**CAPSTONE PROJECT PREP 2**

1. **Write Agile Manifesto?**

**Ans:** The **Agile Manifesto** is a set of guiding principles for developing the software which gives importance on faster delivery values, collaboration, flexibility and customer satisfaction, also it doesn’t support scalability or extendibility. It consists of 4 main values and 12 principles, which are

**Four Main Values:**

* **Individuals and Interactions over processes and tools** – It prioritize people and team work over rigid processes or tools, as collaboration driven success
* **Working software over comprehensive collaboration** – To deliver functional software that meets needs rather than spending excessive time on lengthy documentation
* **Customer collaboration over contract negotiation** – Actively work with customers to adapt and deliver value instead of focusing solely on predefined agreements
* **Responding to change over following a plan** – Embrace flexibility to adjust to changing requirements rather than strictly adhering to a fixed plan

**12 main Principles:**

* Satisfy the customer through early and continuous delivery of valuables software.
* Welcome changing requirements, even later stage of development. Agile processes harness change for the customer’s competitive advantage.
* Frequent delivering of working software from a couple of weeks to months with a preference to shorter timescale.
* Developers and Business people must work together daily throughout the project
* Build projects around motivated individuals. Give them 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 sponsor, developers and users should be able to maintain a constant pace indefinitely.
* Continuous attention to technical excellence and good design enhances agility.
* The art of maximizing the amount of work not done is essential which makes simplicity towards the works
* The best architectures, requirement and designs emerge from self-organising teams
* At regular intervals, the team reflects on how to become more effective then tunes and adjusts its behaviour accordingly.

1. **Write minimum 40 User stories and their Acceptance Criteria along with their BV and CP?**

**Ans:** A **User story** is an informal description of a software feature from user perspective. These are the stories are the smallest unit of work in an agile framework which help to prioritize features and project functionalities.

Here, are the 40 user stories

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| **User Story :** 01 | **Tasks :** 03 | | **Priority :** High |
| AS A CUSTOMER,  I WANT TO BROWSE RESTURANTS,  SO THAT I CAN QUICKLY MATCH MY PREFERENCE | | | |
| **BV :** 200 | | **CP:** 3 | |
| **Acceptance Criteria:**  1.App displays a list of dishes on homepage  2.Select a list of dishes relevant restaurants  3.List updates based on user’s location | | | |

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| **User Story :** 02 | **Tasks :** 03 | | **Priority :** High |
| AS A CUSTOMER,  I WANT TO REGISTER AND LOG IN USING EMAIL OR PHONE,  SO THAT I CAN ACCESS PERSONALISED FEATURES | | | |
| **BV :** 500 | | **CP:** 3 | |
| **Acceptance Criteria:**  1.User can register using email or phone  2.OTP/email verification  3.Successful Login redirects to homepage | | | |

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| **User Story :** 03 | **Tasks :** 03 | | **Priority :** High |
| AS A CUSTOMER,  I WANT TO RESET MY PASSWORD IF I FORGET IT,  SO THAT I CAN REGAIN ACCESS TO MY ACCOUNT | | | |
| **BV :** 200 | | **CP:** 3 | |
| **Acceptance Criteria:**  1.Forgot password option is visible on login page  2.Users can reset the password via email or OTP verification  3.Users receive confirmation of a successful reset | | | |

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| **User Story :** 04 | **Tasks :** 03 | | **Priority :** High |
| AS A CUSTOMER,  I WANT TO SEE RESTAURANT MENU, REVIEWS, RATINGS  SO THAT I CAN DECIDE WHERE TO ORDER | | | |
| **BV :** 500 | | **CP:** 2 | |
| **Acceptance Criteria:**  1.The restaurant’s details page includes menu items with prices  2.Reviews and ratings are displayed prominently  3.Users can navigate back to list | | | |

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| **User Story :** 05 | **Tasks :** 03 | | **Priority :** Medium |
| AS A CUSTOMER,  I WANT TO FILTER RESTAURANT BY CUSTOMER RATINGS,  SO THAT I CAN CHOOSE BEST RATED OPTIONS | | | |
| **BV :** 100 | | **CP:** 2 | |
| **Acceptance Criteria:**  1.A rating filter option is available on list page  2.Restaurants are displayed in descending order of ratings  3.Users can adjust the filter to show all restaurants | | | |

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| **User Story :** 06 | **Tasks :** 03 | | **Priority :** Medium |
| AS A CUSTOMER,  I WANT TO APPLY PROMO CODES,  SO THAT I CAN SAVE ON MY ORDER | | | |
| **BV :** 100 | | **CP:** 1 | |
| **Acceptance Criteria:**  1.A field for entering promo codes is visible on checkout  2.Valid promo codes apply the discount and update total  3.Invalid codes prompt an error message | | | |

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| **User Story :** 07 | **Tasks :** 03 | | **Priority :** High |
| AS A CUSTOMERS,  I WANT TO ADD FOOD ITEMS TO MY CART,  SO THAT I CAN PREPARE MY ORDER | | | |
| **BV :** 200 | | **CP:** 3 | |
| **Acceptance Criteria:**  1.App displays a list of dishes on homepage  2.Select a list of dishes relevant restaurants  3.List updates based on user’s location | | | |

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| **User Story :** 08 | **Tasks :** 03 | | **Priority :** High |
| AS A CUSTOMER,  I WANT TO UPDATE QUANTITIES,  SO THAT I CAN REMOVE OR ADD FROM MY CART BEFORE CHECKOUT | | | |
| **BV :** 100 | | **CP:** 2 | |
| **Acceptance Criteria:**  1.Users can increase or decrease item quantities in cart  2.Users can remove items entirely  3. Cart updates dynamically based on changes. | | | |

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| **User Story :** 09 | **Tasks :** 03 | | **Priority :** High |
| AS A CUSTOMER,  I WANT TO PLACE AN ORDER AFTER CART REVIEW,  SO THAT THE RESTAURANT RECEIVES MY REQUEST | | | |
| **BV :** 500 | | **CP:** 3 | |
| **Acceptance Criteria:**  1.Checkout page displays all cart items with a total price  2.Users can confirm the order with single button click  3.Users receive an order confirmation upon successful payment | | | |

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| **User Story :** 10 | **Tasks :** 03 | | **Priority:** Medium |
| AS A CUSTOMER,  I WANT TO SEARCH RESTUARANTS BY NAME,  SO THAT I CAN LOCATE A SPECIFIC RESTAURANT | | | |
| **BV :** 100 | | **CP:** 1 | |
| **Acceptance Criteria:**  1.A search bar is prominently displayed  2.App returns results matching the entered text  3.Users can filter results further if needed | | | |

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| **User Story :** 11 | **Tasks :** 03 | | **Priority :** Low |
| AS A CUSTOMER,  I WANT TO VIEW MY PAST ORDERS ,  SO THAT I CAN REORDER EASILY | | | |
| **BV :** 50 | | **CP:** 2 | |
| **Acceptance Criteria:**  1.Customer can view order history  2.Select reorder items with one click | | | |

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| **User Story :** 12 | **Tasks :** 03 | | **Priority :** Medium |
| AS A CUSTOMER,  I WANT TO RATE AND REVIEW FOOD,  SO THAT I CAN SHARE MY EXPERIENCE | | | |
| **BV :** 100 | | **CP:** 2 | |
| **Acceptance Criteria:**  1.User can rate food with stars and write a review  2. Select submit button with click and updated | | | |

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| **User Story :** 13 | **Tasks :** 03 | | **Priority :** High |
| AS ADMIN,  I WANT TO GENERATE REPORTS ON SALE AND ORDER ,  SO THAT I CAN TRACK BUSINESS PERFORMANCE   |  | | --- | |  | | | | |
| **BV :** 200 | | **CP:** 2 | |
| **Acceptance Criteria:**  1.Admins can generate daily ,weekly, monthly sales reports  2.Display generate button to download the report | | | |

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| **User Story :** 14 | **Tasks :** 03 | | **Priority :** High |
| AS ADMIN,  I WANT TO MANAGE USER ACCOUNTS ,  SO THAT I CAN ENSURE THE QUALITY OF USERS | | | |
| **BV :** 500 | | **CP:** 2 | |
| **Acceptance Criteria:**  1.Admins can view all user accounts with filter  2.Admins should be able to deactivate accounts with a reason  3.Admin can delete duplicate accounts after verification | | | |

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| **User Story :** 15 | **Tasks :** 03 | **Priority :** High |
| AS ADMIN,  I WANT TO MONITOR ORDER DETAILS ,  SO THAT I CAN OVERSEE SYSTEM OPERATION | | |
| **BV :** 200 | **CP:** 3 | |
| **Acceptance Criteria:**  1.Admins can view order statuses in real time  2.Filter by date, restaurant or delivery status should be available  3.Admins can resend confirmation emails if needed | | |

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| **User Story :** 16 | **Tasks :** 03 | | **Priority :** High |
| AS ADMIN,  I WANT TO MANAGE RESTAURANT LIST ,  SO THAT I CAN ENSURE QUALITY | | | |
| **BV :** 200 | | **CP:** 2 | |
| **Acceptance Criteria:**  1. Admins can view all restaurant profiles.  2. Admins should approve/reject new restaurant submit list with comments.  3.suspended restaurant profiles should not be visible to customers | | | |

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| **User Story :** 17 | **Tasks :** 03 | | **Priority :** High |
| AS ADMIN,  I WANT TO MANAGE DELIVERY PERSONNEL ,  SO THAT I CAN ENSURE TIMELY DELIVERES | | | |
| **BV :** 500 | | **CP:** 2 | |
| **Acceptance Criteria:**  1.Admins should be see profiles of all delivery personal status  2.Admins can assign delivery zones to personnel  3. Notifications must alert delivery personnel about changes in assignments  4. Admins should view performance metrics like delivery times and customer ratings for each delivery person | | | |

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| **User Story :** 18 | **Tasks :** 03 | | **Priority :** High |
| AS ADMIN,  I WANT TO RESOLVE CUSTOMER DISPUTES ,  SO THAT I CAN ENSURE SATISFACTION | | | |
| **BV :** 200 | | **CP:** 3 | |
| **Acceptance Criteria:**  1.Admin should view all customer complaints with order details  2.Refunds or credits should be processed directly within the platform if necessary | | | |

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| **User Story :** 19 | **Tasks :** 03 | | **Priority :** Medium |
| AS ADMIN,  I WANT TO BROADCAST ANNOUNCEMENTS ,  SO THAT I CAN NOTIFY USERS OF UPDATES | | | |
| **BV :** 100 | | **CP:** 1 | |
| **Acceptance Criteria:**  1.Announcements should allow text formats  2.A preview feature should allow to admins to review before broadcast  3. User should see announcements in their dashboard or homepage | | | |

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| **User Story :** 20 | **Tasks :** 03 | | **Priority :** Medium |
| AS ADMINS,  I WANT TO APPROVE OR REJECT REFUND REQUEST ,  SO THAT I CAN CONTROL PAYOUTS | | | |
| **BV :** 200 | | **CP:** 2 | |
| **Acceptance Criteria:**  1.Refund request must display details  2.Admins can approve/reject refunds with comments  3. Notifications must alert customers and business owners  4. A record of refunds lists should be maintained | | | |

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| **User Story :** 21 | **Tasks :** 03 | | **Priority :** Medium |
| AS ADMIN,  I WANT TO VIEW OVERALL PLATFORM ANALYTICS ,  SO THAT I CAN MONITOR GROWTH | | | |
| **BV :** 200 | | **CP:** 3 | |
| **Acceptance Criteria:**  1.Dashboard should summarise key performance indicators  2. Trends over time should be highlighted  3. Analytics should provide breakdowns by region, restaurant type and delivery personnel.  4. Alerts for sudden drops in activity | | | |

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| **User Story :** 22 | **Tasks :** 03 | | **Priority :** Low |
| AS ADMINS,  I WANT TO MANAGE USER FEEDBACK AND REVIEWS,  SO THAT I CAN IMPROVE SERVICE QUALITY | | | |
| **BV :** 100 | | **CP:** 2 | |
| **Acceptance Criteria:**  1.Admins can view, approve or delete feedback of users  2.Reviews are display after approval  3.Admin can respond to reviews if necessary | | | |

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| **User Story :** 23 | **Tasks :** 03 | | **Priority :** Medium |
| AS ADMINS,  I WANT TO ENSURE THAT ALL LEGAL REQUIREMNTS ARE MET  SO THAT IT IS USEFUL FOR AUDITING | | | |
| **BV :** 200 | | **CP:** 2 | |
| **Acceptance Criteria:**  1.System automatically calculates taxes and other required fees  2.Admins can review compliance reports | | | |

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| **User Story :** 24 | **Tasks :** 03 | | **Priority :** High |
| AS ADMINS,  I WANT TO CONFIGURE SYSTEM WIDE NOTIFICATIONS ,  SO THAT I CAN ALERT CUSTOMERS AND RESTAURANT OWNERS FOR CRITICAL UPDATES | | | |
| **BV :** 200 | | **CP:** 3 | |
| **Acceptance Criteria:**  1.Admin can send notifications for promotions, outages and system updates  2.Notifications are sent to customers and restaurant owners | | | |

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| **User Story :** 25 | **Tasks :** 03 | | **Priority :** Medium |
| AS ADMINS,  I WANT TO REVIEW RESTAURANT RATING ,  SO THAT I CAN ENSURE HIGH STANDARDS | | | |
| **BV :** 100 | | **CP:** 3 | |
| **Acceptance Criteria:**  1.Admin can view rating for all restaurants  2.Restaurant with low rating are flagged and admin can take action on flagged restaurants | | | |

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| **User Story :** 26 | **Tasks :** 03 | | **Priority :** High |
| AS ADMINS,  I WANT TO VERIFY PAYMENT METHODS ,  SO THAT THE SYSTEM ONLY ACCEPTS VALID TRANSACTIONS   |  | | --- | |  | | | | |
| **BV :** 200 | | **CP:** 1 | |
| **Acceptance Criteria:**  1.Admins can enable/disable payment methods  2.Invalid transactions are flagged | | | |

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| **User Story :** 27 | **Tasks :** 03 | | **Priority :** Low |
| AS A CUSTOMER,  I WANT TO SCHEDULE AN ORDER FOR LATER ,  SO THAT I CAN RECEIVE FOOD AT MY PREFERRED TIME | | | |
| **BV :** 100 | | **CP:** 3 | |
| **Acceptance Criteria:**  1.User can select a delivery time for later  2.System checks availability for scheduled time | | | |

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| **User Story :** 28 | **Tasks :** 03 | | **Priority :** Medium |
| AS A CUSTOMER,  I WANT TO TRACK THE STATUS OF MY ORDER ,  SO THAT I KNOW WHEN IT WILL ARRIVE | | | |
| **BV :** 200 | | **CP:** 1 | |
| **Acceptance Criteria:**  1.Order status is updated in real time  2.Customer receives notifications for status changes | | | |

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| **User Story :** 29 | **Tasks :** 03 | | **Priority :** High |
| AS A CUSTOMER,  I WANT TO MAKE PAYMENT FOR MY ORDER ,  SO THAT I CAN COMPLETE MY PURCHASE | | | |
| **BV :** 500 | | **CP:** 3 | |
| **Acceptance Criteria:**  1.Multiple payment methods are available  2.Payment confirmation is shown after successful transaction | | | |

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| **User Story :** 30 | **Tasks :** 03 | | **Priority :** High |
| AS A CUSTOMER,  I WANT TO KEEP DELIVERY ADDRESS DETAILS ,  SO THAT MY ORDER CAN BE DELVIERED TO THE CORRECT LOCATION | | | |
| **BV :** 500 | | **CP:** 3 | |
| **Acceptance Criteria:**  1. User can input and save a delivery address  2.Addres is validated for accuracy  3. User can select saved address or enter a new one | | | |

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| **User Story :** 31 | **Tasks :** 03 | | **Priority :** Low |
| AS A CUSTOMER,  I WANT TO SAVE MY FAVORITE RESTAURANTS ,  SO THAT I CAN EASILY ACCESS THEM IN LATER | | | |
| **BV :** 100 | | **CP:** 2 | |
| **Acceptance Criteria:**  1.User can mark and remove the favourite restaurant  2.Favorites list is accessible from home page | | | |

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| **User Story :** 32 | **Tasks :** 03 | | **Priority :** Medium |
| AS A BUSINESS OWNERS,  I WANT TO MANAGE MY RESTAURANT HOURS ,  SO THAT CUSTOMERS KNOW WHEN WE ARE OPEN | | | |
| **BV :** 200 | | **CP:** 3 | |
| **Acceptance Criteria:**  1.Business owner can set open and close times  2.Hours and special hours can be set and visible to customers | | | |

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| **User Story :** 33 | **Tasks :** 03 | | **Priority :** High |
| AS A BUSINESS OWNER,  I WANT TO MONITOR SALES AND PERFORMANCE ,  SO THAT I CAN MAKE BETTER BUSINESS DECISIONS | | | |
| **BV :** 500 | | **CP:** 3 | |
| **Acceptance Criteria:**  1. Business owners can view sales reports  2.Reports contain total sales, top items  3. Reports can be exported | | | |

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| **User Story :** 34 | **Tasks :** 03 | | **Priority :** Medium |
| AS A BUSINESS OWNER,  I WANT TO SET DELIVERY AREAS ,  SO THAT I CAN LIMIT WHERE I DELIVER | | | |
| **BV :** 200 | | **CP:** 3 | |
| **Acceptance Criteria:**  1.Delivery areas are configurable  2.The system prevents orders outside the defined area  3. Updated areas can be list | | | |

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| **User Story :** 35 | **Tasks :** 03 | | **Priority :** High |
| AS A BUSINESS OWNER,  I WANT TO UPDATE MY RESTAURANT MENU,  SO THAT I CAN OFFER NEW ITEMS | | | |
| **BV :** 500 | | **CP:** 3 | |
| **Acceptance Criteria:**  1. The business owner can add, edit or remove menu items  2.Menu updates are visible to customers immediately  3. Menu items can include descriptions and prices | | | |

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| **User Story :** 36 | **Tasks :** 03 | | **Priority :** High |
| AS A BUSINESS OWNER,  I WANT TO TRACK THE INVENTORY  SO THAT I CAN ENSURE THAT WE DON’T RUN OUT OF ITEMS | | | |
| **BV :** 500 | | **CP:** 3 | |
| **Acceptance Criteria:**  1.Business owner can track ingredient levels  2.System alerts the business owner when stock is low  3. Business owner can manually update inventory | | | |

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| **User Story :** 37 | **Tasks :** 03 | | **Priority :** Medium |
| AS A BUSINESS OWNER,  I WANT TO OFFER CUSTOMIZABLE DISHES  SO THAT I CAN PERSONALIZE THEIR ORDER   |  | | --- | |  | | | | |
| **BV :** 200 | | **CP:** 2 | |
| **Acceptance Criteria:**  1.Business owner can define customizable options  2.Customers can modify dishes based on predefined options | | | |

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| **User Story :** 38 | **Tasks :** 03 | | **Priority :** Medium |
| AS A BUSINESS OWNER,  I WANT TO CUSTOMIZE MY RESTAURANT’S BRANDING  SO THAT IT MATCHES MY BRANDs | | | |
| **BV :** 200 | | **CP:** 1 | |
| **Acceptance Criteria:**  1.Business owner can upload a logo  2.Color schemes can be customized  3. Customizations can reflected immediately on the platform | | | |

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| **User Story :** 39 | **Tasks :** 03 | | **Priority :** Medium |
| AS A BUSINESS OWNER,  I WANT TO OFFER DELIVERY TIME ESTIMATES ,  SO THAT CUSTOMERS KNOW WHEN TO EXPECT THEIR FOOD | | | |
| **BV :** 200 | | **CP:** 1 | |
| **Acceptance Criteria:**   1. Delivery times are estimated and shown before checkout 2. Customer can see estimated delivery time when placing an order 3. Estimated time update | | | |

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| **User Story :** 40 | **Tasks :** 03 | | **Priority :** Medium |
| AS A BUSINESS OWNER,  I WANT TO SET UP DELIVERY FEES,  SO THAT I CAN CHARGE CUSTOMERS ACCORDINGLY | | | |
| **BV :** 500 | | **CP:** 1 | |
| **Acceptance Criteria:**  1.Business owner can set fixed or variable delivery fees  2.Delivery fees are added to the order total at checkout  3. Different fees for different locations | | | |

**3. What is epic? Write 2 epics?**

**Ans:** An **Epic** is a set of related user stories where a large set of work can broke down into smaller user stories. It typically a high level goal or feature than takes multiple sprints. They are also considered as **“Big user story”** as it represents big functionalities or requirements that need to be developed and too large to be completed in single sprint.

**1st Epic: Dish CatLog Management**

**User Story:**

* AS A RESTAURANT OWNER, I WANT TO add new items to my menu SO THAT I can update my offerings.
* AS A RESTAURANT OWNER, I WANT TO set prices for each item on my menu SO THAT customers can see them when ordering.
* AS AN ADMIN, I WANT TO review restaurant listings SO THAT to ensure they meet platform standards.
* AS A BUSINESS OWNER, I WANT TO receive notification when new order is placed SO THAT I can prepare the food.

**2nd Epic: User Details Management**

**User Story:**

* AS A CUSTOMER, I WANT TO create a profile SO THAT I can order my food and save my delivery address.
* AS A RESTAURANT OWNER, I WANT TO update my business address SO THAT customers have accurate information
* AS A ADMIN, I WANT TO manage user accounts SO THAT I can Help with issues such as login, ordering food
* AS A CUSTOMER, I WANT TO save multiple delivery address SO THAT I can speed up the ordering process in the future.

1. **What is the difference between BV and CP?**

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| **Business Value (BV)** | **Complexity Points (CP)** |
| It is a measure of how much value the feature or task adds to the product, the company or customer experience | It helps the team assess the level of effort, technical complexity and time required to complete a task |
| It is usually rated on scale of **10,20,50,100,200** | It is usually rated on a scale of Fibonacci series **1,2,3,5,8,13** |
| The benefit of a particular user story, feature to the business or end customer. | Its shows how difficult to implement a feature of user story from technical perspective |
| High BV means the features directly impacts customer satisfaction or company revenue | High CP means the feature is difficult to implement, requiring more effort, time and possible collaboration with multiple times |
| Low BV means the feature has a minor impact on the product and only improve user experience | Low CP means that the feature is easy to implement requiring less time and fewer resources |
| **Example:** As a customer I want to pay via digital wallet so that I can complete my order – BV : 200 (Essential for business) | **Example:** As user, I want to change my account settings: - CP:3 ( easy to do) |

1. **Explain about Sprints?**

**Ans:** A **Sprints** is the time boxed iteration during which a team works to complete a set of tasks or user stories from the product backlog. It the fundamental unit of the scrum frameworks in agile software development.

* 1. A Sprint is typically between **2- 4 weeks** long. There are several of sprints conducted which are (**Sprint planning, Daily Scrum/Daily, Sprint Review, sprint retrospective)** meetings.
  2. **Purpose:** To allow teams to deliver functional features or improvements within a short time period and to develop a potentially shippable product increment.
  3. **Key Features:** 
     1. **Time boxed** - 2,3,4 weeks of duration .To ensure consistent delivery and helps manage expectations
     2. **Repeatable Process –** They are repeated in continuous cycle with each sprint building on the previous and delivering incremental improvements to the product
     3. **Goal Oriented –** Focused on achieving a specific set of goals or delivering certain user stories to contribute overall product increment.
     4. **Deliverable-** By the end of the sprint, the team should have delivered the features which were fully tested, integrated and could be released if needed

**5.4 Benefits:** Frequent delivery of value, Flexibility and adaptability, continuous improvement, transparency.

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| **Product Backlog Index** | **TASKS** | **Work In progress** | **DONE** |
| Registration/Login | 4 | 2 | 2 |
| Add Products | 5 | 3 | 2 |
| Add to cart | 2 | 0 | 2 |
| Make payment | 3 | 1 | 1 |
| Order Products | 1 | 0 | 1 |
| Delivery Track | 2 | 1 | 1 |

1. **Explain Product backlog and sprint backlog?**

**Ans:**

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| **Product Backlog** | **Sprint Backlog** |
| It is a the prioritized list of all the work that need to be done in a product including features, themes, technical tasks etc. which maintains a long term perspective | It’s the subset of tasks or user stories selected from the product backlog that the team committed to complete during sprints. Also it is actionable and focused on achieving the sprint goal |
| It serves as the main input for the scrum team work driving the products development and evolution. | It is a subset of user stories from the product backlog that |
| The Product backlog is managed and owned by **Product Owner** and who are responsible for backlogs prioritization | The sprint backlog is managed by the **development team** in collaboration with **Product owner.** But development team is responsible for executing the task and delivering the product iteration |
| Typically includes Epics, features, user stories, bugs ,tasks ,enhancements, non-functional requirements | Typically includes user stories, tasks, bug and sub tasks that team plans to complete in the current sprint |
| Continuously evolves throughout the project’s lifecycle | Time boxed iteration to the duration of the sprint like 2,3,4 weeks |
| It includes all the features and requirements for the entire product | It Includes only the tasks/features selected for the current sprint. |
| The user stories are prioritized by the product owner based on business value, customer feedback, and marker conditions | The team commits to work on specific user stories based on their capacity and priority |
| Changes frequently as arise on new requirements, feedback and insights | Changes are limited during the sprint but can be adjusted based on new tasks or clarifications in sprint progress |
| Here, We have Public visibility to the technical team and stakeholders ,regularly reviewed in backlog refinement sessions | We have public visibility to the technical team in the sprint but not stakeholders until they are part of sprint review |
| **Examples:**   1. Display food items from restaurants – **13 story points (HIGH** priority) 2. Implement login user – **7 story point (HIGH** Priority) 3. Add Payment Gateway integration | **Examples: Sprint 1**   1. Display food items from restaurants – **13 story points (HIGH** priority) 2. Test Payment Gateway functionality |

1. **What is impediments log? write 2 impediments**

**Ans:** An **Impediment Log** is set of record of all challenges that prevent the project team especially the development team from making progress on their tasks for achieving the sprint goal which ranges from technical issues to non-technical factors or team related challenges/ resource limitation.

* 1. So, The **Scrum Master** is responsible for identifying, tracking and helping to run to look for answers for these impediments ensuring that they don’t negatively impact the team productivity or progress.
  2. **Key Features:** 
     1. **Identification:** Any issue that prevents the team from moving forward is logged immediately.
     2. **Description:** A Clear or concise explanation of the issue is formatted
     3. **Impact Assessment:** Understand how this affects the team work and progress of the current sprint
     4. **Responsibility:** Identify who is responsible for resolving the impediment usually the scrum master but sometimes other team members
     5. **Resolution/Status:** Tracking the status of the impediment and whether it is resolved or not and specify the date

**7.3 Importance:** Visibility, Actionable, Continuous Improvement and Focus on flow

**7.4 Impediments LOG**

|  |
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| **1.Restaurant Menu not updated:**  **Description:** Menu data is not updated in the app leads to unavailable menu items  **Impact:** Customer may order unavailable items, causing poor customer satisfaction.  **Responsible:** Business Analyst/ Development Team  **Status:** Open, awaiting updated data from restaurants. |

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| **2.Delivery Area Issue:**  **Description:** App unable to accurately detect the customer locations due to inaccurate data  **Impact:** Customer may unable to place orders or wrong address is used cause delayed and confusion  **Responsible:** Development Team  **Status:** Open, investigate API or improving mapping accuracy |

1. **Explain Velocity of the Team?**

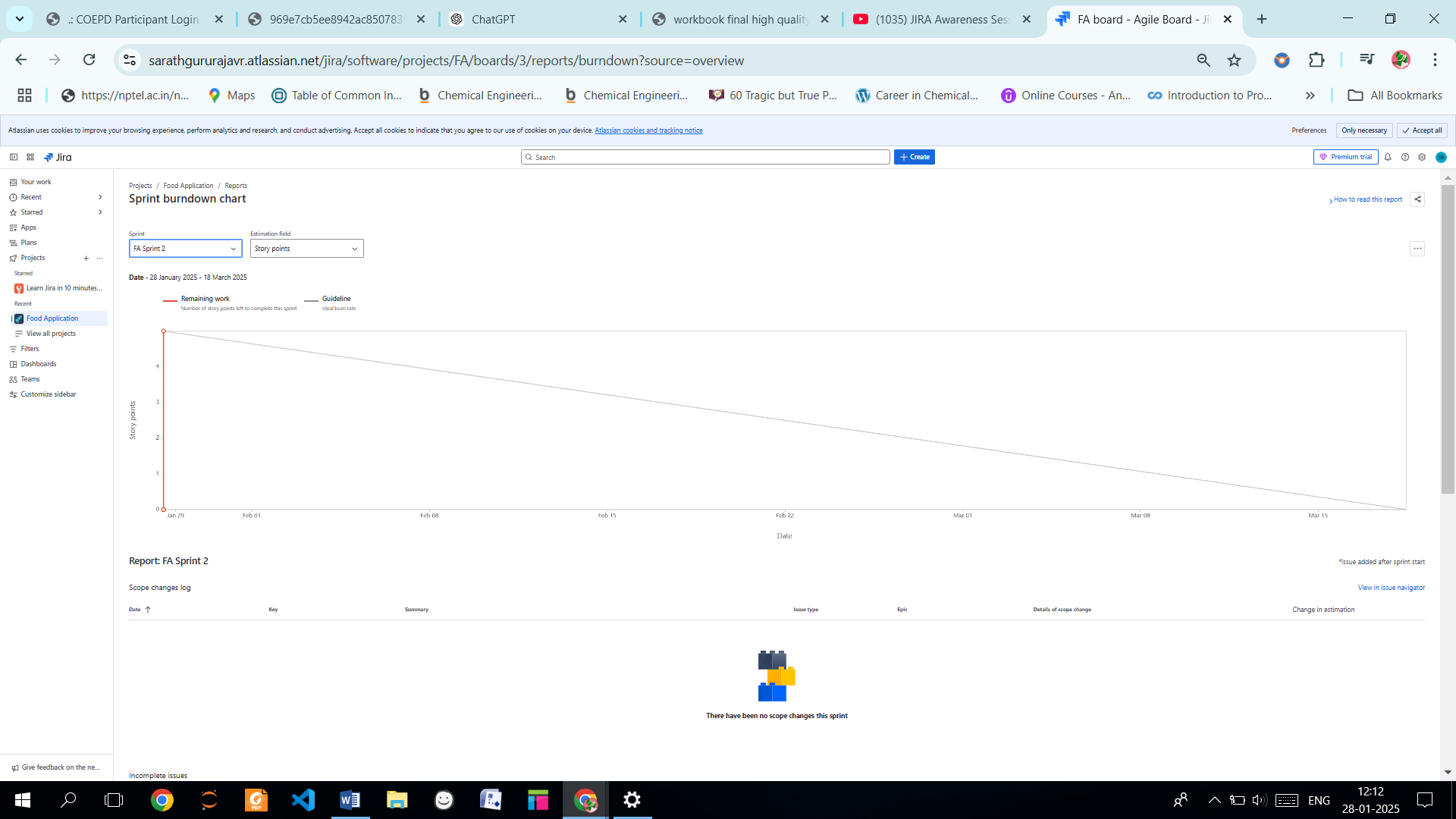
**Ans:** It is key metric used to measure the amount of work as scrum team can completed in a sprint. So, It is the total number of Story Points or work units the team completed in a sprint so that it helps the team to predict the how much work is achievable in future sprints by looking at historical data. Usually the product owner and the team use their historical velocity to plan how many stories or items can take to next sprint.

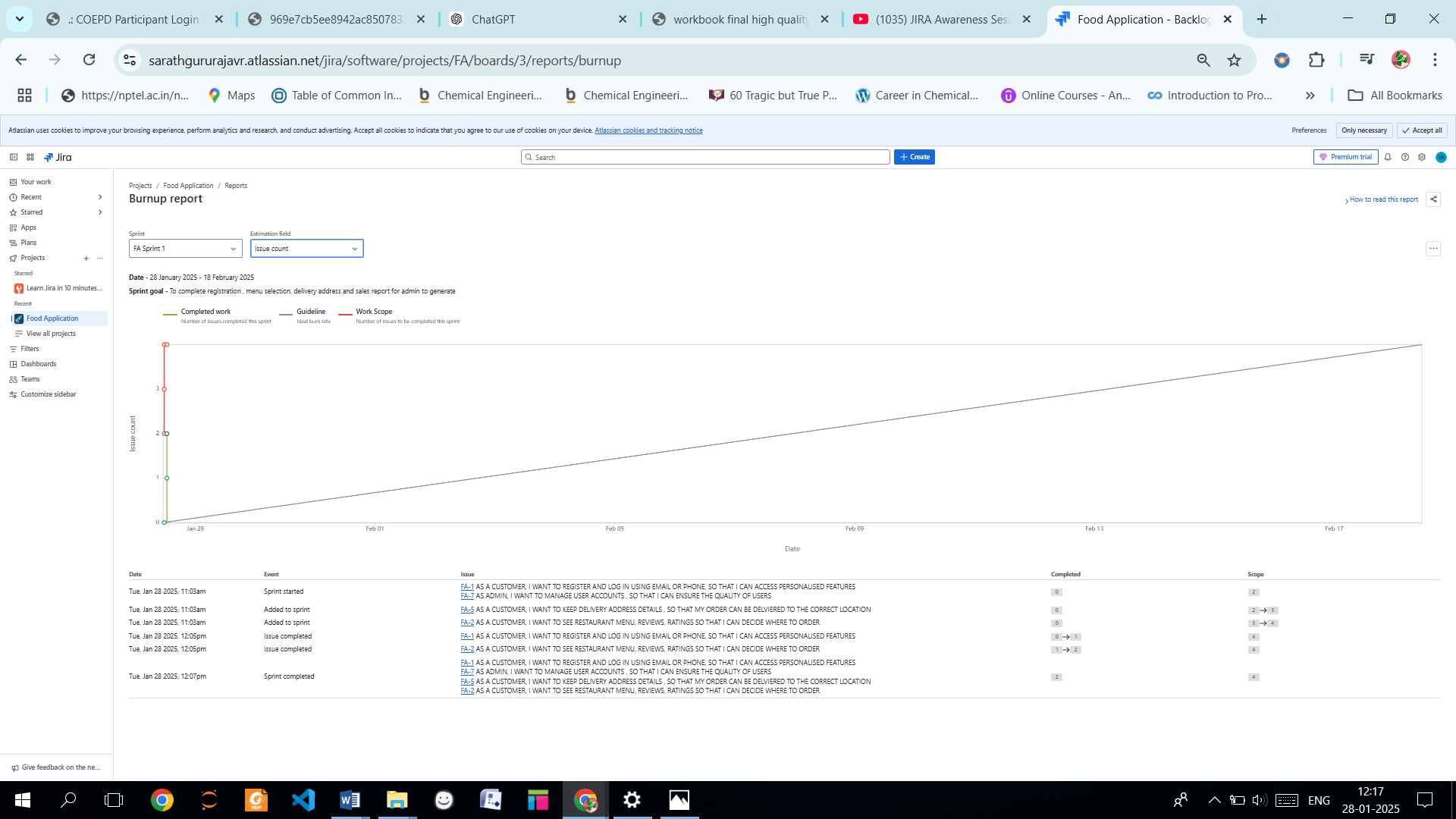
* It is measured in Story points like Ideal days or hours which are assigned to user stories or tasks based on their complexity and effort.
* It can be also discussed in **sprint retrospective** to understand impediments and also in **product backlog refinement** to reorder the product backlog
* **Consistent Velocity**: If velocity remains consistent sprint after sprint, **increased velocity**: A steady increase velocity indicates team in becoming efficient. **Decreased Velocity**: It signal of problem like technical debt, unresolved impediments or over commitment
* It can **calculated**, by If the team completes 4 user stories in sprint 1 with story points 1,5,3,5 the total velocity for Sprint 1 = 1+5+3+5= **14 story points** worth of work in a sprint and if they stabilize these for next 4 sprints and they have 20 story points in **remaining product backlog**, we can **estimate 20/14 =1.5 sprints** required **to complete the remaining work**.

1. **Draw Sprint Burn Charts n Product Burn Down Charts?**

**Ans:**

|  |  |
| --- | --- |
| **Sprint Burn Charts** | **Product Burn Down Charts** |
| This charts tracks the remaining work in the sprint, by showing the number of story points that team has left to complete. | This chart tracks the total remaining work in story points across multiple sprints aiming for all work to be completed by the project end. Also it shows the overall progress of **Product Backlog.** |
| X axis – Sprint Days  Y axis – Remaining effort for the current sprint ( story points, hours) | X Axis – Time in sprints or months  Y Axis – Total remaining effort for the entire product in story points |
| **Example :**Tracking how much of the user registration features is completed each day | **Example:** Tracking overall progress of all features like user registration, payment ,food listing |

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1. **Explain about Product Grooming?**

**Ans:** It is collaborative process in agile scrum work where the product backlog is prioritized, reviewed and updated to ensure it meets the relevant task for the team to work on. Also it helps in upcoming work items that are well defined and ready to taken up in the next sprint

* 1. **Who is Involved:** Product Owner (prioritize the backlog items),Development Team (insights to technical feasibility, effort estimates) , Scrum Master (facilitates the grooming session), BA and business stakeholders
  2. **Key Steps & Goals:** 
     1. Review Backlog items to ensure they have clear, actionable and clarify requirements
     2. Refine user stories by organize and prioritize task based on business value, customer needs or project timelines
     3. To break down epics into smaller, user stories
     4. To assign story points or to do effort estimation values like planning poker or T shirt sizing or Fibonacci series to backlog items. Remove or add items based on feedback or priorities and remove outdated items
     5. To identify and address any impediments that could delay progress

1. **Explain the roles of Scrum Master and Product Owner?**

**Ans:**

|  |  |
| --- | --- |
| **Scrum Master** | **Product Owner** |
| The role is to facilitate the scrum process and ensure the team is performing good and the practices of agile were followed | The role is to represents the stakeholders to define product vision and priorities and to ensure that the product delivers maximum business value to customers and business. |
| They protects the team from distractions whenever the team raises the issue , they will run to look for answers & remove impediments for the team | They collaborates with stakeholders to gather requirements and prioritize it |
| They most interacts with team and product owner rather than stakeholders | They interact extensively with stakeholders, customers and team |
| They facilitates scrum events such as daily scrum/stand up meeting, sprint planning meeting, sprint review meeting and sprint retrospective meeting | They defines and prioritizes the product backlog and take part in sprint review meeting to ensure they achieve the goal |
| They work to improve team productivity and clear scrum framework implementation | They work to raise the product increment and to maintain a well and prioritized backlog |
| They work closely with team to ensure smooth workflow and they don’t have authority over the team | They provide clarity to the team about the product features and have authority over the product backlog |

1. **Explain all Meetings Conducted in Scrum Project?**

**Ans:** A **Scrum Project** is the method of agile project management used in scrum framework. It can be used when requirements are unclear and need for collaboration with uncertainty of projects. It emphasize on collaboration, transparency and adaptability and faster value of the project delivery to stakeholders. So first we break down the project into features such as login screen, second we work on prioritized features during each sprint, third we demonstrate the completed features to stakeholder’s feedback and finally we adjust the product backlog and refine based on feedback and progress.

In this scrum project we have five ceremonies which are called as key meetings such as,

* 1. **Sprint Planning Meeting:**
* This meeting is conducted to plan the work for the upcoming sprint which is usually happens at the beginning of each sprint and team decides on what they will delivering in this sprint.
* The Product owner will explain their product vision and how the team should undergo the steps of the project
* In the meeting, the participants such as **Product Owner, Scrum Master, Development Team, and BA** will take part to decide the amount of work they can complete within the sprint.
* This team will break down the product backlog items into takes and estimate effort such as planning poker, T shirt sizing. Also the product owner will discuss the top priority items from the product backlog
  1. **Daily Scrum/Stand Up Meeting:**
* In the Meeting, the **Scrum Master** engages the team members to report the progress or issues on their tasks.
* This meeting conducted every day to plan and sync the team progress and the team member will answer for the following answer such as,

1. What did you do today?
2. What task will you do tomorrow?
3. Is there any impediments/challenges you faced and what measures you taken today?

* Finally the scrum master will update the plan and report to the product owner for the day

**12.3 Sprint Review Meeting:**

* In this meeting, the team will present live demo of the completed stories to product owner and get it cleared. This usually happens at end of each sprint.
* The scrum developers, scrum master will present the completed tasks, product owner will discuss the where they reach the product goal and also they will gather the feedback from stakeholders and alter the product backlog based on changing priorities.
* This meeting is conducted to ensure that the stakeholder alignment on progress and next steps ,also to update the product

**12.4 Sprint Retrospective Meeting:**

* This meeting is conducted at the end of the sprint, to inspect the performance and progress of the project. Also suggest the practise to improve those progress in next sprint.
* Basically, the **scrum master, PO and development team** will discuss on the following questions:

1. What went well in the sprint?
2. What did not go well?
3. What are the required areas of improvements in next sprint?

* They will prepare a list of actions items such as development process, communication or tools to ensure that these are identified to improve the upcoming sprint

**12.5 Product Backlog Grooming:**

* In this meeting, team members will refine and prioritize the product backlog by break down large epics, clarifying details and to do estimate effort.
* It necessary for the product owners to engage with scrum master and development team to assess the quality of the final product.

1. **Explain Sprint Size and Scrum Size?**

**Ans:**

|  |  |
| --- | --- |
| **Sprint Size** | **Scrum Size** |
| It refers to the duration of the sprint or the fixed time boxed period where the scrum team will deliver the shippable product increment. | It refers to the size of the scrum team or project scopes |
| It affects when new team might start with long sprints and reduce size as they improve. | It affects when large multi-functional teams may require complex projects |
| Usually we have duration of 1 -4 weeks of sprint, most cases we have 2 weeks of sprint for balance between manage overload and frequent feedback | Usually we have 4- 10 team members are participated. Smaller scrum team will recommended for easy communication |
| Smaller sprints will recommended for easier to adapt changes and lower risk | smaller team size will be recommended for well specialised task where domain knowledge is concentrated |
| Larger sprints will recommended for complex task and fewer administrative overheads | Large scrum will recommended to handle diverse but we have coordination issues, risk of diluting agile principles. |

1. **Explain DOR and DOD?**

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| --- | --- |
| **DOR** | **DOD** |
| DOR – **Definition of Ready** – it ensures that a product backlog item is fully prepared and ready to work on development team during a sprint. | DOD – **Definition of Done –** it ensures the work delivered meets quality standards and ready for release. Shares the agreement on what completion of product backlog item or product increment |
| The purpose of DOR is to clear understand of the work to be done and ensure enough details to start work on it | The purpose of DOD is to ensure consistency, quality and readiness of the deliverable |
| Applied before product backlog item enters sprint | Applied after product backlog item is completed |
| **Examples**   1. Item is small enough to be completed within a single sprint 2. Dependencies are identified and resolved 3. Well defined user stories with clear acceptance criteria 4. Required resources are available | **Examples**   1. Code is integrated and tested in staging environment 2. Codes are developed with unit tests are passed and meets acceptance criteria 3. Stakeholder approval is obtained |
| It ensures the team is set up for success in work delivery and increases sprint planning efficiency | It reduces technical debt by good work and align team members on definition of completion |

1. **Explain Prioritization Techniques and MVP**

**Ans:** A **Prioritization Techniques** is to prioritize or queuing the requirements for the development process that helps stakeholders and teams to decide which user stories or tasks should be worked based on their business value, needs, urgency and impact. Also it ensure that the most critical requirements are addressed with influence factors such as time, budget or effort which are limited that leading to maximize delivery value and efficient resource allocation.

Some of the Prioritization Techniques are,

* 1. **MOSCOW:**
* It is a prioritization framework used in SDLC and business analysis to reach a common understanding with stakeholders on the importance they place on the delivery of each requirement.
* In Agile and iterative projects it helps to prioritize the backlog for sprints or iterations. To focuses the team on high value outcomes with align of stakeholders
* The MOSCOW expands from , MUST HAVE, SHOULD HAVE, COULD HAVE, WON’t HAVE

**15.1.1 MUST HAVE –** Requirements that are critical for the project success, without these project cannot deliver its core purpose.

**Ex:** A User login system for food delivery app to order

**15.1.2 SHOULD HAVE -** Requirements that are important but not critical which are high priority and can be scheduled later if necessary as they enhance the product quality.

**Ex:** An admin wants to view dashboard for sales analytics.

**15**.**1.3 COULD HAVE –** Requirements that are desirable but not necessary and they can be included if time and resources permit to enhance the product deliver and have least priority compared to Must or Should have.

**Ex**: A Business Owners, wants to custom themes or text while update the food product.

**15**.**1.4 WON’t HAVE –** Requirements or features that out of scope for the current project but may be considered in the future. It helps in scope control and expectation management

**Ex**: A Customer can view the live availability of the food products in the app.

* 1. **100 dollars test:**
* It is method to prioritize tasks or requirements by allocation of an imaginary $100.
* First It gather all items to be prioritized like user stories, features etc. Secondly, give each participant of $100 of imaginary money and Third, ask them to distribute the $100 among the items based on their importance. Finally, add the allocated dollars for each item which one are most value by the group that are prioritized.
* They are simple and quick to perform and may not consider dependencies
  1. **MVP:**
* MVP – **Minimum Viable Product –** is the product with minimum features needed to solve a core problem and satisfy early users
* It is used to focus on solving the primary problem and deliver value even with limited features. Also improve based on feedback over time
* The purpose of MVP to test the product idea quickly and to reduce the minimize of cost development and risks
* **Example:** List of all restaurant and browse the food from the restaurant to order

1. **Difference between Business Analyst & Product Owner?**

**Ans**

|  |  |
| --- | --- |
| **Business Analyst** | **Product Owner** |
| Business analyst will gather and analyse business requirements. Also document use cases and workflows | Product Owner will define and prioritize the product backlog. Also create and communicate the product vision |
| They work closely with stakeholders to gather the requirements and understand their objective | They acts the central point of contact with stakeholders and manages their expectations |
| Responsibility of BA: To do BRD,FRD, Process flows and wireframes, other functional specifications | Responsibility of PO: Deals with product backlog, user stories with acceptance criteria and sprint goals |
| Less involved in technical decisions and more focused on requirements and process improvement | More involved in technical discussion, especially in agile team to ensure to meet the needs |
| Have limited authority and provides recommendations but does not make final product decisions | Have high authority to make decisions on product scope, priorities and directions |
| Who does not own the product but clarify the requirements to work | Who owns the product and accountable for success |

1. **Prepare a sample Resume of 3yrs exp Product Owner?**

**Ans:**

PRADEEP KUMAR

Email: [prk342@gmail.com](mailto:prk342@gmail.com) | Phone no: +91 8382938212 | LinkedIn: linkedin.com/pradeepkumar

# SUMMARY

A Proven result oriented Product Owner with 3 years of experience, manage product lifecycle, product backlogs and collaboration with cross functional team to ensure successful high delivery products within deadlines. Adept at working with stakeholders, prioritizing features and translating business needs into actionable development tasks.

## SKILLS

* Stakeholder Management
* Product Life cycle Management
* User stories and backlog management
* Business Analysis
* Agile Methodology and its framework
* Technical Skills: JIRA, TRELLO, Confluence, SQL, EXCEL, Product metrics, ASANA, A/B testing

### EXPERIENCE

# Product Owner

ABC tech solutions| Hyderabad, India JULY 2022 - PRESENT

* Worked Closely with customers and internal teams to gather feedback and translate into actionable product requirements
* Assisted Senior Product Owners in Managing the product backlog and user stories ensuring timely delivery of features. Contributed to increase team velocity by improving the backlog refinement
* Collaborated with other technical team like development and design team led sprint planning, review and retrospective meeting ensuring alignment between them and also prioritization of features based on customer satisfactions.
* Conducted market research and customer interviews, analyse product data and provided insights for improving product features and increasing customer satisfaction.

Key Achievement:

* Played a major role in delivering a food delivery application that enhances the users by 40%.
* Reduced the bug resolution time by 30% by implementing better communication strategies with QA teams

## EDUCATION

MASTER OF BUSINESS ADMINISTRATION (MBA) 2020 - 2022

SIT University | Delhi, India

CGPA: 9.8

BACHELOR OF TECHNOLOGY, CHEM ENGG 2016 - 2020

Indian Institute of Technology, Madras

CGPA: 9.2

# PROJECTS

Food web application JULY 2022 – MAR 2023

Managed the design of food application that improves user to order the food in online platform, leading to 30% of increase in monthly active users.

UBER Application Redesign APR 2023 - MAR 2024

Led the enhancement of redesign of the dashboard interface and addition of new reporting features. Results in 30% of increase in customer satisfaction based on post launch survey.

## CERTIFICATIONS

* Product Management Certification – XYE Institute (2022)
* Certified Scrum Product Owner - Scrum Alliance ( 2024)

## LANGUAGES

* English
* Tamil
* Hindi
* Telugu

## DECLARATION

I hereby I attached the correct information as per my knowledge.