

## Question 1- write Agile Manifesto

The Agile Manifesto comprises of 4 values and 12 principles: - Values:

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.

Principles:

- Satisfying Customers Through Early & Continuous Delivery
- Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
- Deliver working software frequently, from a couple of weeks to a couple of months, with a preference for the shorter timescale.
- Businesspeople and developers must work together daily throughout the project.
- Build projects around motivated individuals. Give them the environment and support they need and trust them to get the job done.
- The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
- Working software is the primary measure of progress.
- Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
- Continuous attention to technical excellence and good design enhances agility.
- Simplicity—the art of maximizing the amount of work not done—is essential.
- The best architectures, requirements, and designs emerge from self-organizing teams.
- At regular intervals, the team reflects on becoming more effective, then tunes and adjusts its behaviour accordingly.

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

User Story No: 1	Tasks: 01	Priority: Highest
AS BUSINESS OWNER I WANT TO VIEW RESTAURANT REVENUE REPORT SO THAT I CAN VIEW RESTAURENT REVENUE REPORT		
BV:1000		CP:2

Acceptance Criteria:

Select on Revenue report section  
Select to and from date (DD/MM/YEAR)  
Select Restaurant (Can select all)  
Select Region (Can select all)  
Generate Report  
Download report in excel

User Story No:2	Task:01	Priority: High
AS BUSINESS OWNER I WANT TO CHECK FOR ISSUES, COMPLAINTS FROM RESTAURANTS SO THAT I CAN CHECK THE ISSUES TO BE SORTED AND TRACK		
BV:500	CP:3	
Acceptance Criteria:  1.Select on Issues and Complaints section 2.View issues and complaints from restaurants which include restaurant id, restaurant name, region 3.Display issues in issues field 4.Display complaint track status in complaint field		

User Story No:3	Task:01	Priority: Highest
AS BUSINESS OWNER		
I WANT TO VIEW THE PAYMENT DETAILS		
SO THAT I CAN CHECK THE PAYMENTS FOR RESTAURANTS		
BV:1000	CP:3	
Acceptance Criteria:		
1.Select on payment file		
2.Select payment status for restaurants		
3.Select region (can select all)		
4.Select restaurant id, restaurant name (can select all)		
5.view payment status for restaurants		
6.check for pending payment file for restaurants and submit		
Business Rule: View any one payment status under view payment status:		
1.Payment was paid		
2.Payment is pending		

User Story No:4	Task:01	Priority: High
AS BUSINESS OWNER I WANT TO VIEW THE PAYMENT DETAILS SO THAT I CAN UPDATE ON PAYMENTS FOR DELIVERY BOYS		
BV:500	CP:2	
Acceptance Criteria:  1.Select on payment file 2.Select payment status for delivery boys 3.View payment update for delivery boys 4.check for pending payment file for delivery boys and submit  Business Rule: View any one payment update under view payment update: 1.Payment was paid 2.Payment is pending		

User Story No:5	Task:01	Priority: High
AS BUSINESS OWNER		
I WANT TO LOGOUT BUTTON		
SO THAT I CAN LOGOUT THE APPLICATION AT ANYTIME		
BV:500	CP:3	
Acceptance Criteria:		
Click on logout button		
Logout removes all authenticate information from application		

User Story No:6	Task:01	Priority: Highest
AS BUSINESS OWNER I WANT TO LOGIN THE APPLICATION AT ANYTIME WITH VALID USERNAME AND PASSWORD SO THAT SYSTEM CAN AUTHENTICATE DATA		
BV:1000	CP:3	

Acceptance Criteria:

Enter username and password

Click on login page

Valid Data associated to system should be accessible

User Story No:7	Task:02	Priority: High
AS ADMIN I WANT TO LOGIN THE APPLICATION AT ANYTIME WITH VALID USERNAME AND PASSWORD SO THAT SYSTEM CAN AUTHENTICATE DATA		
BV:500	CP:2	
Acceptance Criteria: Enter username and password Click on login page Valid data associated to system should be accessible		
User Story No:8	Task:02	Priority: High
AS ADMIN I WANT TO VIEW THE RESTAURANTS SO THAT I CAN APPROVE THEIR REGISTRATION		
BV:500	CP:2	
Acceptance Criteria:  List of Restaurants, Select Restaurants, Verify Restaurants details, region, approve button, reject button, Notification to the restaurant.		
User Story No:9	Task:02	Priority: High
AS ADMIN I WANT TO GET NOTIFICATION FOR APPROVE/ REJECT PROCESS FROM REGIONAL ADMIN SO THAT I CAN MAKE DECISION ON CONCERNED REQUESTS		
BV:500	CP:2	

Acceptance Criteria:

Click on regional admin approvals

Select approval/reject status

Check for approve or reject

User Story No:10

Task:02

Priority: High

AS ADMIN

I WANT TO VIEW CUSTOMER COMPLAINTS

SO THAT I CAN RESOLVE THE ISSUES

BV:500

CP:2

Acceptance Criteria:

1.Select on Issues and Complaints section

2.View issues and complaints from customer which include restaurant id, restaurant name, region

3.Display complaint in complaints field

4.Provide resolution comments and submit

User Story No:11

Task:02

Priority: High

AS ADMIN

I WANT TO VIEW RESTAURANT COMPLAINTS

SO THAT I CAN RESOLVE THE ISSUES

BV:500

CP:2

Acceptance Criteria:

1.Select on Issues and Complaints section

2.View issues and complaints from restaurant which include restaurant id, restaurant name, region

3.Display complaint in complaints field

4.Provide resolution comments to complaint raised and submit

User Story No:12

Task:02

Priority: Highest

AS ADMIN

I WANT TO APPROVE/REJECT DELIVERY BOYS

SO THAT I CAN SELECT DELIVERY BOYS

BV:1000

CP:3

Acceptance Criteria:

- 1.Select on approve/reject section
- 2.Click on Delivery boy file
- 3.View delivery boy details which include name, gender, age, phn num, nationality, govt.id proof, photo
- 4.Accept or Reject option to be selected
- 5.Get notification to delivery boy regarding selection

User Story No:13	Task:02	Priority: High
AS ADMIN		
I WANT TO APPROVE/REJECT RESTAURENTS		
SO THAT I CAN SELECT RESTAURANT		
BV:500		CP:3
Acceptance Criteria: 1.Select on approve/reject section 2.Click on restaurant file 3.View restaurant details which include restaurant name, registration details, region, phn num, photos 3.Accept or Reject option to be selected 4.Get notification to restaurant regarding selection		

User Story No:14	Task:02	Priority: High
AS ADMIN		
I WANT TO LOGOUT BUTTON		
SO THAT I CAN LOGOUT THE APPLICATION ANYTIME		
BV:500	CP:3	
Acceptance Criteria:		
Click on logout button		
Logout removes all authenticate information from application.		

User Story No:15	Task:02	Priority: High
AS ADMIN		
I WANT TO VIEW FEEDBACK OF CUSTOMERS		
SO THAT I CAN MAKE IMPROVEMENTS		
BV:500	CP:3	
Acceptance Criteria:		
In app dashboard click on feedback section		
View feedback information given by customer.		

User Story No:16	Task:02	Priority: High
AS REGIONAL ADMIN		
I WANT TO LOGIN THE APPLICATION AT ANYTIME WITH VALID		
USERNAME AND PASSWORD		
SO THAT SYSTEM CAN AUTHENTICATE DATA		
BV:500		CP:3
Acceptance Criteria:		
Enter username and password		
Click on login page		
Valid data associated to system should be accessible		

User Story No:17	Task:03	Priority: High
AS REGIONAL ADMIN		
I WANT TO MANAGE REGION WISE REPORT		
SO THAT I CAN GET DATA ON NUMBER OF RESTAURANTS AND DELIVERY BOYS		
BV:500	CP:3	
Acceptance Criteria:		
Click on regional data report		
Click on region (can select all)		
Click on restaurant region wise (can select all)		
Click on delivery boys (can select all)		
Generate data		
Download data in excel		

User Story No:18	Task:03	Priority: High
AS REGIONAL ADMIN  I WANT TO VIEW REPORT FOR RESTAURANT REVENUE  SO THAT I CAN SEE PERFORMANCE		
BV:500	CP:3	

Acceptance Criteria:

- 1.Select revenue report for restaurant
- 2.Select region dropdown
- 3.Select restaurant id, restaurant name
- 4.Select from and to date (DD/MM/YYYY)
- 5.Generate revenue report
- 6.Download report in excel

USER STORY:19	Task:03	Priority: High
AS REGIONAL ADMIN I WANT TO CHECK FOR ISSUES, COMPLAINTS FROM RESTAURANTS SO THAT I CAN CHECK THE ISSUES TO BE SORTED AND TRACK COMPLAINT		
BV:500	CP:3	
Acceptance Criteria:  1.Select on Issues and Complaints section 2.View issues and complaints from restaurants which include restaurant id, restaurant name, region 3.Diplay issues in issues field 4.Display complaint track status in complaint field		

USER STORY:20	Task:03	Priority: High
AS REGIONAL ADMIN  I WANT TO VIEW FEEDBACK OF CUSTOMERS  SO THAT I CAN MAKE IMPROVEMENTS		
BV:500		CP:3
Acceptance Criteria:  In app dashboard click on feedback section View feedback information given by customer		

USER STORY:21	Task:03	Priority: High
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AS REGIONAL ADMIN I WANT TO VIEW REFUND SO THAT I CAN MAKE PAYMENTS FOR RESTAURANT OWNERS	
BV:500	CP:3
Acceptance Criteria:  1.Select Refunds 2.Click on region wise 3.Check refund status 3.Pay outstanding refund and submit 4.View payment successful notification to regional admin for outstanding refund 5.Send notification to restaurant owner regarding payment for outstanding refund	

USER STORY:22	Task:03	Priority: High
AS REGIONAL ADMIN		
I WANT TO MANAGE REGIONAL DELIVERY BOYS		
SO THAT I CAN SEE CUSTOMER RATINGS		
BV:500	CP:3	
Acceptance Criteria:		
1.Select ratings		
2.Select region drop down		
3.Select Delivery Boys		
4.Select rating between 1-5		
5.Generate report		
6.Download report in excel		

USER STORY:23	Task:03	Priority: Highest
AS REGIONAL ADMIN I WANT TO VIEW PAYMENT FILE SO THAT I CAN MAKE PAYMENTS TO RESTAURANTS		
BV:1000	CP:3	

Acceptance Criteria:

- 1.Select payment file
- 2.Select region drop down
- 3.Select restaurant
- 4.View outstanding amount
- 5.Make payment and submit
- 6.View payment successful notification to regional admin
- 7.Send notification to restaurant owner regarding payment
- 8.Check for pending payment file and submit

USER STORY:24	Task:03	Priority: High
AS REGIONAL ADMIN MANAGE		
I WANT TO MANAGE REGIONAL RESTAURANTS		
SO THAT I CAN SEE CUSTOMER RATINGS		
BV:500	CP:2	
Acceptance Criteria:		
1.Select ratings		
2.Select region drop down		
3.Select restaurant (can select all)		
4.Select rating between 1-5		
5.Generate report		
6.Download report in excel		

USER STORY:25	Task:03	Priority: High
AS REGIONAL ADMIN		
I WANT TO LOGOUT BUTTON		
SO THAT I CAN LOGOUT OF THE APPLICATION AT ANYTIME		
BV:500	CP:3	
Acceptance Criteria:		
Click on logout button		
Logout removes all authenticate information from application.		

USER STORY:26	Task:04	Priority: Highest
AS A RESTAURANT OWNER  I WANT TO REGISTER WITH SCRUM FOODS  SO THAT I CAN USE SCRUM FOOD APPLICATION		
BV:1000	CP:3	

Acceptance Criteria:

Click on new user register

Text boxes that include restaurant name, region, address, registration number, phone number, photos

Click on register button

Generate restaurant id

View registration notification to restaurant owner

USER STORY:27	Task:04	Priority: High
AS A RESTAURANT OWNER		
I WANT TO VIEW ORDERS		
SO THAT I CAN VIEW LIST OF ORDERS		
BV:500	CP:2	
Acceptance Criteria:		
View order, Display list of orders in the tabular form.		
USER STORY:28	Task:04	Priority: High
AS A RESTAURANT OWNER		
I WANT TO VERIFY DELIVERY BOY PERSONAL DETAILS FOR		
SAFETY FEATURES		
BV:500	CP:3	
Acceptance Criteria:		
Select Delivery boy		
Select region		
Text box include delivery boy name and Phone number		
View personal information that include delivery boy name, address, phone number, age, photo.		

USER STORY:29	Task:04	Priority: High
AS A RESTAURANT OWNER		
I WANT TO CHECK REVENUE GENERATED THROUGH SCRUM		
FOODS		
SO THAT I CAN SEE THE PROFITABILITY		
BV:500	CP:3	

Acceptance Criteria:

Select revenue file  
Select from and to date  
Click on generate revenue report  
Check for profit or loss Download  
the report.

USER STORY:30	Task:05	Priority: High
AS A DELIVERY BOY  I WANT TO USE SCRUM FOOD  SO THAT I CAN USE SCRUM FOOD APPLICATION		
BV:500	CP:2	
Acceptance Criteria:  Click on new user register Text boxes that include delivery boy name, region, address, govt id proof, phone number, photo , bank account details. Click on register button Generate ID number Send successful notification to delivery boy		

USER STORY:31	Task:05	Priority: High
AS A DELIVERY BOY  I WANT TO VIEW ORDERS  SO THAT I CAN DELIVER FOOD ITEMS		
BV:500	CP:2	
Acceptance Criteria:  View order, select region, Display list of orders in the tabular form.		

USER STORY:32	Task:05	Priority: High
AS A DELIVERY BOY  I WANT TO SELECT AND ACCEPT ORDER  SO THAT I CAN DELIVER ORDER		
BV:500	CP:2	
Acceptance Criteria:  Select on order file Select region Display list of orders in the tabular form Accept/Decline order drop down View order confirmation		

USER STORY:33	Task:05	Priority: High
AS A DELIVERY BOY		
I WANT TO VIEW REVENUE GENERATED FROM SCRUM FOODS		
SO THAT I CAN SEE PROFITABILITY		
BV:500	CP:2	
Acceptance Criteria:		
Select revenue file		
Select from and to date		
Click on generate revenue report		
Check for profit or loss		
Download the report		

USER STORY:34	Task:05	Priority: High
AS A DELIVERY BOY		
I WANT TO VIEW FEEDBACK GIVEN BY CUSTOMERS		
SO THAT CAN I CAN RATE MY WORK PERFORMANCE'		
BV:500	CP:2	
Acceptance Criteria:		
In app dashboard click on feedback section		
View feedback information given by customer		

USER STORY:35	Task:06	Priority: High
AS A CUSTOMER		
I WANT TO REGISTER WITH SCRUM FOOD APPLICATION		
SO THAT I CAN ORDER FOOD		
BV:500	CP:2	
Acceptance Criteria:		
Click on new user register		
Text boxes that include name, region, delivery address, phone number.		
Click on register button Generate profile.		

USER STORY:36	Task:06	Priority: High
AS A CUSTOMER		
I WANT TO SEARCH AND VIEW RESTATURANTS		
SO THAT I CAN PLACE ORDER		
BV:500	CP:2	
Acceptance Criteria:		
Click on search option		
Text box include restaurant name, region		
View restaurants available in that region		
Select restaurant name		
Select food items		
Place the order		
USER STORY:37	Task:06	Priority: High
AS A CUSTOMER		
I WANT TO VIEW THE MENU AND PRICE		
SO THAT I CAN PLACE THE ORDER		
BV:500	CP:2	

Acceptance Criteria:

Choose the restaurant  
View the menu and price  
Select food items  
Place order

USER STORY:38

Task:06

Priority: High

AS A CUSTOMER

I WANT TO VIEW THE OFFERS  
SO THAT I CAN PLACE MY ORDER

BV:500

CP:2

Acceptance Criteria:

Select the offers and discounts  
Place order with best discount

USER STORY:39

Task:06

Priority: High

AS A CUSTOMER

I WANT TO RATE MY ORDER  
SO THAT I CAN GIVE FEEDBACK

BV:500

CP:2

Acceptance Criteria:

Click on rate my order  
Select rating option between 1-5  
Submit the rating

USER STORY:40

Task:06

Priority: High

AS A CUSTOMER

I WANT TO VIEW DELIVERY BOY CONTACT DETAILS  
SO THAT I CAN CALL TO TRACK MY ORDER

BV:500

CP:2

Acceptance Criteria:

Click on track my order

Display delivery boy name and phone number

Display tracking location

Display option to call and contact

Question 3– What is epic? Write 2 epics

An Epic can be high level description document of what client wants. Epics are helpful way to organise your work and to create hierarchy in development process, Epic can be split into number of user stories. Epic can be spread across sprints and even across agile teams. The main benefit of epics in agile project management is the structure they provide for work and If the project used under agile model the epic is utilized to:

- improve the organization of their flow of work.
- create clear priorities aligned with clients' requirements.
- bring transparency into the strategic goals.
- create a hierarchy of ideas in the product backlog (when using Scrum).

3 Major benefits of using Agile Epics:

**1. Helps teams to tackle large projects**

**2. Keeps the team focused on key goals**

**3. Improves project and sprint planning**

An epic sits between a theme and a user story in the agile development strategic hierarchy. A theme represents a team's high-level strategy for its product and user story describes what user wants.



Write 2 epics:

1. Scrum Project Name: Scrum Foods (Foods Delivery Application)

Scrum Foods (Foods Delivery Application)	Theme
Login page for customer	Epic
As a customer I want to have login page so that I can access scrum foods	User story

2. Scrum Project Name: Scrum Foods (Foods Delivery Application)

Scrum Foods (Foods Delivery Application)	Theme
Select payment mode for customer	Epic
As a customer I want to select payment mode so that I can make payment of my choice.	User story



## Question 4- What is difference between BV and CP

### **Business Value:**

Business Value is how important is this feature (user story) to the Business, Business value describe much important the user story to client. The concept of business value is fairly subjective, and it depends on the needs of organization. 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.

### **Complexity Points (CP):**

Complexity points is also known as Story Points (SP). This will be generated by scrum developers. CP is how much time is taken by developer to complete entire task. Complexity points is the effort required by the scrum developer 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 5- Explain about Sprint

### **Sprint**

A sprint is a scrum based agile methodology concept that is similar to an iteration. A sprint is time boxed to deliver specific set of user stories and produce working feature within a set time period.

Sprint is basically an iteration , A sprint is a short , time boxed period when a scrum team works to complete a set amount of work.

During sprint planning the business customer or product owner specifies the user story priority and the development team commits to the scope for a given sprint. During a sprint, user stories can be removed from the sprint scope, but the new user story cannot be added; this allows project team to focus on the goals of the sprint and deliver rapidly.

- In scrum client stakeholder or product stakeholder will be identified first.
- Next product vision will be identified – Reason of project, effected person, end user value.
- Scrum master will be starting user story work shop – scrum master will be writing user stories depending on the requirement given by client.
- For the written user stories client stakeholder will be providing acceptance criteria, Business Value, Complexity Points.
- The user stories what scrum master has created will be moved to product backlog item.
- Definition of ready – The information updated in product backlog item is called as definition of ready

- As a scrum master will arrange a meeting with scrum developers this meeting is called as sprint planning meeting – In this meeting user stories we have and BV, CP value we have will be discussed.

Sprint are of 4 types- sprint 1, sprint 2, sprint 3, sprint 4.

Sprint 1= 7 days of time

Sprint 2= 14 days of time

Sprint 3= 21 days of time Sprint

4=28 days of time.

Scrum Developers will be selecting the user stories that are placed in product backlog item, the program is developed and output is generated.

**Sprint backlog item:** Sprint backlog is the number of user stories completed in the sprint. The scrum developers will be selecting the own task, the task will be in sprint backlog item.

**Sprint Review:** In sprint review the work covered in the sprint to product owner is shown, in sprint review product owner, scrum master, scrum developer, testers will be involved. The product owner will check the task and get satisfied with the output the closing activities is done.

**Scrum meeting:** It's a daily stand-up meeting, on daily meeting will be conducted by scrum master. This provides information on what task has covered and what task will be covered or challenges to developers by scrum master.

Sprint backlog example:

#### Login to scrum foods

S.No	PBI	TASKS	OWNER/ASSIGNE	STATUS
1	As a user I want to login scrum foods so that I can access scrum foods.	Design UI for login page	Developer 1	Open
		Coding for login page	Developer 2	WIP
		Automate test	Developer 3	Done
		Code Review	Developer 1	WIP

Question 6-Explain Product backlog and sprint back log

#### Product Backlog:

- 1.Product Backlog is the ordered list of product features – These features are written in the form of user stories.
- 2.Product Backlog is prepared and maintained by product owner- Product owner may write user story with the help of the development team members and also from stakeholders to make transparent to everyone
- 3.Product backlog includes ideas, enhancement, bug fix and documentation- To keep visible to everyone like development team members and stakeholders

4.Product backlog is never complete and dynamic.

### **Sprint Backlog:**

1.Sprint Backlog is a list of items in a current sprint – When team gets together in sprint planning meeting the subset of product backlog is sprint backlog and sprint backlog indicates the work to be taken up by team during particular sprint.

2.Subset of product backlog is sprint backlog- Sprint backlog only focuses on the work items that are going to be done in the current sprint

3.Sprint backlog shows what is work not started, what is in progress and what is the work done- It shows visibility to all scrum team members regarding what is current team progress this helps the velocity of team of doing the work.

4.Used in daily scrum- In daily scrum it is important to know who is working on what, are they facing any issues and who has completed work before time.

5.Kept visible to scrum team- Information to be available for scrum team.

### Differences between Product backlog and Sprint backlog-

Product Backlog	Sprint Backlog
Product Backlog is master requirement document for entire product	Sprint backlog is a subset of product backlog
Product Backlog is owned by product owner	Sprint backlog is owned by development team
Product Backlog scope will support entire product vision	Sprint backlog scope will support sprint goal
Product backlog contains user stories, epic and features	Sprint backlog contains user stories and technical task
Product backlog will be estimated using story points	Sprint backlog will be estimated in hours
Product backlog will be created by product owner and development team	Sprint backlog will be created by development team
In Product backlog user stories will not be assigned to development team members	In Sprint backlog each user story and task will be assigned to developers.

Question 7 – What is impediments log? write 2 impediments

Impediments are nothing but issues or problems that blocks or stops the progress of scrum work. If the scrum team is having more impediments, then it reduces the overall velocity of scrum team then not able to make progress. It is responsible of scrum master to identify the impediments and resolve these impediments such as:

- Resource issues
- Technical issues/ tool issues
- Management issues
- Power failures/Network failures/Infrastructure issues
- Natural calamities.

There are two main types of impediments:

1.Team Impediments

2.Organizational Impediments

**1.Team Impediments** – Issues that the team can solve without needing external assistance. However, the team may need internal assistance from management. These types of impediments would include but are not limited to:

- Changes to the way that the team works
- Reminders for when a specific problem re-occurs
- The need for tools or workflows that can make team's work easier
- Internal measures put in place for the team to avoid repeating a prior error

**2.Organizational Impediments** – Issues that are dependent on others to solve. These issues include but are not limited to:

- Slow internet
- Issues with obtaining input from other teams or divisions
- Lack of training

Impediment Log: There should only be a *single* Impediment Log for a Scrum Master to manage

Process	Description
<b>1. Record</b>	The Daily Stand-up Meeting is the best time to document impediments in the Impediments Log as each team member reveals them. After the brief meeting, the Scrum Master will gather additional information so that the impediments can be prioritized.
<b>2. Prioritize</b>	Impediments should be prioritized based on their levels of importance and in relation to those on that are already on the log.
<b>3. Publish</b>	The Impediments Log should be made visible to everyone and posted for all to view.
<b>4. Address</b>	The Scrum Master should address the highest priority impediments from the log and ensure that it is removed so that the team can continue to reach the Sprint's objective.
<b>5. Communicate</b>	When the impediment is removed, this information should be communicated to the involved parties and the Impediments Log is updated.

Following are several tips for the removal of impediments:

- Impediments should be identified at any time. The Scrum Team should never wait until the Daily Scrum to discuss them.

- If an item will prevent the team from achieving the Sprint Goals, it's an impediment.
  - There is a distinct difference between **blockers** and **impediments**. A blocker impacts a single task and an impediment hinders overall progress.
- 
- Use an Impediments Board to ensure of adequate transparency. This means that Impediments should be included in the list of Information Radiators.
  - Track completed impediments. This information is good feedback for the Sprint Review and Retrospective meetings.
  - The Scrum Master needs to understand the organizational culture to best figure out how to remove impediments.
  - Use courage and creativity to remove impediments. Ask for forgiveness later if a bold decision needs to be made.
  - Collaborate with the Product Owner. Many impediments in Scrum are related to product management, stakeholder and supplier collaboration.
  - Don't waste time and effort in fixing incorrect problem. Make sure that the focus is on the real problem(s).

#### Question 8 – Explain Velocity of the Team

Velocity in agile terms means the average amount of work a team complete in one delivery cycle which is typically a sprint or release for scrum teams or a time period such as a week or a month. Velocity in agile is the total effort estimates associated with user stories that were completed during an iteration. The rate at which the team can deliver is a key agile metric known as velocity

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

##### Sprint Burn Down Chart:

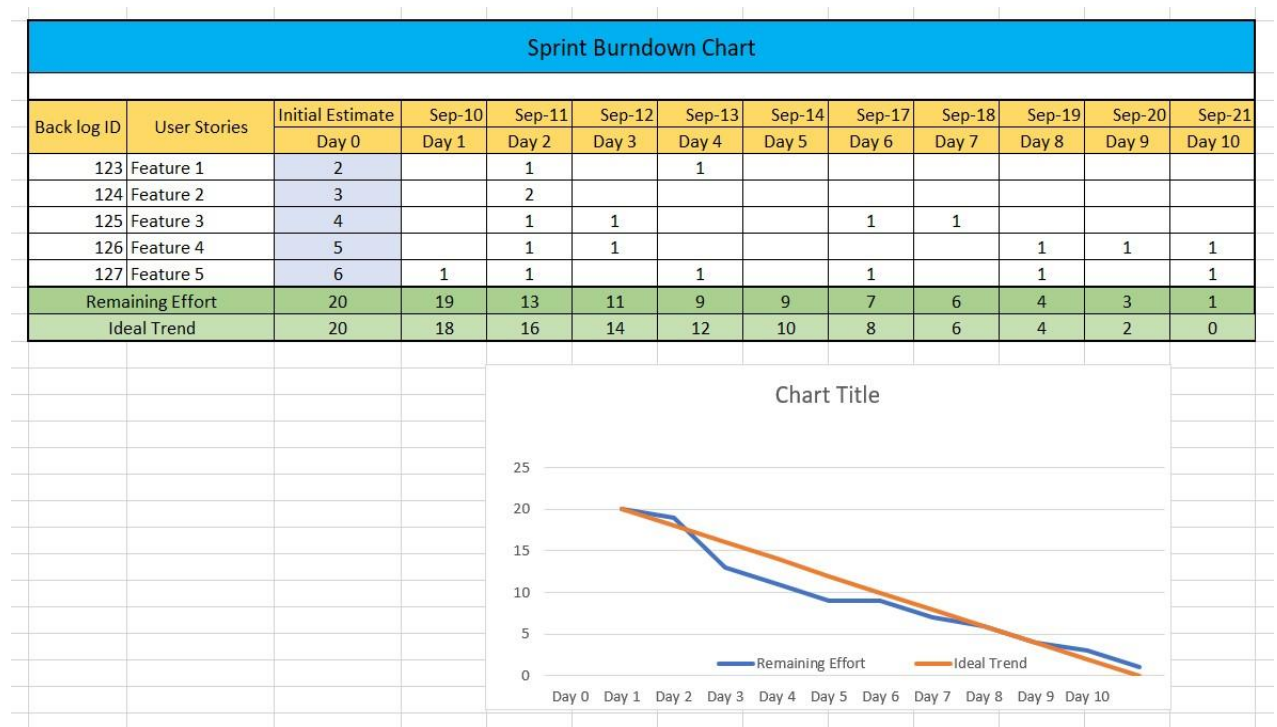
A sprint burndown chart **shows how much work remains in a specific iteration**. Sprint burn down chart shows:

- Total Efforts -Total effort require to all the work items done
- Amount of effort remaining- Amount of work done is indicated by sprint burn down chart.
- Number of days in sprint and days past- Immediately views the days that are passed.
- Ideal Trend -For a given day how much amount of work need to be done
- Current Trend- Provides exact view of particular effort done in completing particular work item.

##### Product Burn Down Chart:

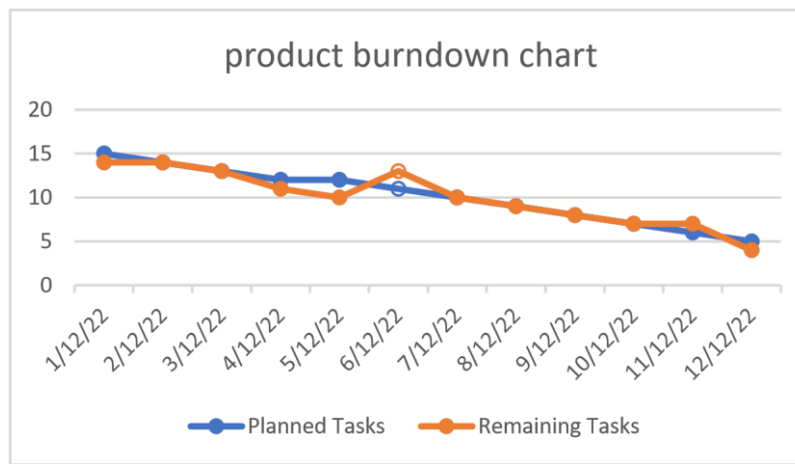
A product burndown chart **shows how much work remains for the entire project**. A product burndown chart is used by the product owner for product management purposes. The chart displays story points for each completed sprint, so it depicts the completion of requirements over time.

Sprint Burndown Chart:



Product Burndown Chart:

Time		Tasks	
Day	Dates	Planned Tasks	Remaining Tasks
1	1-12-22	15	14
2	2-12-22	14	14
3	3-12-22	13	13
4	4-12-22	12	11
5	5-12-22	12	10
6	6-12-22	11	13
7	7-12-22	10	10
8	8-12-22	9	9
9	9-12-22	8	8
10	10-12-22	7	7
11	11-12-22	6	7
12	12-12-22	5	4



#### Question 10- Explain about product grooming

Product grooming is the meeting held during sprint, In product grooming team reviews and provides input to product owners.

In this meeting product owner might explain –

- 1) What is coming in next sprint or Development team will have a meeting with product owner what is required to certain functionality done
- 2) What is required to be done before sprint planning meeting.

**Product Grooming** is a meeting of the Scrum team in which the product backlog items are discussed and the next sprint planning is prepared. Product grooming is critical in product management because it means keeping the backlog up to date and getting backlog items ready for upcoming sprints. Backlog grooming is a regular session where backlog items are discussed, reviewed, and prioritized by product managers, product owners, and the rest of the team. **The primary goal of backlog grooming is to keep the backlog up-to-date and ensure that backlog items are prepared for upcoming sprints.**

Product owners should always keep the backlog tidy. Regular involving team members is optional.

The grooming involves splitting big items into smaller ones, rewriting backlog items to be more expressive, deleting obsolete or no more need items, and so on.

Here are some activities that take place during product backlog grooming:

- Eliminating out-of-date user stories and tasks.
- Adding new user stories as per newly discovered needs.
- Breaking down prominent user stories into smaller items.
- Rearranging user stories appropriate to their priority. • Clearly outline user stories and tasks to avoid doubt.
- Assigning or re-assigning story points and estimates.
- Identifying dependencies and reducing risks related to backlog items.

- Ensure upcoming stories are adequately defined by adding additional information and acceptance criteria.

Benefits of Backlog grooming:

1. Increases Team efficiency
2. Manages backlog mess
3. Keeps the product team up to date
4. Increases work velocity.

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

**Scrum:** Scrum is a light weight agile management framework which is primarily used for software development task including complete developing software packages.

**Scrum process starts with the process:**

- 1.Product owner – The product owner creates something known as product backlog, Product backlog is the list of tasks created to do project.
- 2.The product owner, scrum team, development team will gather and have a meeting on what task are important and which they should include in particular sprint.
- 3.Those all task are included into something known as sprint backlog, After that team will have multiple meetings discuss on how to proceed the task which are listed in sprint backlog we call this meeting as daily scrum meeting.
- 4.Once the team is sure about what is supposed to do and what their particular individual tasks are they start working on the project and some how the sprint comes to an end.
- 5.At the end of every sprint they need to have a working piece of product and that is called as product increment.
- 6.The team has a meeting sprint meeting, in this meeting where team discuss on what went well during the sprint and what should they have done to improve any other thing
- 7.After sprint review there is sprint retrospective were team lands on how to change things which went wrong in the sprint and how to make changes and how to make improvement and all that and the cycle begins again until the entire product is developed or until budget is exhausted or the timeline is reached.

**So that's how an entire scrum framework works**

**Scrum master:** Scrum master will monitor the performance of the team within the sprint. Team will raise all their issues to scrum master and he will run to look for answers, A Scrum Master is responsible for ensuring a Scrum team is operating as effectively as possible with Scrum values. This means they keep the team on track, plan and lead meetings, and work out any obstacles the team might face .



A Scrum master will have following responsibilities:

- Facilitate daily Scrum meetings (also called “daily stand-ups”)
- Lead sprint planning meetings • Conduct “retrospective” reviews to see what went well and what can be improved for the following sprint
- Keep a pulse on team members, through individual meetings or other means of communication.
- Manage obstacles that arise for the team by communicating with stakeholders outside of the team.

**Product owner:** A product owner ensures the Scrum team aligns with overall product goals. They understand the business needs of the product, like customer expectations and market trends. Because they have to understand how the Scrum team fits into bigger picture goals, product owners usually stay in touch with product managers and other stakeholders outside the team.

A product owner is a role in product development team or scrum team who is responsible for product backlog, making sure that it is up to date in terms of priorities and has items which translate back to vision.

The product owner works with both the stakeholders and development team

Stakeholders: Product owner works with the stakeholders to get the right **requirement**, to help the users to devise the requirements

Development Team: Product owner work with the development team to help team **understand the requirements** .

A Product owner will have following responsibilities:

- Product owner has the responsibility of creating a vision so that the development team will clearly visualize the expected outcome by the user.
- Manage the product backlog by ordering work by priority- It's the product owner responsibility to bring the stack of items in the backlog and prioritize as per the business goal.
- Communicate with external stakeholders and translate their needs to team.
- Make sure that team is focussed on hitting product needs through communication and evaluating progress.

Question 12 – Explain all Meetings Conducted in Scrum Project

There are five key agile scrum meetings

**1.Sprint Planning Meeting:** Sprint planning meeting happens at the beginning of each sprint and team decides on what they will be delivering in the sprint. It is attended by product owner, scrum team and scrum master. This meeting is held with the objective for selecting the set of product backlog items which are to be delivered during current sprint. Sprint planning meeting mainly focuses on two things: **A) What is to be built during sprint?**

The product owner provides rough idea of the goal to the team, The product owner tells the features he/she wants to be added or to be improved in the product. The initial goal presented by product owner helps in selecting the set of product backlog items to be built in the current sprint and product owner selects the highest priority items from the product backlog to the team, so the team will ask questions to product owner so the team members will get clear picture of what exactly is to be created. **B) How the team will build it?**

The work required to be done in product backlog item is broken down into task list . Breaking backlogs into tasks also helps in confirming the right amount of work is selected or not.

The official time box of sprint planning meeting is:

2 hours per week which means for 2 weeks long sprint it is 4 hours.

## **2. Daily Stand up meeting:**

This happens each day where team will just answer 3 questions:

- a) what did you do today
- b) what will you do tomorrow
- c) Are there any impediments that is slowing or stopping you.

This meeting occurs at the start of working day, The daily scrum meeting is attended by Development team and it is optional for scrum master and product owner to attend meeting. The time allotted for daily scrum meeting is fifteen minutes, The benefits of daily scrum meeting is improved communication within the team, elimination of other meetings, identification of impediments, promotion/quick decision making and improvement of teams level of knowledge.

## **3.Sprint review meeting:**

This happens at the end of sprint where team will give demo on the completed stories to the product owner and get it cleared. In this meeting, the scrum team demonstrates the work they have completed in the sprint to the product owner for final approval, once all the work is approved the sprint will be completed. The sprint review meeting is attended by scrum team, product owner, scrum master and invited key stakeholder. The scrum master is responsible for scheduling the meeting and informing everyone attending of the purpose of the review. The scrum master is also responsible for ensuring the meeting stays within the time-box.

## **4.Sprint retrospective meeting:**

A sprint retrospective is a meeting held after the sprint review and before the next sprint planning. The purpose of this meeting is exclusively to collect feedback from the entire team in order to understand which practices worked and which didn't. The official timebox for sprint retrospective meeting is 3 hours .

In sprint retrospective meeting scrum team meets to review:

- With respect to progress - What happened with the project
- Relationship among people
- Tools- tools which were used and how the tools are running and with the tools is there any scope for improvement or do we need to replace the tool
- Communication- How was the communication between the teams as scrum team whole.

In sprint retrospective meeting team identifies:

- What went well – Important to appreciate great things established
- What went wrong

Scrum master must ensure that this meeting is positive and productive .

Question 13 – Explain Sprint Size and Scrum Size

### **Sprint Size:**

The whole concept of sprint is to identify User stories that the scrum team would work on and complete within a specific sprint duration. Typically known as the sprint length. An Agile sprint is a concept in scrum that represents a time box, i.e., a short amount of time the team has committed to complete the work. it is most common for sprint length to be **between 1 and 4 weeks**.

Four types of sprints- Sprint

1= 7 days of time

Sprint 2= 14 days of time

Sprint 3=21 days of time Sprint

4=28 days of time.

### **Scrum Size:**

Project resources like BA's, developers, testers are grouped as scrum team where each team member is 7-8. The size should not be very small nor large as both have its own consequences as mentioned below. However a solution is offered to overcome the same.

Question 14 – Explain DOR and DOD

### DOR- Definition of ready

A definition of ready (DOR) is used to determine whether work on a task is ready to be started. Before teams assign a task or user story in a sprint, it must be sufficiently well described and understood by team members. The development team should grasp enough of a propose scope to plan it into a sprint, estimate completion time, and allocate adequate resources to meet its goal. A definition of ready serves as a checklist of criteria to help facilitate a team's decision to begin working on a new task.

### DOD- Definition of done

Definition of Done (DoD) is a list of requirements that a user story must adhere to for the team to call it complete. While the Acceptance Criteria of a User Story consist of set of Test Scenarios that are to be met to confirm that the software is working as expected. The Definition of Done ensures everyone on the Team knows exactly what is expected of everything the Team delivers. It ensures transparency and quality fit for the purpose of the product and organization.

The Definition of Done promotes transparency by providing everyone a unified understanding of the work completed during the Increment. If a Product Backlog

item doesn't meet the Definition of Done, it shouldn't be released or presented at the Sprint Review. Instead, it's returned to the Product Backlog for future consideration.

## Question 15- Explain Prioritization Techniques and MVP

### Prioritization Technique:

Agile is an iterative approach to project management and software development that helps team to deliver faster and better value to customers. And prioritization is set to provide work for the agile team.

Prioritization technique is a process by which set of items are aligned in terms of importance. The main purpose of prioritization is to allocate resources to important projects of agile. It focuses on where and how to assign resources and start the work.

The main goal of Prioritization technique is used to accomplish the work and deliver maximum business value on time.

The **agile prioritization technique** contains models for the development of a product.

- MoSCoW prioritization
- Kano model
- The relative weighting method
- Opportunity Scoring
- Stack Ranking
- Priority Poker
- Cost of Delay
- 100 Dollar Test **Moscow Prioritization:**

**MOSCOW** is one of the most commonly used technique where requirements are classified as

- Must-have: **Mo in the name stands for must be.** Where it tells to give the topmost

priority the must needed necessities.

- Should-have: the **S in the name stands for should have.** Where it features only the requirement that is highly needed or not that critical.
- Could-have: the **C in the name stands for could have.** Where the priority is given to the requirement that will be good to have or the vice-versa.
- Wont-have: the **W stands for won't or will not have.** That considers not having any requirements that will not work at that point in time.

MoSCoW models help to prioritize the important aspects in the first place. Where even agile product development considers the same as its main objective. So the theory tells us to consider the product requirements under M and S.

### 100 Dollar Test:

The 100 dollar method is great for prioritizing a manageable requirements pool with multiple or even many stakeholders. The approach is each stakeholder or voter receives 100 “dollars” or points. Requirements can be “purchased” with this limited budget. The stakeholder himself decides how much the realization of a specific

requirement is worth to him. If all dollars or points are spent, the prioritization of the stakeholder is finished.

### **Kano Model:**

This is a matrix for the realization of products that impress users. Kano is suitable for the product development process, as it offers to divide the MVP or product's features into

- those that users expect from the product, • those that users do not care about.
- those that bring joy to users.

### **MVP – Minimum Viable Products**

An MVP is a concept from agile scrum that refers to a product that has just enough features to satisfy the needs of early customers and more importantly , give them something to provide feedback on to shape the future of the product .

### **Purpose of MVP:**

- Release product to the market as quickly as possible
- Test an idea with real users before committing a large budget to the product's development
- Learn what resonates with the company's target and what does not.

Question 16 : Difference between Business Analyst and Product Owner

### **Business Analyst:**

A business analyst works along with the technical team and acts as a liaison (communication between two or more people) between stakeholders of team and technical team. He is the face of the technical team to the client and all client communications will happen through a business analyst. He / She will elicit, analyse, communicate, and validate requirements for changes to business processes, policies and information systems in the existing business process of the client. The business analyst understands business problems and opportunities in the context of the requirements and recommends solutions that enable organization to achieve its goal.

Prime responsibilities of a Business Analyst: -

- Client interactions
- Ownership of requirements
- Process reengineering

Business Analyst will do following in a project:-

- Gather requirements using elicitation technique
- Documents the requirements using industry standards
- Model requirements using UML
- Communicate requirement to technical team
- Tracks the requirements during development stage
- Handle change requests
- Facilitates UAT (User Acceptance Testing).

### **Product Owner:**

A product owner is a role on a Scrum team that is responsible for the project's outcome. The product owner seeks to maximize a product's value by managing and optimizing the product backlog.

In Scrum, a product owner serves as the liaison between multiple areas of an organization. This person communicates with business stakeholders and collaborates closely with Scrum teams to keep all areas of the business informed on a project's development.

Product owner's responsibilities are:

- develop the product features and goals;
- create product backlog items based on product goals;
- order product backlog items, ensuring that the product backlog is visible and understood; and
- serve as the liaison between business stakeholders, Scrum team members and end users.

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

Answer 17:

## PREM KUMAR PAUL

### CONTACT

📍 Hyderabad, India - 500085  
📞 7731864308  
✉️ premkumarpaul.b@gmail.com

### SKILLS

BUSINESS DEVELOPMENT  
BRAND BUILDING  
RESEARCH AND TREND  
ANALYSIS  
MARKETING IN SALES

### OBJECTIVE

Accomplished Marketing professional with demonstrated success in developing and implementing strategic approaches to drive market growth and bottom-line profitability. Strong communicator with natural leadership talent and high energy. Impactful and successful manager proficient in building teams and motivating personnel to new levels of performance:

### EXPERIENCE

01/2021 -  
Current

#### PRODUCT OWNER

Zara  
• Worked in hyper-growth startup environment, aggressively driving product development to market..  
• Led sprint planning sessions and oversaw backlog refinement for product  
• Led design meetings and collaborative sessions with Creative team. orchestrating product vision and strategy.  
• Consulted for and led UX/UI design for Software and product development.

### EDUCATION

2024

**Master's in PROJECT MANAGEMENT**  
NORTHUMBRIA UNIVERSITY LONDON  
85

2021

**CIVIL ENGINEERING**  
CMR College of engineering and  
Technology  
80



