CAPSTONE PROJECT PART-2/2

**Document 1:**

**Definition of Done**: The **Definition of Done (DoD)** is a shared understanding among the development team and stakeholders of what constitutes a "completed" product increment or feature. It sets clear expectations for when a user story, feature, or task is considered fully finished, ensuring high-quality deliverables and alignment with business goals.

1. **Produced Code for Presumed Functionalities:**
	* The functionality described in the user story has been fully implemented in code.
	* All tasks associated with the feature (e.g., cart functionality, checkout, product listing) are complete.
2. **Assumptions of User Story Met:**
	* All assumptions and requirements mentioned in the user story (e.g., user behaviour, edge cases) have been addressed in the solution.
	* The solution aligns with business and technical requirements.
3. **Project Builds Without Errors:**
	* The code builds successfully without errors or warnings in the development and integration environments.
	* The build process has been verified and is repeatable.
4. **Unit Tests Written and Passing:**
	* Unit tests have been written for new or modified code.
	* All unit tests pass without failures, ensuring that the individual components function as expected.
5. **Project Deployed on the Test Environment Identical to Production Platform:**
	* The feature is deployed to a staging/test environment that mirrors the production environment (same configurations, version, etc.).
	* The deployment process has been tested and is reproducible.
6. **Tests on Devices/Browsers Listed in the Project Assumptions Passed:**
	* The feature has been tested across all devices and browsers specified in the project assumptions (e.g., mobile devices, Chrome, Safari, etc.).
	* The feature displays and functions as expected across the required platforms.
7. **Feature Ok-ed by UX Designer:**
	* The feature has been reviewed and approved by the UX designer to ensure it meets the user experience and design standards.
	* The UI is intuitive, accessible, and aligns with the overall look-and-feel of the platform
8. **QA Performed & Issues Resolved:**
	* QA has completed their testing (including functional and non-functional tests) and confirmed the feature works as expected.
	* Any reported issues have been addressed and resolved.
9. **Feature is Tested Against Acceptance Criteria:**
	* The feature has been validated against the acceptance criteria defined for the user story.
	* All functional, non-functional, and edge-case scenarios specified in the acceptance criteria have been tested and passed.
10. **Feature Ok-ed by Product Owner:**
	* The feature has been demoed and approved by the Product Owner, confirming that the business requirements and objectives have been met.
	* Any feedback or requests for adjustments have been incorporated.
11. **Refactoring Completed:**
	* The code has been refactored as needed to ensure it is clean, efficient, and easy to maintain.
	* Any code smells or technical debt identified during the development process have been addressed.
12. **Any Configuration or Build Changes Documented:**
	* Any changes made to the configuration, environment setup, or build process have been properly documented.
	* Documentation has been updated to reflect changes that affect deployment, integration, or environment setup.
13. **Documentation Updated:**
	* The project documentation (e.g., user guides, API documentation, system architecture) has been updated to reflect the new functionality.
	* Any new configurations, APIs, or workflows have been added to the relevant documentation.
14. **Peer Code Review Performed:**
	* The code has been reviewed by at least one peer developer to ensure it meets coding standards, is bug-free, and follows best practices.
	* Feedback from the peer review has been addressed and any required changes have been made.

**2**.**Document 2- Product Vision**

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| Scrum ProjectName: |  Online shopping |
| Venue: |  Delhi |
| Date: | Start time:20-01-2025 | End time:27-12-2025 | Duration: 1-Year |
| Client: |  ABS Shopping |
| Stake holder list: |  |  |  |
|  |
|  Scrum Team |
| Scrum Master: |  Kate |  |  |
| Product Owner: |  Daniel |  |  |
| Scrum developer 1: |  Brad |  |  |
| Scrum developer 2: |  Jenni |  |  |
| Scrum developer 3: |  Couper |  |  |
| Scrum developer 4: |  Winnie |  |  |
| Scrum developer 5: |  Rahul |  |  |
|  UI Designer |  |  |  |
| Business Analyst |  Shaik Javid  |  |  |

**Vision: What is your vision, your overarching goal for creating the product?**

* The vision of this online shopping platform is to provide a seamless and personalized shopping experience for users globally.
* By offering a wide range of products, intuitive navigation, and integrated support for easy payment and shipping, we aim to be the go-to destination for customers looking to shop from the comfort of their own homes.
* The overarching goal is to create a user-friendly, secure, and responsive platform that drives customer loyalty and satisfaction.

**1. Target Group**

**Which market segment does the product address?**

The product addresses the e-commerce market, specifically targeting consumers who prefer online shopping for convenience, price comparison, and product variety.

**Who are the target users and customers?**

The target users are tech-savvy shoppers who are aged 18-45, have a preference for online shopping, and seek convenience in purchasing a variety of products such as electronics, fashion, home goods, and beauty products.
The customers could be both individual consumers (B2C) and businesses looking to purchase in bulk (B2B).

**2. Needs**

**What problem does the product solve?**

The product solves the problems of limited access to products, time constraints in traditional shopping, and lack of variety in physical stores. It also addresses the need for a secure and efficient shopping experience, allowing customers to easily find products, read reviews, compare prices, and make purchases with confidence and ease.

**Which benefit does it provide?**

The platform offers customers a wide variety of products, the convenience of shopping from anywhere, and the freedom to compare prices across different sellers. It also supports secure payment methods and reliable shipping options, ensuring peace of mind during the shopping process.

**3. Product**

**What product is it?**

It is an online shopping platform (e-commerce website and mobile app) that allows customers to browse, select, and purchase a variety of products from different categories such as electronics, clothing, home goods, beauty products, and more.

**What makes it desirable and special?**

The platform’s personalized experience, user-friendly interface, and wide product range make it stand out. Key features like real-time stock updates, discounts, deals, and recommendations, along with fast and reliable delivery options, will further enhance its desirability. It will also have social proof elements like product reviews, ratings, and ratings to build trust.

**Is it feasible to develop the product?**

Yes, with the current availability of robust e-commerce platforms, cloud infrastructure, and reliable payment and shipping integrations, developing this product is technically feasible. The platform will be built using modern technologies such as cloud hosting, secure payment gateways, and a responsive front-end design.

**4. Value**

**How is the product going to benefit the company?**

The online shopping platform will benefit the company by attracting a large number of customers, driving sales revenue, and creating brand loyalty. The company can also leverage data on user behaviour to optimize sales strategies, enhance marketing, and create new business opportunities (e.g., targeted advertising and promotions).

**What are the business goals?**

* + Increase market share by offering a diverse range of products and targeting a broad consumer base.
	+ Generate consistent revenue through direct sales and possibly through partnerships with brands and third-party sellers.
	+ Establish strong customer retention through excellent customer service, loyalty programs, and personalized shopping experiences.
	+ Scale the platform by expanding to new regions and integrating more product categories.

**What is the business model?**

The business model is likely a B2C e-commerce model, where the company sells products directly to consumers. The company may also incorporate a marketplace model, where third-party sellers list their products on the platform in exchange for a commission. Additionally, there could be opportunities for affiliate marketing or advertisements from other businesses.

**Document 3: User stories**

**User Stories**

 are short simple stories used to describe the functionality/requirements of the client from the user’s perspective. It shows the world on how the User’s side is and it simplifies the requirements descripon.0

**Business Value (BV**

- BV is how important is this feature (User story) to the Business

**Complexity Points (CP**

- Complexity points are the efforts used for the developers to write the code and the me spent or the requirement. It is rated as per the CP points known as Poker cards.

**Acceptance criteria**

- While User stories aim at describing what exactly the user wants the system to do, the goal or acceptance criteria is to explain the conditions that a specific user story must satisfy.

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| **User Story No. 1** |  **Task: 2** |  **Priority : high** |
|  **Value Statement** : As a customer, I want to be able to create an account so that I can save my details for future purchases |
|  BV : 500 CP :1 |
|  **Acceptance Criteria** : User can create an account with email and password. - Email verification is sent after registration. - User receives a success message after account creation. |

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| **User Story No. 2** |  **Task: 2** |  **Priority : high** |
|  **Value Statement** : As a customer, I want to log in to my account so that I can access my order history and saved preferences. |
| BV : 200 CP : 2 |
| **Acceptance Criteria** : User can log in using email and password. - Incorrect login shows error message. - User is redirected to dashboard after successful login. |

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| **User Story No. 3** |  **Task : 2** |  **Priority: medium** |
|  **Value Statement** : As a customer, I want to browse products by category so that I can easily find items I am interested in. |
| BV : 200 CP : 2 |
| **Acceptance Criteria** : - User can view a list of product categories. - User can click on a category to view related products. |

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| **User Story No. 4** |  **Task : 2** |  **Priority : high** |
|  **Value Statement** : As a customer, I want to be able to search for products using keywords so that I can quickly find specific items. |
|  BV : 500 CP : 8 |
| **Acceptance Criteria :** User can enter a search term. - Relevant product results appear. - Search results can be filtered by price, rating, etc. |

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| **User Story No. 5** |  **Task** |  **Priority: High** |
| **Value Statement** : As a customer, I want to view detailed product information (including images, price, and reviews) so that I can make informed purchasing decisions. |
|  BV : 200 CP : 2 |
|  **Acceptance Criteria** : Product page displays images, price, description, reviews, and availability. - User can add product to cart from product page. |

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| **User Story No. 6** |  **Task** |  **Priority: High** |
|  **Value Statement** : As a customer, I want to add products to my shopping cart so that I can purchase multiple items in one transaction |
|  BV : 500 CP : 4 |
| **Acceptance Criteria** : User can add items to the cart. - Cart updates with item details (name, price, quantity). - Cart icon updates to show number of items added. |

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| **User Story No. 7** |  **Task** |  **Priority: Medium** |
|  **Value Statement** : As a customer, I want to modify the items in my shopping cart (e.g., change quantity or remove items) before checkout. |
|  BV :200 CP : 4 |
| **Acceptance Criteria** : User can update the quantity or remove items from the cart. - Cart is updated in real-time. |

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| **User Story No. 8** |  **Task** |  **Priority: Medium** |
| **Value Statement** : As a customer, I want to view and apply discount codes so that I can get promotions on my orders. |
|  BV :50 CP : 13 |
|  **Acceptance Criteria** : User can enter a discount code during checkout. - Discount is applied to the order total. - Invalid codes show an error message. |

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| **User Story No. 9** |  **Task** |  **Priority: high** |
| **Value Statement** : As a customer, I want to proceed to checkout and choose a shipping method so that I can complete my order. |
|  BV : 200 CP : 4 |
| **Acceptance Criteria** : User can enter shipping address and select shipping method. - Shipping cost is displayed before finalizing the order. - User can proceed to payment after selecting shipping option. |

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| **User Story No. 10** |  **Task** |  **Priority** |
| **Value Statement** : As a customer, I want to securely enter my payment details so that I can complete my purchase. |
|  BV : 200 CP : 8 |
|  **Acceptance Criteria** : User can enter credit/debit card details securely. - Payment gateway handles transaction securely. - User receives confirmation of order upon successful payment. |

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| **User Story No. 11** |  **Task** |  **Priority: Medium** |
| **Value Statement** : As a customer, I want to receive an order confirmation email so that I know my purchase was successful. |
|  BV : 500 CP : 2 |
| **Acceptance Criteria** : User receives an email confirming the order after successful purchase. - Email contains order details (items, total price, estimated delivery date). |

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| **User Story No. 12** |  **Task** |  **Priority: medium** |
|  **Value Statement** : As a customer, I want to track the status of my order so that I can stay informed about its delivery. |
|  BV :200 CP : 4 |
| **Acceptance Criteria** : User can view order status in their account (e.g., pending, shipped, delivered). - User receives an email with tracking information once the order is shipped. |

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| **User Story No. 13** |  **Task** |  **Priority: low** |
|  **Value Statement** : As a customer, I want to rate and review products so that I can share my experience with others. |
|  BV : 200 CP : 4 |
| **Acceptance Criteria** : User can rate the product (1-5 stars) and write a review. - Reviews are displayed on the product page after submission. - User can edit or delete their review. |

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| **User Story No.14**  |  **Task** |  **Priority: High** |
| **Value Statement** : As an admin, I want to manage product listings (add/edit/remove) so that the online store is up-to-date with available products. |
|  BV : 200 CP : 8 |
|  **Acceptance Criteria** : Admin can add, edit, or remove products from the catalogue. - Changes reflect on the storefront immediately. |

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| **User Story No. 15** |  **Task** |  **Priority: High** |
| Value Statement : As an admin, I want to view customer orders so that I can process them efficiently. |
|  BV :200 CP : 3 |
| **Acceptance Criteria** : Admin can view a list of customer orders. - Admin can change the order status (e.g., processing, shipped). |
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| **User Story No. 16** |  **Task** |  **Priority** |
| **Value Statement** : This feature improves engagement and customer retention by providing access to personalized preferences and past purchases. |
|  BV : 200 CP : 6 |
|  **Acceptance Criteria** : 1. Users can log in with email and password. 2. Users can view their order history. 3. Users can see their saved preferences and payment methods |

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| **User Story No. 17** |  **Task** |  **Priority** |
| **Value Statement** : Enables better product discoverability and user engagement, improving sales potential. |
|  BV : 20 CP : 12 |
|  **Acceptance Criteria** : Users can filter products by category. 2. Categories are clearly visible and easy to navigate. 3. The product list updates as per the selected category. |

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| **User Story No. 18** |  **Task** |  **Priority** |
| **Value Statement** : A cart system facilitates purchase decisions and reduces cart abandonment rates. |
|  BV : 150 CP : 4 |
|  **Acceptance Criteria** : 1. Users can add products to the cart. 2. Users can view items in their cart. 3. Users can remove or adjust quantities of items. |

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| **User Story No. 19** |  **Task** |  **Priority** |
| **Value Statement** : Encourages conversion and increases sales through discounts and promotional strategies. |
|  BV : 200 CP : 8 |
|  **Acceptance Criteria** : 1. Promo code input field is available. 2. Valid promo codes are applied to the order total. 3. Invalid promo codes show an error message. |

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| **User Story No. 20** |  **Task** |  **Priority** |
| **Value Statement** : A smooth and secure checkout process leads to increased conversion rates and customer trust. |
|  BV : 200 CP : 2 |
|  **Acceptance Criteria** : Multiple payment methods are available. 2. Payment is securely processed. 3. Customers receive a confirmation email after the payment is successful. |

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| **User Story No. 21** |  **Task** |  **Priority** |
| **Value Statement** : Keeps customers informed and improves satisfaction by providing transparency. |
|  BV : 20 CP : 4 |
|  **Acceptance Criteria** : 1. Users can view the status of their order. 2. Status includes shipment tracking and estimated delivery date. 3. Users are notified via email when the status changes. |

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| **User Story No. 22** |  **Task** |  **Priority** |
| **Value Statement** : Reviews help build trust and influence purchase decisions, improving conversion rates. |
|  BV : 150 CP : 6 |
|  **Acceptance Criteria** : 1. Users can leave a review with a rating for a product. 2. Reviews are visible to other customers. 3. Reviews can be edited or deleted by the user. |

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| **User Story No. 23** |  **Task** |  **Priority** |
| **Value Statement** : Filtering improves the browsing experience and increases the likelihood of conversion. |
|  BV : 500 CP : 12 |
|  **Acceptance Criteria** : 1. Users can filter products by price, brand, and rating. 2. Filters work without page reloads. 3. Products update dynamically according to selected filters. |

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| **User Story No. 24** |  **Task** |  **Priority** |
| **Value Statement** : Inventory management is crucial for ensuring product availability and avoiding overselling. |
|  BV : 200 CP : 2 |
|  **Acceptance Criteria** : 1. Admins can update product stock levels. 2. Admins can edit product details such as name, description, and price. 3. Admins can add or remove products. |

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| **User Story No. 25** |  **Task** |  **Priority** |
| **Value Statement** : Personalization increases engagement and sales by providing relevant product suggestions. |
|  BV : 200 CP : 4 |
|  **Acceptance Criteria** : 1. Product recommendations appear based on browsing history. 2. Recommendations update in real-time as the user interacts with the site. |

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| **User Story No. 26** |  **Task** |  **Priority** |
| **Value Statement** : As a customer, I want to securely enter my payment details so that I can complete my purchase. |
|  BV : 200 CP : 13 |
|  **Acceptance Criteria** : User can enter credit/debit card details securely. - Payment gateway handles transaction securely. - User receives confirmation of order upon successful payment. |

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| **User Story No. 27** |  **Task** |  **Priority** |
| **Value Statement** : Confirmation emails provide reassurance, improving customer satisfaction. |
|  BV : 200 CP : 4 |
|  **Acceptance Criteria** : 1. Email confirmation is sent after purchase. 2. The confirmation includes order details and estimated delivery time. 3. Users can contact customer support from the email. |

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| **User Story No. 28** |  **Task** |  **Priority** |
| **Value Statement** : Filtering by availability reduces customer frustration and abandonment. |
|  BV : 200 CP : 8 |
|  **Acceptance Criteria** : 1. Users can filter products by availability. 2. Out-of-stock items are not shown. |

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| **User Story No. 29** |  **Task** |  **Priority** |
| **Value Statement** : As a customer, I want to filter products by price, brand, and rating so I can find the best options. |
|  BV :500 CP : 13 |
|  **Acceptance Criteria** : 1. Users can filter by price, brand, and rating. 2. Filters update products in real time. 3. The filter selection is clearly visible. |

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| **User Story No. 30** |  **Task** |  **Priority** |
| **Value Statement** : As an admin, I want to manage inventory so I can update stock levels and product details. |
|  BV : 200 CP : 4 |
|  **Acceptance Criteria** : 1. Admins can adjust stock levels. 2. Admins can edit product details (price, description). 3. Admins can add or remove products. |

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| **User Story No. 31** |  **Task** |  **Priority** |
| **Value Statement** : As a customer, I want to view product details (images, descriptions, specifications) so I can make an informed purchase. |
|  BV : 200 CP : 8 |
|  **Acceptance Criteria** : 1. Product page displays images, descriptions, and specifications. 2. Product variants are visible. 3. Users can zoom into product images. |

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| **User Story No. 32** |  **Task** |  **Priority** |
| **Value Statement** : As a customer, I want to receive a confirmation email after purchase so I know my order was successful. |
|  BV : 50 CP : 4 |
|  **Acceptance Criteria** : 1. Confirmation email is sent after purchase. 2. The email includes order details and estimated delivery |

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| **User Story No. 33** |  **Task** |  **Priority** |
| **Value Statement** : As a customer, I want to save my payment information so I don’t have to enter it every time I check out. |
|  BV : 500 CP : 8 |
|  **Acceptance Criteria** : Users can save payment information securely. 2. Saved payment methods are available on subsequent checkouts. |

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| **User Story No. 34** |  **Task** |  **Priority** |
| **Value Statement** : As a customer, I want to see product reviews with detailed ratings (1-5 stars) so I can make an informed decision. |
|  BV : 200 CP : 2 |
|  **Acceptance Criteria** : Product reviews show star ratings. 2. Reviews include user-generated text. 3. Reviews can be sorted by most recent or highest rating. |

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| **User Story No. 35** |  **Task** |  **Priority** |
| **Value Statement** : As a customer, I want to create a wish list so I can save items I’m interested in for future purchase. |
|  BV : 150 CP : 4 |
|  **Acceptance Criteria** : 1. Users can add products to a wish list. 2. Users can view, edit, and delete items in the wish list. |

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| **User Story No. 36** |  **Task** |  **Priority** |
| **Value Statement** : As a customer, I want to track the delivery status of my order so I can know when to expect it. |
|  BV : 133 CP : 8 |
|  **Acceptance Criteria** : 1. Users can track orders. 2. Delivery status is updated in real time. 3. Notifications are sent at key stages of delivery. |

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| **User Story No. 37** |  **Task** |  **Priority** |
| **Value Statement** : As a customer, I want to request a refund or return directly through the platform so I can resolve any issues with my order. |
|  BV : 50 CP : 13 |
|  **Acceptance Criteria** : 1. Users can initiate a return or refund. 2. The status of the return is visible. 3. Users receive email updates about their return status. |

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| **User Story No. 38** |  **Task** |  **Priority** |
| **Value Statement** : As a customer, I want to filter by product size to ensure the items I purchase fit properly. |
|  BV : 200 CP : 8 |
|  **Acceptance Criteria** : 1. Size filter is available on product listings. 2. Only available sizes are shown |

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| **User Story No. 39** |  **Task** |  **Priority** |
| **Value Statement** : As a customer, I want to see suggested products based on my browsing history so I can discover new products I might like. |
|  BV : 200 CP : 4 |
|  **Acceptance Criteria** : 1. Suggested products appear based on browsing history. 2. Suggestions are updated in real time. |

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| **User Story No. 40** |  **Task** |  **Priority** |
| **Value Statement** : As an admin, I want to view sales reports so I can analyze performance and optimize inventory |
|  BV : 200 CP : 12 |
|  **Acceptance Criteria** : Admins can view sales by product, category, and date range. |

**4. Document 4: Agile PO Experience**

The **Product Owner (PO)** in an online shopping project plays a pivotal role in driving the success of the product. The PO acts as the primary point of contact between the business and the Scrum team, ensuring that the product meets market needs, customer expectations, and business goals. Below is a detailed breakdown of the PO's responsibilities and the learnings from the project.

**Responsibilities of the Product Owner in the Online Shopping Project**

**1. Market Analysis:**

* **Analysis of Market Need/Demand:** The PO performs detailed market research to understand the demand for certain products and trends in the online shopping industry. The PO identifies customer pain points and ensures the product addresses those needs effectively.
* **Availability of Similar Products in the Market:** The PO conducts competitive analysis to understand what similar products are available in the market. This analysis helps define the unique value proposition of the product and informs key differentiators.

**2. Enterprise Analysis:**

* **Due Diligence on the Market Opportunity:** The PO assesses the viability of launching the product in the market by conducting a feasibility study. This includes evaluating potential revenue, market share, and the competitive landscape.

**3. Product Vision and Roadmap:**

* **Product Vision:** The PO creates and communicates the vision of the product, keeping the market need and customer expectations in mind. The vision should highlight the key goals and the overall purpose of the product.
* **Product Roadmap:** The PO develops a roadmap with high-level features and an estimated timeline for the product's evolution. This roadmap guides the team and stakeholders, providing clear milestones for development and release.

**4. Managing Product Features:**

* **Managing Stakeholder Expectations:** The PO engages with business stakeholders regularly to manage expectations and clarify any misunderstandings. The PO ensures that the product features align with business goals and user needs.
* **Prioritization of Epics, Stories, and Features:** The PO prioritizes the backlog, focusing on high-value features and epics that bring the most return on investment (ROI). This involves evaluating the urgency and impact of each feature on both the business and the customer.

**5. Managing Product Backlog:**

* **Prioritization of User Stories:** The PO works with the Scrum team to prioritize user stories based on business value, dependencies, and technical complexity.
* **Reprioritization Based on Stakeholder Needs:** As stakeholder requirements evolve, the PO adjusts the product backlog, ensuring the team focuses on the most critical tasks.
* **Epics Planning:** The PO breaks down large features (epics) into smaller, manageable user stories that are easier for the development team to work on in sprints.

**6. Managing Overall Iteration Progress:**

* **Sprint Progress Review:** The PO reviews the progress of each sprint, ensuring that the Scrum team is on track and that the sprint goals are being met.
* **Reprioritization of Sprints and Epics if Needed:** If new priorities emerge during a sprint, the PO may adjust the backlog, ensuring the team focuses on the most impactful tasks.
* **Sprint Retrospectives with Business Analyst:** The PO participates in sprint retrospectives, collaborating with the Scrum team and the Business Analyst to reflect on what worked well and what could be improved for future sprints.

**Learnings from the Project: Sprint Meetings**

Throughout the project, I learned how to manage and participate in various Scrum ceremonies, which are essential for maintaining a healthy and productive development process:

1. **Sprint Planning Meeting:**
	* The team discusses which user stories will be worked on in the upcoming sprint.
	* The PO defines the priorities for the sprint and clarifies any uncertainties in the user stories.
2. **Daily Scrum Meeting:**
	* The team holds short daily meetings to discuss progress, blockers, and the plan for the day.
	* The PO may attend to answer any questions or clarify requirements.
3. **Sprint Review Meeting:**
	* At the end of the sprint, the team presents the completed features to stakeholders.
	* The PO reviews the deliverables, ensures the acceptance criteria are met, and collects feedback for future iterations.
4. **Sprint Retrospective Meeting:**
	* The team reflects on the sprint process to identify improvements.
	* The PO works with the Scrum team to address any challenges or inefficiencies identified during the sprint.
5. **Backlog Refinement Meeting:**
	* The PO, along with the team, refines the product backlog by breaking down epics into user stories, clarifying requirements, and re-prioritizing tasks as necessary.

**User Story Creation:**

I learned the importance of crafting **user stories** that are clear, concise, and actionable. Key components of a user story include:

* **Story Number:** A unique identifier for the user story (e.g., US001).
* **Tasks:** A breakdown of work needed to complete the user story (e.g., design UI, develop cart functionality, etc.).
* **Priority:** The priority of the user story based on its importance and urgency (e.g., High, Medium, Low).
* **Acceptance Criteria:** Clear, testable conditions that define when the story is "done" (e.g., "The cart should display the correct total price after adding an item").
* **Business Value (BV) and Customer Pain (CP) Value:** The value that the feature brings to the business and how it addresses customer pain points (e.g., increased sales, improved customer satisfaction).

**PO as a Liaison Between Stakeholders and Scrum Team:**

In Scrum, the PO serves as a **liaison** between multiple areas of the organization:

* The PO communicates with **business stakeholders** to understand their needs and expectations.
* The PO collaborates closely with the **Scrum team** to ensure they understand and build the right product features.
* The PO keeps all areas of the business informed about the project's development and any updates, ensuring alignment with business goals.

**Developing Product Features and Backlog Items:**

The **Product Owner** translates the product vision into actionable items for the Scrum team by:

* Developing a vision for the product's **function and operation**.
* Breaking the vision into specific **product features** and **backlog items** that the Scrum team can implement.
* Organizing features into **epics** and breaking them down into **user stories**, ensuring each story has clear **acceptance criteria** and aligns with business priorities.

**Document 5: Product and sprint backlog and product and sprint burndown charts**

**Product backlog:**

A product backlog is a list of the new features, changes to existing features, bug fixes, infrastructure changes, or other activities that a team may deliver in order to achieve a specific outcome.

It should be cheap and fast to add a product backlog item to the product backlog, and it should be equally as easy to remove a product backlog item that does not result in direct progress to achieving the desired outcome or enable progress toward the outcome. Product backlog items take a variety of formats, with user story being the most common.

The team using the product backlog determines the format they chose to use and looks to the backlog items as reminders or the aspects of a solution they may work on.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **User story ID** | **User Story** | **Tasks** | **Priority** | **BV** | **CP** | **Sprint** |
| US001 | As a customer, I want to create a user account so that I can save my information for faster checkout. | Design user registration page- Implement form validation- Create user account API | High | 500 | 2 | 1 |
| US002 | As a customer, I want to log in to my account so I can view my order history and saved preferences. | Design login page- Implement authentication system- Integrate with database for user data | High | 200 | 2 | 1 |
| US003 | As a customer, I want to browse products by categories so that I can find what I'm looking for easily. | Design category filter UI- Implement backend filtering logic- Implement category pages | High | 200 | 2 | 2 |
| US004 | As a customer, I want to add items to my shopping cart so that I can review them before checkout. | Design shopping cart page- Implement add-to-cart functionality- Test cart features | High | 200 | 2 | 2 |
| US005 | As a customer, I want to apply a promo code during checkout to get a discount on my purchase. | Design promo code input UI- Implement promo code validation- Integrate with payment system | Medium | 200 | 2 | 1 |
| US006 | As a customer, I want to securely checkout with various payment options (credit/debit cards, PayPal, etc.) | Design checkout page- Integrate payment gateways (Stripe, PayPal)- Implement security (SSL, encryption) | High | 200 | 2 | 1 |
| US007 | As a customer, I want to be notified about my order status so I can track delivery. | Design order status page- Implement email/SMS notifications- Integrate with shipping API | Medium | 300 | 2 | 2 |
| US008 | As a customer, I want to leave reviews for products I purchase so that I can help other customers make decisions. | Design review system UI- Implement review submission- Integrate with product database | Medium | 300 | 2 | 2 |
| US009 | As a customer, I want to filter products by price, brand, and rating so that I can quickly find the best options. | Design product filter sidebar- Implement filter logic- Test for various filter combinations | High | 300 | 2 | 2 |
| US010 | As an admin, I want to manage inventory so that I can update product stock levels. | Design inventory management UI- Implement CRUD functionality for products- Integrate with product database | Medium | 300 | 2 | 2 |

**Sprint backlog:**

The Sprint Backlog is composed of the sprint goal (why), the set of Product Backlog items selected for the Sprint (what), as well as an actionable plan for delivering the Increment(how).

The Sprint Backlog is a plan by and for the Developers. It is a highly visible, real-time picture of the work that the Developers plan to accomplish during the Sprint in order to achieve the Sprint Goal.

Consequently, the Sprint Backlog is updated throughout the Sprint as more is learned.

It should have enough detail that they can inspect their progress in the Daily Scrum.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **User story ID** | **User story** | **Tasks** | **Owner** | **Status** | **Estimated Value** |
| US001 | As a customer, I want to create a user account so that I can save my information for faster checkout. | Design user registration page- Implement form validation- Create user account API | Alice (Dev) | In Progress | 8 |
| US002 | As a customer, I want to log in to my account so I can view my order history and saved preferences. | Design login page- Implement authentication system- Integrate with user database | Bob (Dev) | To Do | 5 |
| US003 | As a customer, I want to browse products by categories so that I can find what I'm looking for easily. | Design category filter UI- Implement backend filtering logic- Implement category pages | Carol (Dev) | To Do | 8 |
| US004 | As a customer, I want to add items to my shopping cart so that I can review them before checkout. | Design shopping cart page- Implement add-to-cart functionality- Test cart features | David (Dev) | To Do | 8 |
| US005 | As a customer, I want to apply a promo code during checkout to get a discount on my purchase | Design promo code input UI- Implement promo code validation- Integrate with payment system | Eve (Dev) | In Progress | 5 |
| US006 | As a customer, I want to securely checkout with various payment options (credit/debit cards, PayPal, etc.) | Design checkout page- Integrate payment gateways (Stripe, PayPal)- Implement security (SSL, encryption) | Frank (Dev) | In Progress | 13 |
| US007 | As a customer, I want to be notified about my order status so I can track delivery. | Design order status page- Implement email/SMS notifications- Integrate with shipping API | Grace (Dev) | To Do | 8 |
| US008 | As a customer, I want to leave reviews for products I purchase so that I can help other customers make decisions. | Design review system UI- Implement review submission- Integrate with product database | Alice (Dev) | To Do | 3 |
| US009 | As a customer, I want to filter products by price, brand, and rating so that I can quickly find the best options. | Design product filter sidebar- Implement filter logic- Test for various filter combinations | Bob (Dev) | To Do | 8 |
| US010 | As an admin, I want to manage inventory so that I can update product stock levels. | Design inventory management UI- Implement CRUD functionality for products- Integrate with product database | Carol (Dev) | To Do | 5 |
| US011 | As a customer, I want to receive personalized product recommendations based on my browsing history. | Design recommendation engine- Implement personalized product suggestions- Integrate user behaviour tracking | David (Dev) | In Progress | 8 |
| US012 | As a customer, I want to receive a confirmation email after purchase so that I know my order is complete. | Design email confirmation template- Implement email notification system- Test email content and delivery | Eve (Dev) | To Do | 3 |

Burn down charts :

**Sprint burndown chart**



Product burn down chart



6 .

**Sprint Planning meeting**

|  |  |  |
| --- | --- | --- |
| Date |  27-12-2022 |  |
| Time |  11:00 am to 01:00 pm |  |
| location | Phoenix, Chennai |  |
| prepared by |  Alexander. K |
| Attendees | Daniel | Scrum master |
| Bradley | Product Owner |
|  | Brad | Dev 1 |
| Couper | Dev 2 |
| Alexander. k | BA |
| Rohit | UI Designer |
| Pawan | Tester |

Other information:

|  |  |
| --- | --- |
| Observers | Tester team, SME |
| Resources | Manpower: business stakeholder developer & developer & another project teamOther: Database, Internet, Past transaction History, Reports |
| Special Notes | Clients would be onboarded virtually from the Legacy tool |

**SPRINT REVIEW MEETING:**

|  |  |
| --- | --- |
| Date |  20th oct 2024 |
| Time |  11.00 am to 1:00 pm |
| Location |  Delhi |
| Prepared by |  Alexander. k |
| Attendees | Daniel SM |
|  | Bradley PO |
|  | Brad DEV 1 |
|  | Couper DEV 2 |
|  | Pawan Tester |
|  | Rohit Tester |

|  |  |  |  |
| --- | --- | --- | --- |
| **Sprint status** | **Things to demo** | **Quick updates** | **What next** |
| **Sprint 1 : Done** | Login screen for users to add, update % remove items from the shopping cart | All features enable | Deploy in live environment |

**SPRINT RETROSPECTIVE MEETING:**

|  |  |
| --- | --- |
| Date | 20th oct 2024 |
| Time | 11.00 am to 1:00 pm |
| Location | phoenix, Chennai |
| Prepared by | Alexander. k |
| Attendees | Daniel SM |
|  | Bradley PO |
| Brad Dev 1 |
| Couper Dev 2 |
| Alexander. k Dev 3 |
| Pawan Tester |
| Rohit Tester |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Agenda** | **What went well** | **What did not go well** | **Questions** | **Reference** |
| **Sprint analysis** | All the sprint backlog covered in time. Sign-off taken for first iteration | Had issue while approval module code | UAT, and unit testing has to complete | SME,PO |

**Daily Stand-up Meeting:**

|  |  |  |
| --- | --- | --- |
| **Question** | **Name/Role** |  **weekly meeting scheduled**  |
|  | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
| **What did****you do yesterday** | Developer 1Developer 2Developer 3 | Haveworkedin loginpage | Completed loginpage | Login pagecompleted | Completedsearchingpage | Search optioncompleted |  |  |
| **What will you do today?** | Developer 1Developer 2Developer 3 | Have tocomplete bytoday | Recodinglogin hassomeerrors | Code onsearching for shopping app | Recodingerrorcodes | work on queries |  |  |
| **What (if any) is****blocking****your****progress?** | Developer 1Developer 2Developer 3 | Few bugs | Nope | Few bugs | Nope | Few bugs |  |  |