should be able to filter and search for products.
**BV:** 10 | **CP:** 6

**4. Product Details View**

**User Story:** As a farmer, I want to view detailed information about a product so that I can make an informed decision.
**Acceptance Criteria:**

* Users should be able to see product descriptions, prices, and reviews.
* Users should see stock availability.
**BV:** 9 | **CP:** 5

**5. Add to Cart**

**User Story:** As a farmer, I want to add products to my cart so that I can purchase them later.
**Acceptance Criteria:**

* Users should be able to add/remove products to/from their cart.
* The system should update cart items and total price dynamically.
**BV:** 10 | **CP:** 6

**6. Checkout Process**

**User Story:** As a farmer, I want to proceed to checkout so that I can place my order.
**Acceptance Criteria:**

* Users should be able to review their cart before finalizing the purchase.
* Users should be able to enter/select their shipping address.
**BV:** 12 | **CP:** 7

**7. Payment Integration**

**User Story:** As a farmer, I want to make secure online payments so that I can complete my purchase.
**Acceptance Criteria:**

* Users should have multiple payment options (Credit/Debit Card, UPI, Net Banking).
* Transactions should be processed securely with confirmation messages.
**BV:** 15 | **CP:** 8

**8. Order Confirmation**

**User Story:** As a farmer, I want to receive order confirmation so that I can track my purchase.
**Acceptance Criteria:**

* Users should receive a confirmation email/SMS with order details.
* The order status should update to "Confirmed" in their profile.
**BV:** 10 | **CP:** 5

**9. Order Tracking**

**User Story:** As a farmer, I want to track my order so that I can know when it will be delivered.
**Acceptance Criteria:**

* Users should be able to see order status updates.
* Users should receive SMS/email notifications for status changes.
**BV:** 12 | **CP:** 6

**10. Product Review & Rating**

**User Story:** As a farmer, I want to review and rate products so that I can help other users.
**Acceptance Criteria:**

* Users should be able to give a rating (1-5 stars) and write a review.
* Users should see existing reviews on the product page.
**BV:** 8 | **CP:** 5

**11. Wishlist Feature**

**User Story:** As a farmer, I want to save products to my wishlist so that I can purchase them later.
**Acceptance Criteria:**

* Users should be able to add/remove products to/from their wishlist.
* Wishlist items should be saved to the user’s profile.
**BV:** 8 | **CP:** 4

**12. Customer Support Chat**

**User Story:** As a farmer, I want to contact customer support so that I can resolve my issues quickly.
**Acceptance Criteria:**

* Users should have access to a live chat or chatbot feature.
* Users should receive responses within a specified time.
**BV:** 12 | **CP:** 7

**13. Address Management**

**User Story:** As a farmer, I want to save multiple delivery addresses so that I can choose the correct one during checkout.
**Acceptance Criteria:**

* Users should be able to add/edit/delete addresses.
* The system should allow users to set a default address.
**BV:** 8 | **CP:** 4

**14. Bulk Order Discounts**

**User Story:** As a farmer, I want discounts for bulk purchases so that I can save money.
**Acceptance Criteria:**

* System should automatically apply discounts for bulk orders.
* Discount details should be visible before checkout.
**BV:** 10 | **CP:** 5

**15. Coupon Code System**

**User Story:** As a farmer, I want to apply coupon codes so that I can get discounts on my purchases.
**Acceptance Criteria:**

* Users should be able to enter and validate coupon codes.
* Discounts should be applied dynamically.
**BV:** 10 | **CP:** 6

**16. Mobile App Access**

**User Story:** As a farmer, I want a mobile app so that I can shop conveniently from my phone.
**Acceptance Criteria:**

* The platform should be accessible on Android/iOS.
* App should provide the same functionality as the website.
**BV:** 15 | **CP:** 8

**17. Multi-Language Support**

**User Story:** As a farmer, I want the website/app to be available in my local language so that I can use it easily.
**Acceptance Criteria:**

* Users should be able to select their preferred language.
* All product details and UI elements should update accordingly.
**BV:** 10 | **CP:** 6

**18. Farmer Community Forum**

**User Story:** As a farmer, I want a discussion forum so that I can interact with other farmers and share knowledge.
**Acceptance Criteria:**

* Users should be able to create posts and comment on discussions.
* Users should be able to like and share posts.
**BV:** 12 | **CP:** 7

**19. Refer and Earn**

**User Story:** As a farmer, I want to refer my friends and earn rewards so that I can benefit from inviting others.
**Acceptance Criteria:**

* Users should be able to send referral links.
* Rewards should be credited once the referred user makes a purchase.
**BV:** 10 | **CP:** 5

**20. SMS & Email Notifications**

**User Story:** As a farmer, I want to receive SMS and email updates so that I stay informed about my orders and offers.
**Acceptance Criteria:**

* Users should receive alerts for order confirmations, delivery status, and promotions.
* Users should be able to enable/disable notifications.
**BV:** 9 | **CP:** 4

**21. Subscription Model**

**User Story:** As a farmer, I want a subscription service so that I can receive my essential products every month automatically.
**Acceptance Criteria:**

* Users should be able to subscribe to specific products.
* Subscription payments should be deducted automatically.
**BV:** 12 | **CP:** 7

**22. Supplier Registration**

**User Story:** As a vendor, I want to register on the platform so that I can list and sell my products.
**Acceptance Criteria:**

* Vendors should be able to sign up and provide necessary business details.
* Vendors should receive approval before listing products.
**BV:** 15 | **CP:** 8

**23. Delivery Partner Integration**

**User Story:** As a logistics provider, I want to integrate with the platform so that I can manage deliveries efficiently.
**Acceptance Criteria:**

* Orders should be assigned to delivery partners automatically.
* Users should see estimated delivery time.
**BV:** 14 | **CP:** 7

**24. GST Invoice Generation**

**User Story:** As a farmer, I want a GST-compliant invoice so that I can use it for business accounting.
**Acceptance Criteria:**

* System should generate invoices with GST details.
* Users should be able to download invoices.
**BV:** 10 | **CP:** 5

**25. Advanced Product Filters**

**User Story:** As a farmer, I want advanced filters so that I can find the right product easily.
**Acceptance Criteria:**

* Users should be able to filter products by price, brand, category, and rating.
**BV:** 8 | **CP:** 4

**26. Loyalty Points System**

**User Story:** As a farmer, I want to earn points on purchases so that I can redeem them for discounts.
**Acceptance Criteria:**

* Points should be added automatically on successful purchases.
* Users should be able to redeem points at checkout.
**BV:** 12 | **CP:** 6

**27. AI-Based Product Recommendations**

**User Story:** As a farmer, I want personalized product suggestions so that I can find relevant items quickly.
**Acceptance Criteria:**

* System should recommend products based on user purchase history.
**BV:** 14 | **CP:** 7

**28. Complaint Management**

**User Story:** As a farmer, I want to raise complaints and track resolution status.
**Acceptance Criteria:**

* Users should be able to submit complaints with details.
* System should update complaint status dynamically.
**BV:** 10 | **CP:** 5

**29. Admin Dashboard**

**User Story:** As an admin, I want a dashboard to track sales, orders, and user activity.
**Acceptance Criteria:**

* The dashboard should display real-time statistics.
* Admins should be able to filter data by date and category.
**BV:** 15 | **CP:** 8

**30. Order Cancellation & Refund**

**User Story:** As a farmer, I want to cancel orders and request refunds if needed.
**Acceptance Criteria:**

* Users should be able to cancel orders before shipment.
* Refunds should be processed automatically for eligible cases.
**BV:** 12 | **CP:** 6

**31. Secure User Data**

**User Story:** As a farmer, I want my data to be secure so that I can shop without worries.
**Acceptance Criteria:**

* User passwords should be encrypted.
* Platform should comply with data protection regulations.
**BV:** 15 | **CP:** 8

**32. Stock Management**

**User Story:** As a vendor, I want to update my product inventory in real-time.
**Acceptance Criteria:**

* Vendors should be able to update stock quantity.
* System should display "Out of Stock" when applicable.
**BV:** 12 | **CP:** 7

**33. Voice Search**

**User Story:** As a farmer, I want to search for products using voice commands.
**Acceptance Criteria:**

* Users should be able to activate voice search.
* Search results should display relevant products.
**BV:** 12 | **CP:** 6

**34. Order Analytics**

**User Story:** As a farmer, I want to see my past purchases and spending trends.
**Acceptance Criteria:**

* Users should have a dashboard showing order history and spending insights.
**BV:** 10 | **CP:** 5

**35. Fraud Detection System**

**User Story:** As an admin, I want an automated fraud detection system so that I can prevent fraudulent transactions.
**Acceptance Criteria:**

* The system should flag suspicious transactions based on predefined patterns.
* Admins should receive alerts for manual review.
**BV:** 14 | **CP:** 7

**36. Seasonal Discounts & Offers**

**User Story:** As a farmer, I want seasonal discounts so that I can save money on bulk purchases.
**Acceptance Criteria:**

* Admins should be able to set up seasonal offers dynamically.
* Discounts should be applied automatically at checkout.
**BV:** 12 | **CP:** 6

**37. Chatbot Assistance**

**User Story:** As a farmer, I want a chatbot that can help me navigate the platform easily.
**Acceptance Criteria:**

* Users should be able to ask common queries via chatbot.
* Chatbot should provide instant responses or escalate to human support if needed.
**BV:** 10 | **CP:** 5

**38. Multi-Currency Support**

**User Story:** As an international customer, I want to pay in my local currency so that I can avoid conversion issues.
**Acceptance Criteria:**

* The system should support multiple currency conversions.
* Exchange rates should be updated dynamically.
**BV:** 14 | **CP:** 7

**39. Farming Tips & Guidance**

**User Story:** As a farmer, I want expert farming tips so that I can improve my crop yield.
**Acceptance Criteria:**

* The platform should provide blogs, videos, and guides on best farming practices.
* Users should be able to bookmark useful content.
**BV:** 12 | **CP:** 6

**40. Affiliate Marketing Program**

**User Story:** As an influencer, I want to promote products and earn commissions so that I can generate income.
**Acceptance Criteria:**

* Users should be able to generate affiliate links.
* The system should track purchases made through affiliate links and calculate commissions.
**BV:** 15 | **CP:** 8

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

Business Value and Complexity Points

An **Epic** is a large body of work that can be broken down into smaller tasks called user stories. It represents a significant business need, feature, or requirement that cannot be completed in a single iteration and spans multiple sprints or releases. Epics help in organizing and managing work at a higher level.

 **Epic 1 (Online Payment System):** High Business Value (critical for revenue), High Complexity (security, compliance, multiple integrations).

 **Epic 2 (Customer Support Chatbot):** Moderate Business Value (enhances customer experience), Medium Complexity (AI training, NLP integration).

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

* **Business Value (BV):** This tells us how useful or important a feature is for the business. If something increases sales, improves customer satisfaction, or makes processes smoother, it has high BV.
* **Complexity Points (CP):** This measures how hard or time-consuming a task is. If something takes a lot of coding, testing, or has dependencies, it has high CP.

**Example:**
Imagine building a **loyalty rewards program** for an online store:

* **BV:** High (because it attracts and retains customers).
* **CP:** Medium to High (since it involves tracking points, integrating discounts, and managing user data).

# Product Backlog

Your User stories will go into Product Back log

|  |
| --- |
| Question 5 –Explain about Sprint– 5 Marks |

## Sprint Understanding

What is sprint Duration: 2 Weeks - Your sprint Value

Scrum is a subunit of Sprint.

What is scrum Duration: 1 day – Your scrum Value ? PBI: Product Backlog Item

Task: Unit of Work done by 1 Developer in 1 Scrum WIP: Work In Progress

Sprint Backlog

|  |  |  |  |
| --- | --- | --- | --- |
| PBI | Tasks | WIP | Done |
| RegistrationLoginAdd ResturantsOrder FoodMake PaymentTrack DeliveryCust Feedback | 3233333 | 2220333 | 1013000 |

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

**Product Backlog:**

The **Product Backlog** is like a shopping list of everything that needs to be done for the project. It includes all features, improvements, and bug fixes that the team might work on in the future. This list keeps changing as new ideas come up or priorities shift.

 Example: If you are building an **Online Agriculture Products Store**, the Product Backlog might have tasks like:

* Add a payment gateway
* Improve product search
* Create a farmer support chat system

**Sprint Backlog:**

The **Sprint Backlog** is a smaller list taken from the Product Backlog. It contains only the tasks the team has decided to complete in the current sprint (usually 1-4 weeks). These are the high-priority tasks that the team commits to finishing within the sprint.

 Example: For the same **Online Agriculture Products Store**, the Sprint Backlog for one sprint might include:

* Design the homepage
* Set up login and signup
* Add product categories

 **Key Difference:**

* **Product Backlog = Everything that needs to be done (big list)**
* **Sprint Backlog = What will be done in the current sprint (smaller list)**

This way, work is planned in steps, ensuring steady progress without overwhelming the team.

Sprint Planning Meeting: All 8 Scrum Developers will gather before the sprint starts and understand how many user stories, they can develop in 1 sprint (2 weeks), and move them from the product Backlog to the sprint Backlog. They take inputs from Sprint Retrospective meeting.

Scrum Meeting – Daily Stand-up Meeting

End of every Scrum, Scrum Developers will participate in Scrum meeting. Here they must answer 3 Questions.

1. What task did you work in this scrum?
2. What task will you work on next scrum?
3. Any Challenges/impediments? When you will complete the user story?

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

An **Impediments Log** is a list of problems that slow down or block the team's progress in a project. These issues can be anything that stops the team from completing their work smoothly. The Scrum Master or Project Manager tracks these impediments and helps remove them.

 **Two Examples of Impediments:**

1️. **Delay in API Integration** – The development team is waiting for the API from a third-party vendor, and without it, they cannot complete the payment feature.
2️. **Lack of Test Environment** – The testing team does not have access to a proper test server, which delays the testing of new features.

 The **Impediments Log** helps keep track of such issues so they can be resolved quickly, ensuring smooth project progress.

Impediments Log:

|  |
| --- |
| All challenges faced by the team will be logged in this impediments logA sick team memberLack of system knowledgeLack of management support |

Once the Sprint is completed

1. From the Done state of the sprint Backlog, we will product Increment and we can deliver it to the client
2. Sprint Retrospective meeting: Only the Scrum Developers will participate and will discuss about Challenges faced and come up with lessons learnt. We can use these lessons learnt in Sprint planning meeting to select user stories for the next sprint.
3. Sprint Review meeting: All Stakeholders like Scrum Developers, Product owner, Scrum master, Client, 3rd party reviewers will participate. What they discuss is
	* Velocity – How many CP is covered in this sprint
	* Sprint Burn Down Chart



* + Product Burn Down Chart



* + Product insights for improvement

## Sprint 1

|  |
| --- |
| Start Time: 11:00 AM End Time: 13:00 Duration: 2 hrs |

#### Sprint Planning Meeting

|  |
| --- |
| **Participants** |
| **Discussion Points:** Discussed on the Sprint Velocity and the BV with the user stories. Discussed withthe associates on resources provided to them and also communicated to the team on sprint duration as well as expectations from the client. |
| **User Stories Selected: 10 (MVP)** |

Sprint Backlog

|  |  |  |  |
| --- | --- | --- | --- |
| PBI | Tasks | WIP | Done |
| 10 | 20 | 0 | 10 |

Prepare Tasks from PBI

How many Scrums, we will have in this sprint? Allocate Tasks to Developers

## Scrum 1

|  |
| --- |
| Start Time: End Time: Duration: |

Participant and Task Selected

Scrum Meeting

End of every Scrum, Scrum Developers will participate in Scrum meeting. Here they must answer 3 Questions.

1. What task did you work in this scrum?
2. What task will you work on next scrum?
3. Any Challenges/impediments? When you will complete the user story?

Scrum 2

Scrum 3

Scrum 4

Repeat the same activities for all scrums

## Sprint 1 – Closing Activities

From the Done state of the sprint Backlog, we will product Increment and we can deliver it to the client What is the Product Increment we made now?

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| In this sprint, we completed **10 user stories** (MVP), meaning we now have a working feature or a set of functionalities that can be used by the client.  |
| **Example Product Increment:*** **User Registration & Login:** Farmers can create accounts and log in.
* **Product Listing Page:** Farmers can view available fertilizers, seeds, and pesticides.
* **Basic Search Functionality:** Users can search for agricultural products.
* **Cart & Checkout:** Farmers can add items to the cart and proceed to checkout.
* **Order Summary Page:** Users can review orders before purchasing.
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**Sprint Retrospective meeting:** Only the Scrum Developers will participate and will discuss about Challenges faced and come up with lessons learnt. We can use these lessons learnt in Sprint Planning Meeting to select user stories for the next sprint.

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| Write here **Participants:** Only Scrum Developers**Purpose:** Reflect on Sprint 1, discuss challenges faced, and identify lessons learned for improvement in future sprints. **Challenges Faced:**1️.**Delayed API Integration** – Some external APIs were not ready, slowing down development.2️. **Unclear Requirements** – Some user stories lacked detailed acceptance criteria, leading to confusion.3️. **Environment Issues** – Developers faced access issues in the testing environment, causing delays.4️. **Task Overload** – Some developers had more tasks than expected, leading to bottlenecks. |
| **Lessons Learned & Action Points for Next Sprint:*** **Better Requirement Clarity** – Ensure detailed user stories with clear acceptance criteria before development starts.
* **Early API Coordination** – Align with third-party vendors earlier to avoid delays. **Testing Environment Setup Beforehand** – Ensure all required environments are accessible before development begins.
* **Balanced Task Allocation** – Distribute tasks more evenly among team members.
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**Sprint Review meeting:** All Stakeholders like Scrum Developers, Product owner, Scrum master, Client, 3rd party reviewers will participate. What they discuss is

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| We as team, **1.Demonstrated the Completed Work** – Showed the **Product Increment** (completed user stories) to stakeholders.**2️.Gathered Feedback from the Client** – Discussed whether the completed features meet expectations and if any improvements are needed.**3.** **Reviewed Business Value Delivered** – Explained how the implemented features align with business goals.**4️.Discussed Any Changes Needed** – Noted any modifications or enhancements suggested by the client or reviewers.**5️.Planned for Next Steps** – Based on feedback, considered changes for future sprints and discussed upcoming priorities. |
| **Key Takeaways for Next Sprint:*** **Any new requirements or changes will be added to the Product Backlog.**
* **Stakeholder feedback will be considered in the next Sprint Planning Meeting.**
* **The team will focus on improving efficiency based on lessons learned.**
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| Question 8 – Explain Velocity of the Team – 1 Marks |

Velocity – How many CP is covered in this sprint

**Velocity of the Team**

Velocity is the **speed of work** done by the team in one sprint. It shows **how many Complexity Points (CP)** the team completed during the sprint.

**Velocity in This Sprint**

If the team planned **20 CP** and completed **10 CP**, then the velocity for this sprint is **10 CP**.

 **Why is Velocity Important?**

* Helps in **predicting** how much work can be completed in future sprints.
* Helps in **better sprint planning** by knowing the team's actual capacity.

 **Example:**
If a team’s velocity is **10 CP per sprint**, and there are **40 CP left**, we can estimate that the project will need **4 more sprints** to finish the remaining work.

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

### Sprint Burn down Chart

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### Product Burn down Chart



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

**Product Grooming (Backlog Refinement)**

Product Grooming is when the team **reviews and updates the Product Backlog** to make sure everything is clear and ready for future sprints. This helps in smooth sprint planning.

 **What Happens in Product Grooming?**

1️. **Add New User Stories** – If new requirements come up, they are added to the backlog.
2️. **Refine Existing User Stories** – Improve details, update acceptance criteria, and clarify doubts.
3️. **Prioritize Work** – Decide which user stories are most important for the next sprint.
4️. **Estimate Complexity Points (CP)** – Assign effort levels to tasks so the team knows how much work is involved.

 **Why is Product Grooming Important?**

* Keeps the backlog clean and **well-organized**
* Helps in **better sprint planning**
* Reduces confusion and last-minute changes

**Product insights for improvement**

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| Used for product grooming**Product Insights for Improvement:**Product insights refer to data-driven observations and feedback collected from users, market trends, and performance metrics to enhance a product’s features, usability, and overall value. These insights help identify gaps, user pain points, and opportunities for innovation.**Used for Product Grooming:**Product grooming (or backlog refinement) involves continuously reviewing and updating product features, requirements, and priorities to ensure alignment with business goals and user needs. Product insights play a crucial role in grooming by guiding decision-making, prioritizing feature development, and refining user stories for better implementation.4o |

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

**Team Experiences with Sprint 1**

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| **Scrum Master: The Scrum Master is like a coach for the team. They make sure the Scrum process runs smoothly and help remove any blockers.** **Responsibilities:1️.Helps the team follow Scrum rules and best practices.2️. Removes obstacles so developers can work without issues.3️. Conducts Scrum meetings and keeps the team focused.4️. Supports the Product Owner and developers to improve productivity.** |

#### Product Owner

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| **You** acted as Product Owner.The **Product Owner** is the **bridge between the client and the team**. They decide **what work** is important and make sure the team builds the **right product**. **Responsibilities:****1️.Manages the Product Backlog** – Adds, updates, and prioritizes user stories.**2️.** **Defines Business Value** – Makes sure the team works on the most valuable features.**3️.Clarifies Requirements** – Answers team questions and ensures they understand user needs.**4️.** **Reviews Completed Work** – Checks if features meet expectations and provides feedback.The **Product Owner** acts as a **bridge** between the business and the development team. They focus on **what needs to be built** by:**Managing the Product Backlog** – Adding, updating, and prioritizing user stories. **Defining Business Value** – Making sure the team works on features that provide the most value.**Clarifying Requirements** – Ensuring developers understand what needs to be built. **Reviewing Completed Work** – Checking if the team’s work meets expectations and making necessary adjustments. |

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

Scrum follows an **Agile framework**, where meetings (also called **Scrum Events**) help teams plan, track, and improve their work. These meetings ensure smooth communication, progress monitoring, and continuous improvement. The four key Scrum meetings are:

**1️. Sprint Planning Meeting**

 **When?** Before the sprint begins
 **Who Attends?** Scrum Master, Product Owner, Development Team
 **Purpose:** Decide what work will be done in the upcoming sprint.

 **Discussion Points:**

* The **Product Owner** presents the **Product Backlog** (list of tasks & features).
* The **team selects user stories** based on priority and team capacity.
* Tasks are **broken down, estimated (CP - Complexity Points), and assigned**.
* The Scrum Master ensures that sprint goals are clear and achievable.

 **Outcome:** A clear Sprint Goal and a **Sprint Backlog** (list of tasks for the sprint).

**2️.Daily Scrum (Daily Stand-up Meeting)**

 **When?** Every day during the sprint (15 minutes)
 **Who Attends?** Scrum Master & Development Team
 **Purpose:** A quick check-in to track progress and remove blockers.

 **Each team member answers three questions:**
 What did I complete yesterday?
 What will I work on today?
 Any blockers or challenges?

**3️. Sprint Review Meeting**

 **When?** At the end of the sprint
 **Who Attends?** Scrum Master, Product Owner, Development Team, Client, 3rd Party Reviewers
**Purpose:** Present the completed work and gather feedback.

 **Discussion Points:**

* The team **demonstrates the finished product increment** (completed user stories).
* The **client reviews the features** and provides feedback.
* Any required **changes or new requests** are noted for future sprints.

 **Outcome:** A reviewed product increment, feedback recorded, and possible backlog updates.

**4️. Sprint Retrospective Meeting**

 **When?** After Sprint Review (before the next Sprint Planning)
 **Who Attends?** Scrum Master & Development Team
 **Purpose:** Reflect on the sprint, identify challenges, and improve team performance.

 **Discussion Points:**

* What went **well** in the sprint?
* What **challenges** did we face?
* What can we **improve** for the next sprint?

 **Key learning points** are documented and applied to the next sprint for **continuous improvement**.

**Conclusion:**

These **four Scrum meetings** ensure that the team stays organized, removes obstacles, receives feedback, and continuously improves. **Proper execution of these meetings leads to higher productivity and better product delivery.**

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

**Sprint Size vs. Scrum Size**

 **Sprint Size:**

* Sprint size refers to the **total amount of work** planned for a sprint.
* It depends on **team capacity, complexity points (CP), and sprint duration** (usually 1–4 weeks).
* Example: If a sprint is **2 weeks long**, the team might commit to **10 user stories** with a total of **50 CP**.

**Scrum Size:**

* Scrum size refers to the **number of people** in the Scrum team.
* Typically, a Scrum team has **7 ± 2 members** (i.e., 5 to 9 people).
* It includes the **Scrum Master, Product Owner, and Developers**.

**Key Difference:**

* **Sprint Size** = Workload in a sprint
* **Scrum Size** = Team members in a Scrum team

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

**Definition of Ready (DoR) & Definition of Done (DoD)**

 **Definition of Ready (DoR):**

* A **user story** or task is considered **"Ready"** when it has **clear requirements** and is prepared for development.
* It ensures that the team has all necessary **details, acceptance criteria, and approvals** before starting work.

 **Example:**
A user story is "Ready" when:

 Requirements are clearly defined.
 Dependencies are resolved.
Acceptance criteria are written.

**Definition of Done (DoD):**

* A **user story** or task is considered **"Done"** when it meets all quality standards and is ready for release.
* Ensures **code is tested, reviewed, and meets business needs** before delivery.

 **Example:**
A user story is "Done" when:

Code is developed and reviewed.
 Testing (unit, integration, acceptance) is completed.
Documentation is updated.

 **Key Difference:**

**DOR** = When work **can start**

**DoD** = When work **is complete**

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

**Prioritization Techniques & MVP**

 **Prioritization Techniques:**
Prioritization helps decide which features or tasks should be completed **first** based on business value. Some common techniques include:

1️.**MoSCoW Method:**

* **M**ust Have – Critical features needed for the product.
* **S**hould Have – Important but not urgent.
* **C**ould Have – Nice to have but not necessary.
* **W**on’t Have – Not required in the current release.

2️. **Kano Model:**

* **Basic Needs** – Features users expect.
* **Performance Needs** – Features that improve satisfaction.
* **Delighters** – Unexpected features that create excitement.

3️. **WSJF (Weighted Shortest Job First):**

* Prioritizes tasks based on **Business Value ÷ Cost of Delay** to deliver the most value quickly.

🔹 **Minimum Viable Product (MVP):**

* **MVP** is the **simplest version of a product** that delivers core value with **minimum features**.
* It helps test the market and get early user feedback **before full development**.

**Example:**
For an **Online Agriculture Store**, an MVP might include:
 User login & product catalog.
 Basic order placement & payment.
Essential customer support.

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

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| Aspect | Business Analyst (BA) | Product Owner (PO) |
| Role | Analyzes business needs and documents requirements. | Owns the product vision and prioritizes the backlog. |
| Focus | Ensures requirements align with business goals. | Ensures the product delivers maximum value to users. |
| Backlog Involvement | Helps gather and refine requirements for the backlog. | Directly manages and prioritizes the product backlog. |
| Stakeholder Interaction | Works with stakeholders to gather insights. | Acts as a bridge between business and development teams. |
| Decision Making | Provides recommendations based on analysis. | Makes final decisions on features and priorities. |
| Output | Requirement documents, process flows, user stories. | Approved backlog items, product roadmap. |

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

**PRODUCT OWNER - 3 YEARS EXPERIENCE**

📍 **Name:** **Rahul Sharma**
📍 **Phone:** **+91 98765 43210**
📍 **Email:** **rahul.sharma@email.com**
📍 **LinkedIn:** **linkedin.com/in/rahulsharma**

**🎯 OBJECTIVE**

Results-driven **Product Owner** with **3 years of experience** in Agile environments. Skilled in **product backlog management, stakeholder collaboration, and delivering high-value features**. Strong expertise in **prioritization, sprint planning, and user story refinement** to ensure seamless product development.

**💼 PROFESSIONAL EXPERIENCE**

**Product Owner | ABC Tech Solutions | Jan 2022 – Present**

📍 **Key Responsibilities:**

* Managed and prioritized the **Product Backlog** based on business value.
* Collaborated with **stakeholders, development teams, and UX designers** to define and refine user stories.
* Led **Sprint Planning, Daily Stand-ups, Sprint Reviews, and Retrospectives** to ensure smooth execution.
* Defined **MVP (Minimum Viable Product)** and ensured timely delivery of critical features.
* Used **prioritization techniques (MoSCoW, WSJF, and Kano Model)** to focus on high-impact features.
* Worked closely with QA to ensure that acceptance criteria were met before release.

📍 **Key Achievements:**
✅ Successfully launched a **customer self-service portal**, increasing user engagement by **30%**.
✅ Improved sprint velocity by **25%** through backlog refinement.
✅ Reduced time-to-market by **20%** through effective prioritization.

**🛠 SKILLS**

✔ Product Backlog Management
✔ User Story Writing & Refinement
✔ Stakeholder Management
✔ Agile & Scrum Methodologies
✔ Sprint Planning & Execution
✔ Data-Driven Decision Making
✔ Jira, Confluence, Trello

**🎓 EDUCATION**

🎓 **Bachelor of Technology (B.Tech) in Computer Science** – Delhi University – 2019

📌 **Certifications:**

* **Certified Scrum Product Owner (CSPO) – 2021**
* **Agile & Scrum Training – Scrum Alliance**