**Deshmukhi Express**

AGILE DOCUMENTS

Document 1: Definition of Done As Per Agile Extension to the BABOK® Guide v2, Definition of Done is a technique where the team agrees on, and prominently displays, a list of criteria which must be met before a backlog item is considered done. That is the team has to create a well-defined,

The best form of Definition of Done representation is a checklist of activities that has to demonstrate the agreed value and quality of a user story.

So, this checklist should include: acceptance criteria (to satisfy customer requirements for a product) quality criteria (to satisfy quality requirements for a product) Definition of Done may be defined for different levels of project work.

For example, in Agile / Scrum framework these levels of work could be user story, sprint, and release.

Checklist for DOD: Produced code for presumed functionalities Assumptions of User Story met Project builds without errors Unit tests written and passing Project deployed on the test environment identical to production platform Tests on devices/browsers listed in the project assumptions passed Feature ok-ed by UX designer QA performed & issues resolved Feature is tested against acceptance criteria Feature ok-ed by Product Owner Refactoring completed Any configuration or build changes documented Documentation updated Peer Code Review performed

**Checklist for DOD:**

**Produced Code for Presumed Functionalities**

* Code adheres to established coding standards
* Code follows best practices
* Code is modular and maintainable

**Assumptions of User Story Met**

* The user story is well-defined and clearly understood
* Assumptions are documented and validated

**Project Builds Without Errors**

* The build process is automated
* Build artifacts are versioned and tagged

**Unit Tests Written and Passing**

* Code coverage meets project standards
* Test cases cover both edge cases and common scenarios

**Project Deployed on Test Environment**

* Test environment configuration is consistent with production
* Data in the test environment represents production data

**Tests on Devices/Browsers Passed**

* Cross-browser testing is performed
* Compatibility across different devices and screen sizes is ensured

**Feature Approved by UX Designer**

* The design is consistent across the application
* Usability testing has been conducted and meets requirements

**QA Performed and Issues Resolved**

* Comprehensive testing (functional, performance, security) is complete
* All identified issues are documented and addressed

**Feature Tested Against Acceptance Criteria**

* All acceptance criteria are clear and met
* Any deviations are documented and justified

**Feature Approved by Product Owner**

* The product owner has reviewed and approved the implemented feature
* All feedback or changes have been addressed

**Refactoring Completed**

* Code refactoring adheres to coding standards
* Refactoring improves overall code quality and maintainability

**Configuration or Build Changes Documented**

* All changes to configuration files are documented
* Build process changes are recorded and communicated

**Documentation Updated**

* README files and user manuals are revised
* Developer documentation reflects the latest changes

**Peer Code Review Performed**

* Code reviews are completed and documented
* Feedback from peers is addressed and acknowledged

# **Document 2- Product Vision**

| **Scrum Project Name:** | **Railway Reservation System** |
| --- | --- |
| **Venue:** | **Hyderabad**  |
| **Date:** | **Start time: 14-02-2025** | **End time: 27-12-2025** | **Duration: 1 year** |
| **Client:** | **Deepthought** |
| **Stakeholder list:** | Project Stakeholders:- BA- Project manager* Development team
	+ Tech expert
	+ Testing team

- Operations (Network, training)-UI designer | Business Stakeholders:* Project manager
* Business owner
* Business Sponsor
* Operation team
* Subject Matter Expert
 | 3rd Party Stakeholders-Auditors* Legal team
* Outsource

- Vendor- Manufacturer |
|  |  |  |  |
|  |  |  |  |
| **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:** | Kumar |  |  |
| **Tester** | Ram |  |  |
| **Business Analyst:** | Alexchander.K |  |  |

| **Vision:** To book the train tickets in E- ticket & I – ticket using internet. |
| --- |
| **Target group** | **Needs** | **Product** | **Value** |
| Urban customers in Hyderabad and rural users in Deshmukhi needing urgent deliveries | Addresses the lack of same-day courier services; provides real-time tracking and reliability | An online platform (web/app) for booking, managing, and tracking same-day deliveries from Hyderabad to Deshmukhi | Generates revenue through delivery fees; expands company presence in rural logistics; aims to capture a new, underserved market segment in same-day deliveries |

**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 description.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 time spent for 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 of acceptance criteria is to explain the conditions that a specific user story must satisfy.

Acceptance criteria are the conditions that a software product must meet to be accepted by the user, a customer, or other systems. They are unique for each user story and define the feature’s behaviour from the end user’s perspective and how we can achieve it.

| **User story No: 1** | **Task: Parcel Pickup Scheduling** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO PARCEL PICKUP SCHEDULINGSO THAT AS A CUSTOMER, I WANT TO SCHEDULE A PARCEL PICKUP SO THAT I CAN SEND MY PACKAGES WITHOUT VISITING A SERVICE CENTER. |
| **BV: 100** | **CP: 1** |
| **Acceptance criteria:** |
| - Users should be able to request a pickup through the app or website. |
| - Users should receive confirmation of the pickup request. |
| - The system should notify the courier agent of the scheduled pickup. |

| **User story No: 2** | **Task: Real-time Tracking** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO REAL-TIME TRACKINGSO THAT AS A SENDER, I WANT TO TRACK MY PARCEL IN REAL-TIME SO THAT I KNOW ITS EXACT LOCATION AND ESTIMATED DELIVERY TIME. |
| **BV: 95** | **CP: 2** |
| **Acceptance criteria:** |
| - The system should provide real-time parcel tracking updates. |
| - Users should receive notifications at key checkpoints (e.g., pickup, transit, delivery). |
| - The tracking page should be accessible via a unique tracking ID. |

| **User story No: 3** | **Task: Delivery Confirmation** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO DELIVERY CONFIRMATIONSO THAT AS A RECIPIENT, I WANT TO RECEIVE DELIVERY CONFIRMATION SO THAT I KNOW WHEN MY PARCEL HAS ARRIVED. |
| **BV: 90** | **CP: 1** |
| **Acceptance criteria:** |
| - The system should notify users upon successful delivery. |
| - Delivery agents should collect digital signatures as proof of delivery. |
| - Users should receive an electronic receipt upon delivery. |

| **User story No: 4** | **Task: Secure Payment Processing** | **Priority: Critical** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO SECURE PAYMENT PROCESSINGSO THAT AS A CUSTOMER, I WANT A SECURE AND SEAMLESS PAYMENT PROCESS SO THAT I CAN PAY FOR COURIER SERVICES EASILY. |
| **BV: 95** | **CP: 2** |
| **Acceptance criteria:** |
| - The system should support multiple payment methods (e.g., credit/debit card, UPI, cash on delivery). |
| - Transactions should be completed within seconds. |
| - Users should receive instant payment confirmation and invoices. |

| **User story No: 5** | **Task: Customer Support** | **Priority: Medium** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO CUSTOMER SUPPORTSO THAT AS A CUSTOMER, I WANT 24/7 SUPPORT SO THAT I CAN RESOLVE ISSUES RELATED TO MY PARCEL QUICKLY. |
| **BV: 85** | **CP: 3** |
| **Acceptance criteria:** |
| - Users should be able to contact support via chat, email, and phone. |
| - Support should provide quick resolution for common issues (e.g., delayed delivery, lost parcels). |
| - The system should allow users to raise and track support tickets. |

| **User story No: 6** | **Task: Address Validation** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO ADDRESS VALIDATIONSO THAT AS A SENDER, I WANT AN ADDRESS VALIDATION FEATURE SO THAT I CAN AVOID DELIVERY FAILURES DUE TO INCORRECT ADDRESSES. |
| **BV: 90** | **CP: 2** |
| **Acceptance criteria:** |
| - The system should auto-suggest addresses based on user input. |
| - Users should receive an alert for incomplete or incorrect addresses. |
| - The system should validate addresses before confirming the shipment. |

| **User story No: 7** | **Task: Delivery Time Estimation** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO DELIVERY TIME ESTIMATIONSO THAT AS A CUSTOMER, I WANT TO GET AN ESTIMATED DELIVERY TIME SO THAT I CAN PLAN ACCORDINGLY. |
| **BV: 85** | **CP: 2** |
| **Acceptance criteria:** |
| - Users should see an estimated delivery time when booking a parcel. |
| - The system should calculate time based on distance, package type, and courier load. |
| - Users should receive updates if the estimated time changes. |

| **User story No: 8** | **Task: Multiple Parcel Booking** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO MULTIPLE PARCEL BOOKINGSO THAT AS A SENDER, I WANT TO BOOK MULTIPLE PARCELS AT ONCE SO THAT I CAN SAVE TIME AND EFFORT. |
| **BV: 90** | **CP: 2** |
| **Acceptance criteria:** |
| - Users should be able to add multiple parcels to a single booking. |
| - The system should generate a unique tracking ID for each parcel. |
| - Users should receive a consolidated invoice for all parcels booked together. |

| **User story No: 9** | **Task: Courier Service Area Coverage** | **Priority: Medium** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO COURIER SERVICE AREA COVERAGESO THAT AS A CUSTOMER, I WANT TO CHECK THE SERVICE AVAILABILITY IN MY AREA SO THAT I KNOW IF THE COURIER CAN DELIVER TO MY LOCATION. |
| **BV: 80** | **CP: 2** |
| **Acceptance criteria:** |
| - Users should be able to enter a location and check delivery availability. |
| - The system should display available delivery options for the location. |
| - If unavailable, users should be notified with alternative options. |

| **User story No: 10** | **Task: Parcel Insurance** | **Priority: Medium** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO PARCEL INSURANCESO THAT AS A SENDER, I WANT TO INSURE MY PARCEL SO THAT I GET COMPENSATION IN CASE OF LOSS OR DAMAGE. |
| **BV: 85** | **CP: 3** |
| **Acceptance criteria:** |
| - Users should have an option to add insurance while booking. |
| - The system should calculate insurance charges based on parcel value. |
| - Users should receive compensation in case of a valid claim. |

| **User story No: 11** | **Task: Preferred Delivery Time** | **Priority: Medium** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO PREFERRED DELIVERY TIMESO THAT AS A RECIPIENT, I WANT TO SELECT A PREFERRED DELIVERY TIME SO THAT I CAN RECEIVE MY PARCEL AT MY CONVENIENCE. |
| **BV: 80** | **CP: 3** |
| **Acceptance criteria:** |
| - Users should be able to choose a preferred delivery time slot. |
| - The system should allocate delivery agents based on the selected slot. |
| - If unavailable, users should receive alternative time slot options. |

| **User story No: 12** | **Task: Customer Feedback & Reviews** | **Priority: Medium** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO CUSTOMER FEEDBACK & REVIEWSSO THAT AS A CUSTOMER, I WANT TO PROVIDE FEEDBACK AND REVIEWS SO THAT I CAN SHARE MY EXPERIENCE AND HELP IMPROVE THE SERVICE. |
| **BV: 75** | **CP: 3** |
| **Acceptance criteria:** |
| - Users should be able to submit ratings and reviews after delivery. |
| - The system should moderate and display genuine reviews. |
| - Users should receive a response to negative feedback where necessary. |

| **User story No: 13** | **Task: Express Delivery Option** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO EXPRESS DELIVERY OPTIONSO THAT AS A CUSTOMER, I WANT AN EXPRESS DELIVERY OPTION SO THAT MY PARCEL REACHES FASTER WHEN NEEDED. |
| **BV: 90** | **CP: 2** |
| **Acceptance criteria:** |
| - Users should be able to select express delivery during booking. |
| - The system should show expected delivery time and additional charges. |
| - Express parcels should be prioritized in logistics operations. |

| **User story No: 14** | **Task: Bulk Shipping Discounts** | **Priority: Medium** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO BULK SHIPPING DISCOUNTSSO THAT AS A BUSINESS, I WANT DISCOUNTS ON BULK SHIPMENTS SO THAT I CAN SAVE COSTS ON HIGH-VOLUME DELIVERIES. |
| **BV: 85** | **CP: 3** |
| **Acceptance criteria:** |
| - The system should apply discounts for bulk shipments. |
| - Users should see discount details before confirming the booking. |
| - The system should provide an invoice with discount breakdowns. |

| **User story No: 15** | **Task: Delivery Agent Live Location** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO DELIVERY AGENT LIVE LOCATIONSO THAT AS A RECIPIENT, I WANT TO SEE THE LIVE LOCATION OF THE DELIVERY AGENT SO THAT I KNOW WHEN TO EXPECT MY PARCEL. |
| **BV: 90** | **CP: 2** |
| **Acceptance criteria:** |
| - Users should be able to track the agent's live location via the app. |
| - The system should update the agent's location in real time. |
| - Users should receive estimated arrival time updates. |

| **User story No: 16** | **Task: Route Optimization for Couriers** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO ROUTE OPTIMIZATION FOR COURIERSSO THAT AS A DELIVERY AGENT, I WANT OPTIMIZED ROUTES SO THAT I CAN DELIVER PARCELS FASTER AND EFFICIENTLY. |
| **BV: 95** | **CP: 2** |
| **Acceptance criteria:** |
| - The system should suggest the most efficient delivery route. |
| - Routes should be dynamically adjusted based on traffic and delivery priority. |
| - Agents should receive real-time navigation assistance. |

| **User story No: 17** | **Task: Recurring Parcel Shipments** | **Priority: Medium** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO RECURRING PARCEL SHIPMENTSSO THAT AS A BUSINESS, I WANT TO SCHEDULE RECURRING SHIPMENTS SO THAT I DON'T HAVE TO BOOK MANUALLY EVERY TIME. |
| **BV: 85** | **CP: 3** |
| **Acceptance criteria:** |
| - Users should be able to set up recurring deliveries. |
| - The system should allow modifications to recurring schedules. |
| - Users should receive reminders before each scheduled shipment. |

| **User story No: 18 Task** | **: Parcel Weight & Dimension Verificat** | **ion Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO PARCEL WEIGHT & DIMENSION VERIFICATIONSO THAT AS A SENDER, I WANT MY PARCEL'S WEIGHT AND DIMENSIONS TO BE VERIFIED SO THAT I AM CHARGED CORRECTLY. |
| **BV: 90** | **CP: 2** |
| **Acceptance criteria:** |
| - The system should verify parcel weight and dimensions during pickup. |
| - Users should receive an updated charge if discrepancies are found. |
| - The system should notify users before any additional charges are applied. |

| **User story No: 19** | **Task: Lost Parcel Claims** | **Priority: Critical** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO LOST PARCEL CLAIMSSO THAT AS A CUSTOMER, I WANT TO CLAIM COMPENSATION FOR LOST PARCELS SO THAT I AM NOT AT A LOSS. |
| **BV: 95** | **CP: 3** |
| **Acceptance criteria:** |
| - Users should be able to file lost parcel claims. |
| - The system should track claim status and updates. |
| - Users should receive compensation for valid claims within a specified time frame. |

| **User story No: 20 Ta** | **sk: Delivery Agent Rating & Feedback** | **Priority: Medium** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO DELIVERY AGENT RATING & FEEDBACKSO THAT AS A RECIPIENT, I WANT TO RATE AND PROVIDE FEEDBACK ON THE DELIVERY AGENT SO THAT SERVICE QUALITY IMPROVES. |
| **BV: 80** | **CP: 3** |
| **Acceptance criteria:** |
| - Users should be able to rate delivery agents after parcel receipt. |
| - The system should collect feedback for service improvement. |
| - Delivery agents with consistently low ratings should be flagged for review. |

| **User story No: 21** | **Task: Multiple Parcel Shipments** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO MULTIPLE PARCEL SHIPMENTSSO THAT AS A SENDER, I WANT TO SEND MULTIPLE PARCELS IN A SINGLE BOOKING SO THAT I CAN SAVE TIME AND EFFORT. |
| **BV: 90** | **CP: 2** |
| **Acceptance criteria:** |
| - Users should be able to add multiple parcels under one shipment. |
| - The system should provide a consolidated tracking ID. |
| - Users should see individual parcel details within the shipment. |

| **User story No: 22 Ta** | **sk: Automated Delivery Rescheduling** | **Priority: Medium** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO AUTOMATED DELIVERY RESCHEDULINGSO THAT AS A RECIPIENT, I WANT AN OPTION TO RESCHEDULE MY DELIVERY SO THAT I RECEIVE MY PARCEL AT A CONVENIENT TIME. |
| **BV: 85** | **CP: 3** |
| **Acceptance criteria:** |
| - Users should be able to request delivery rescheduling. |
| - The system should provide available delivery slots. |
| - Rescheduled deliveries should be updated in the tracking system. |

| **User story No: 23** | **Task: Loyalty Reward Program** | **Priority: Medium** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO LOYALTY REWARD PROGRAMSO THAT AS A FREQUENT USER, I WANT TO EARN REWARDS FOR MY SHIPMENTS SO THAT I CAN BENEFIT FROM DISCOUNTS AND PERKS. |
| **BV: 80** | **CP: 3** |
| **Acceptance criteria:** |
| - Users should earn points for every shipment. |
| - The system should allow users to redeem points for discounts. |
| - Users should receive notifications on reward eligibility. |

| **User story No: 24** | **Task: Insurance for High-Value Items** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO INSURANCE FOR HIGH-VALUE ITEMSSO THAT AS A SENDER, I WANT TO INSURE MY VALUABLE PARCELS SO THAT I AM PROTECTED AGAINST LOSS OR DAMAGE. |
| **BV: 95** | **CP: 2** |
| **Acceptance criteria:** |
| - Users should be able to add insurance while booking. |
| - The system should calculate insurance costs based on item value. |
| - Users should receive insurance confirmation along with shipment details. |

| **User story No: 25 Ta** | **sk: Courier Service Subscription Plan** | **Priority: Medium** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO COURIER SERVICE SUBSCRIPTION PLANSO THAT AS A BUSINESS, I WANT A SUBSCRIPTION PLAN FOR REGULAR DELIVERIES SO THAT I CAN GET COST-EFFECTIVE COURIER SERVICES. |
| **BV: 85** | **CP: 3** |
| **Acceptance criteria:** |
| - Users should be able to subscribe to monthly or yearly plans. |
| - The system should apply discounts based on subscription type. |
| - Users should receive subscription renewal reminders. |

| **User story No: 26** | **Task: Mobile App Notifications** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO MOBILE APP NOTIFICATIONSSO THAT AS A CUSTOMER, I WANT MOBILE NOTIFICATIONS FOR MY SHIPMENTS SO THAT I STAY UPDATED ON MY PARCEL STATUS. |
| **BV: 90** | **CP: 2** |
| **Acceptance criteria:** |
| - Users should receive push notifications for key delivery updates. |
| - Notifications should be customizable in app settings. |
| - The system should send alerts for delays or changes in delivery status. |

| **User story No: 27** | **Task: International Shipping Support** | **Priority: Critical** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO INTERNATIONAL SHIPPING SUPPORTSO THAT AS A SENDER, I WANT INTERNATIONAL SHIPPING OPTIONS SO THAT I CAN SEND PARCELS ABROAD. |
| **BV: 95** | **CP: 2** |
| **Acceptance criteria:** |
| - Users should be able to select international shipping during booking. |
| - The system should calculate international shipping rates and customs charges. |
| - Users should receive real-time tracking updates for international shipments. |

| **User story No: 28** | **Task: Courier Partner Integration** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO COURIER PARTNER INTEGRATIONSO THAT AS A LOGISTICS MANAGER, I WANT TO INTEGRATE THIRD-PARTY COURIER PARTNERS SO THAT DELIVERIES CAN BE EXPANDED TO MORE LOCATIONS. |
| **BV: 90** | **CP: 2** |
| **Acceptance criteria:** |
| - The system should allow integration with third-party courier services. |
| - Users should be able to see courier partner details when selecting shipping options. |
| - Tracking should remain seamless across different courier networks. |

| **User story No: 29 Task:** | **Automated Customer Feedback Surv** | **eys Priority: Medium** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO AUTOMATED CUSTOMER FEEDBACK SURVEYSSO THAT AS A SERVICE PROVIDER, I WANT TO COLLECT CUSTOMER FEEDBACK AUTOMATICALLY SO THAT I CAN IMPROVE SERVICE QUALITY. |
| **BV: 85** | **CP: 3** |
| **Acceptance criteria:** |
| - Users should receive a feedback survey after delivery. |
| - The system should analyze feedback trends for service improvement. |
| - Negative feedback should trigger customer support follow-up. |

| **User story No: 30 Tas** | **k: AI-Powered Delivery Time Estimatio** | **n Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO AI-POWERED DELIVERY TIME ESTIMATIONSO THAT AS A RECIPIENT, I WANT ACCURATE AI-DRIVEN DELIVERY TIME ESTIMATES SO THAT I CAN PLAN MY AVAILABILITY ACCORDINGLY. |
| **BV: 95** | **CP: 2** |
| **Acceptance criteria:** |
| - The system should use AI to predict delivery times based on real-time data. |
| - Users should receive estimated delivery time updates as their parcel moves. |
| - The system should adjust delivery estimates based on traffic and weather conditions. |

| **User story No: 31** | **Task: Automated Parcel Sorting** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO AUTOMATED PARCEL SORTINGSO THAT AS A LOGISTICS MANAGER, I WANT AUTOMATED SORTING OF PARCELS SO THAT DELIVERY EFFICIENCY IS IMPROVED. |
| **BV: 90** | **CP: 2** |
| **Acceptance criteria:** |
| - The system should categorize parcels based on destination and size. |
| - Automated sorting should reduce manual errors. |
| - Tracking should update automatically after sorting. |

| **User story No: 32** | **Task: Eco-Friendly Packaging Option** | **Priority: Medium** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO ECO-FRIENDLY PACKAGING OPTIONSO THAT AS A SENDER, I WANT ECO-FRIENDLY PACKAGING OPTIONS SO THAT I CAN REDUCE MY ENVIRONMENTAL IMPACT. |
| **BV: 85** | **CP: 3** |
| **Acceptance criteria:** |
| - Users should be able to choose eco-friendly packaging during booking. |
| - The system should provide cost details for eco-packaging. |
| - Users should receive certification for sustainable choices. |

| **User story No: 33 Task** | **: Route Optimization for Delivery Age** | **nts Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO ROUTE OPTIMIZATION FOR DELIVERY AGENTSSO THAT AS A DELIVERY AGENT, I WANT OPTIMIZED DELIVERY ROUTES SO THAT I CAN COMPLETE DELIVERIES FASTER. |
| **BV: 95** | **CP: 2** |
| **Acceptance criteria:** |
| - The system should generate optimal routes based on live traffic data. |
| - Agents should receive updated routes in real time. |
| - Route optimization should reduce fuel consumption and time. |

| **User story No: 34** | **Task: Automated Address Correction** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO AUTOMATED ADDRESS CORRECTIONSO THAT AS A SENDER, I WANT INCORRECT ADDRESSES TO BE AUTO-CORRECTED SO THAT PARCELS ARE NOT MISROUTED. |
| **BV: 90** | **CP: 2** |
| **Acceptance criteria:** |
| - The system should suggest corrections for invalid addresses. |
| - Users should confirm suggested address changes before finalizing. |
| - Delivery failures due to address issues should be minimized. |

| **User story No: 35 Task** | **: Integration with E-Commerce Platfor** | **ms Priority: Critical** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO INTEGRATION WITH E-COMMERCE PLATFORMSSO THAT AS AN E-COMMERCE SELLER, I WANT INTEGRATION WITH COURIER SERVICES SO THAT I CAN STREAMLINE SHIPPING. |
| **BV: 95** | **CP: 2** |
| **Acceptance criteria:** |
| - Users should be able to connect e-commerce platforms to the courier system. |
| - Orders should be synced automatically for shipment. |
| - Tracking updates should be reflected in the e-commerce platform. |

| **User story No: 36** | **Task: AI-Powered Fraud Detection** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO AI-POWERED FRAUD DETECTIONSO THAT AS A SERVICE PROVIDER, I WANT FRAUD DETECTION MECHANISMS SO THAT I CAN PREVENT UNAUTHORIZED TRANSACTIONS. |
| **BV: 90** | **CP: 2** |
| **Acceptance criteria:** |
| - The system should flag suspicious transactions. |
| - Users should be required to verify flagged transactions. |
| - Fraud detection should reduce cases of chargebacks and false claims. |

| **User story No: 37** | **Task: Multi-Language Support** | **Priority: Medium** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO MULTI-LANGUAGE SUPPORTSO THAT AS A NON-ENGLISH SPEAKER, I WANT THE WEBSITE TO BE AVAILABLE IN MULTIPLE LANGUAGES SO THAT I CAN USE THE SERVICE EASILY. |
| **BV: 85** | **CP: 3** |
| **Acceptance criteria:** |
| - Users should be able to select their preferred language. |
| - The system should translate key content dynamically. |
| - Customer support should provide assistance in multiple languages. |

| **User story No: 38** | **Task: Smart Parcel Locker Integration** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO SMART PARCEL LOCKER INTEGRATIONSO THAT AS A RECIPIENT, I WANT MY PARCEL TO BE DELIVERED TO A SMART LOCKER SO THAT I CAN PICK IT UP AT MY CONVENIENCE. |
| **BV: 95** | **CP: 2** |
| **Acceptance criteria:** |
| - Users should be able to choose a smart locker delivery option. |
| - Lockers should notify users when a parcel is ready for pickup. |
| - Users should receive a secure code for locker access. |

| **User story No: 39** | **Task: Paperless Invoicing** | **Priority: Medium** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO PAPERLESS INVOICINGSO THAT AS A BUSINESS USER, I WANT PAPERLESS INVOICING SO THAT I CAN REDUCE PAPERWORK AND MANAGE FINANCES EFFICIENTLY. |
| **BV: 85** | **CP: 3** |
| **Acceptance criteria:** |
| - Users should receive digital invoices via email and dashboard. |
| - The system should store past invoices for easy reference. |
| - Invoices should be downloadable in PDF format. |

| **User story No: 40 Ta** | **sk: Real-Time Weather Impact Alerts** | **Priority: High** |
| --- | --- | --- |
| **Value statement:** |
| AS A USER,I WANT TO REAL-TIME WEATHER IMPACT ALERTSSO THAT AS A SENDER, I WANT TO BE INFORMED ABOUT WEATHER-RELATED DELIVERY DELAYS SO THAT I CAN PLAN SHIPMENTS ACCORDINGLY. |
| **BV: 90** | **CP: 2** |
| **Acceptance criteria:** |
| - The system should monitor weather conditions affecting deliveries. |
| - Users should receive alerts for expected weather delays. |
| - Alternative delivery plans should be suggested when possible. |

**Document 4: Agile PO Experience**

## **Product Owner's Role in Deshmukhi Express**

The Product Owner has a vision of the product, keeping industry experience and market needs in mind. The goal is to develop a **courier service application** that ensures **same-day delivery** from **Hyderabad to Deshmukhi village.**

### **Responsibilities of the Product Owner in Deshmukhi Express:**

### **1. Market Analysis**

The Product Owner will analyze the market using various tools to understand the demand and requirements for a **same-day courier service**. The analysis will cover:

* **Customer demand** for urgent deliveries.
* **Availability of similar courier services** in the region.
* **Competitor analysis** for pricing and service quality.
* **Technology adoption** for tracking and scheduling deliveries efficiently.

### **2. Enterprise Analysis**

As a Product Owner, I have defined strategic goals for **Deshmukhi Express** by prioritizing key factors like:

* **Market trends** in logistics and last-mile delivery.
* **Competitive pricing strategy** for affordability.
* **Operational feasibility** of ensuring same-day deliveries.
* **Scalability and expansion** beyond Hyderabad-Deshmukhi.

### **3. Product Vision and Roadmap**

#### **Product Vision:**

To develop a **technology-driven courier service** that enables seamless, **same-day delivery** between **Hyderabad and Deshmukhi**, ensuring:

* **Reliable** and **fast** delivery service.
* **Real-time tracking** for customers.
* **Easy booking and payment options** through a mobile app.
* **Optimized route planning** to reduce delays and fuel costs.

#### **Roadmap:**

A structured plan outlining **high-level milestones**:

* **Phase 1:** Research & planning (Market analysis, competitor study).
* **Phase 2:** Product development (App and website creation, logistics setup).
* **Phase 3:** Testing & Pilot Launch (Limited customers, feedback collection).
* **Phase 4:** Full-scale launch and expansion (Additional routes, more delivery hubs).

### **4. Managing Product Features**

Key product features for **Deshmukhi Express:**

1. **Instant Booking** – Customers can book deliveries via an app or website.
2. **Real-time Tracking** – Users can track their parcels in real-time.
3. **Delivery Notifications** – Automated alerts for pickup, transit, and delivery.
4. **Secure Payments** – Multiple payment options for customer convenience.
5. **Optimized Route Planning** – AI-based route selection for fast deliveries.

User Story Example:

* **User Story No:** 5
* **Task:** Real-time tracking feature
* **Priority:** High
* **Value Statement:***As a user, I want to track my parcel live so that I know the exact delivery status.*
* **Business Value (BV):** 800
* **Complexity Points (CP):** 6

**Acceptance Criteria:**

1. The app should display the current parcel location.
2. Customers should get SMS/WhatsApp notifications.
3. The estimated delivery time should update dynamically.
4. The courier partner should be able to update the delivery status in real-time.

### **5. Managing Product Backlog**

As a Product Owner, I maintain and prioritize the backlog, working closely with the **Scrum Master** and **development team**. The backlog consists of:

* **Features and functionalities** required for the app.
* **User stories** for different aspects of the courier service.
* **Tasks related to backend, frontend, and logistics integration.**
* **Regular backlog refinement** based on feedback from stakeholders.

**Techniques used:**

* **MoSCoW Method** (Must Have, Should Have, Could Have, Won't Have).
* **BV & CP Calculation** to determine the priority of features.

### **6. Managing Overall Iteration Progress**

* **Sprint Planning Review:**
	+ Organizing work into **sprints** to ensure smooth delivery.
	+ Using a **Burndown Chart** to track progress.
	+ Reprioritizing tasks if required.
* **Sprint Retrospectives:**
	+ Reviewing challenges faced during sprints.
	+ Identifying improvements for the next sprint cycle.

## **Sprint Meetings in Deshmukhi Express**

### **1. Sprint Planning Meeting**

* Product Owner presents the **vision and key deliverables** for the sprint.
* The team estimates the **workload and moves tasks** from the **Product Backlog** to the **Sprint Backlog.**
* The focus is on prioritizing tasks like **real-time tracking, delivery notifications, and route optimization.**

### **2. Daily Scrum Meeting**

* **15-minute daily stand-up** with developers and logistics team.
* Discuss:
	+ *What tasks were completed?*
	+ *What tasks are in progress?*
	+ *Are there any roadblocks?*
* The Product Owner ensures the team stays on track.

### **3. Sprint Review Meeting**

* The team showcases a **live demo** of completed features.
* The **stakeholders, Scrum Master, and Product Owner** review the sprint.
* **Sprint Burn Down Chart** is used to track the **progress of CPs.**
* Customer feedback is considered for further improvements.

### **4. Sprint Retrospective Meeting**

* The team discusses:
	+ What went well?
	+ What challenges were faced?
	+ What improvements can be made?
* The lessons learned are used for **better sprint planning in the next cycle.**

### **5. Backlog Refinement Meeting**

* Evaluating backlog items to maintain **quality and clarity.**
* Discussing **new requirements or feature modifications.**
* Assessing the **development team’s capacity** for upcoming sprints.

## **User Stories & Key Elements in Deshmukhi Express**

### **User Story Components:**

✔ **Story No:** Identifies each story.
✔ **Tasks:** Defines specific development activities.
✔ **Priority:** Defines urgency (High/Medium/Low).
✔ **Acceptance Criteria:** Conditions that must be met.
✔ **BV & CP Values:**

* **BV (Business Value)** – Client's priority for a feature.
* **CP (Complexity Points)** – Effort required by developers.

**Example User Story:**

✔ **Story No:** 10
✔ **Task:** Secure payment gateway integration
✔ **Priority:** High
✔ **Acceptance Criteria:**

* The app must support **UPI, Credit/Debit cards, and Net Banking**.
* Payment status must be updated in real-time.
* Failed transactions should be **automatically retried or refunded**.
✔ **BV:** 900
✔ **CP:** 7

### **Techniques Used for Prioritization:**

🔹 **MoSCoW Method** – Prioritizing Must Have, Should Have, Could Have, Won’t Have features.
🔹 **Planning Poker** – Estimating **CP values** collaboratively.

## **Product Owner's Role in Organization**

The **Product Owner** acts as a **bridge between business stakeholders and the development team.** Key responsibilities:

* Communicating with stakeholders to ensure alignment.
* Collaborating with **Scrum teams** to develop a robust product.
* Translating **business needs into clear product backlog items.**
* Defining **product features and functionalities.**

## **Conclusion**

Working as a Product Owner for **Deshmukhi Express** has given me a strong understanding of **Agile processes, backlog management, sprint planning, and feature prioritization.**By implementing Agile methodologies, we are developing an **efficient and scalable** courier service for **same-day deliveries between Hyderabad and Deshmukhi.**

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

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 stories 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 of the aspects of a solution they may work on

| User Story ID | User Story | Tasks | Priority | BV | CP | Sprint |
| --- | --- | --- | --- | --- | --- | --- |
| USDX001 | As a customer, I want to book a courier service so that I can send packages easily. | 📌 Develop booking UI📌 Implement backend logic📌 Test booking functionality | High | 100 | 2 | Sprint 1 |
| USDX002 | As a customer, I want to track my parcel in real time so that I know its exact location. | 📌 Implement GPS tracking📌 Create tracking UI📌 Notify users of status changes | High | 150 | 3 | Sprint 1 |
| USDX003 | As a courier company, I want an optimized route selection so that deliveries are faster. | 📌 Develop route optimization algorithm📌 Test with different locations📌 Integrate with tracking system | Medium | 200 | 4 | Sprint 2 |
| USDX004 | As a customer, I want to receive notification updates about my parcel so that I stay informed. | 📌 Set up SMS/Email notifications📌 Implement push notifications in the app📌 Test alert accuracy | Low | 250 | 2 | Sprint 2 |
| USDX005 | As a customer, I want a secure payment and invoice generation system so that I can complete transactions smoothly. | 📌 Integrate payment gateways📌 Generate invoices for transactions📌 Test payment security | High | 120 | 3 | Sprint 2 |
| USDX006 | As an admin, I want to assign couriers efficiently so that deliveries happen on time. | 📌 Implement assignment logic📌 Develop admin dashboard📌 Automate notifications for couriers | High | 180 | 4 | Sprint 3 |
| USDX007 | As a customer, I want support for queries and complaints so that my issues are resolved quickly. | 📌 Implement chatbot support📌 Enable live chat with agents📌 Create a ticketing system | Medium | 170 | 3 | Sprint 3 |
| USDX008 | As a courier, I want to collect digital proof of delivery so that there is no dispute. | 📌 Implement e-signature capture📌 Send confirmation to sender/receiver📌 Store proof securely | High | 200 | 4 | Sprint 3 |
| USDX009 | As a customer, I want delay alerts so that I know when my parcel is late. | 📌 Track unexpected delays📌 Send alerts via SMS/Email📌 Show expected resolution time | Medium | 220 | 5 | Sprint 4 |
| USDX010 | As an admin, I want to collect customer feedback so that we can improve services. | 📌 Create feedback forms📌 Store and analyze feedback📌 Implement AI-based sentiment analysis | Low | 250 | 3 | Sprint 4 |

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 Effort** |
| --- | --- | --- | --- | --- | --- |
| USDX001 | As a user, I want to book a courier service so that I can send parcels easily. | - Design booking UI- Implement backend for booking- Test booking functionality | John | Done | 6 |
| USDX002 | As a user, I want real-time tracking so that I can see my parcel’s location. | - Develop tracking system- Integrate GPS APIs- Display tracking updates | Mary | Done | 8 |
| USDX003 | As a delivery agent, I want optimized route selection so that I can deliver faster. | - Implement route optimization logic- Integrate with maps- Test delivery routing | Alex | Pending | 7 |
| USDX004 | As a user, I want notification updates so that I stay informed about my parcel. | - Develop notification system- Implement SMS/email alerts- Test notifications | Sarah | In Progress | 5 |
| USDX005 | As a customer, I want a payment system so that I can pay securely. | - Integrate multiple payment options- Ensure secure transactions- Generate invoices | Tom | Pending | 6 |
| USDX006 | As an admin, I want to assign couriers so that parcels are delivered on time. | - Build courier assignment system- Auto-assign based on availability- Track courier assignments | Priya | In Progress | 7 |
| USDX007 | As a customer, I want 24/7 support so that I can resolve issues. | - Implement chatbot and live support- Set up ticketing system- Automate common queries | Rohan | Pending | 6 |
| USDX008 | As a customer, I want delivery confirmation so that I know my parcel is received. | - Implement digital proof of delivery- Capture customer signature- Generate delivery reports | Lisa | Done | 5 |
| USDX009 | As a user, I want delay alerts so that I know if my delivery is late. | - Implement delay detection- Automate delay notifications- Provide alternative solutions | Raj | In Progress | 5 |
| USDX010 | As an admin, I want customer feedback collection so that I can improve services. | - Design feedback forms- Store customer responses- Analyze feedback data | Emily | Pending | 4 |

**SPRINT BURNDOWN CHART**



**Document 6: Sprint meetings**

| **Location** | Phoenix, Chennai |
| --- | --- |
| **Prepared By** | Alexchander.K |
| **Attendees** | Daniel | Scrum Master |
| Bradley | Product Owner |
| Brad | Dev 1 |
| Couper | Dev 2 |
| Alexchander.K | BA |
| Rohit | UI Designer |
| Pawan | Tester |

**Agenda Topics**

| **Topic** | **Presenter** | **Time allotted** |
| --- | --- | --- |
| **Scopes** | Alexchander.K | 11.00 am to 11.15 am |
| **Strategy & planning** | SM, BA, PO | 11.15 am to 11.30 am |
| **Resource Management** | Scrum Master | 11.30 am to 11.50 pm |
| **Billing & in voices** | BA | 11.50 am to 12.00 pm |
| **GD** | Product Owner | 12.00 pm to 01.00 pm |

**Other Information**

| **Observers** | Tester team, SME |
| --- | --- |
| **Resources** | DeepThought: business stakeholder from XYZ, BA, developer & developer & another project teamTime: 1 year Budget: Rs. 1crOther: Database, Internet, History, Reports |
| **Special Notes** | Ensure real-time package tracking accuracy and optimize delivery route efficiency for faster shipments |

**Sprint review meeting**

| **Date** | 20th Oct 2022 |
| --- | --- |
| **Time** | 11.00 am to 1.00 pm |
| **Location** | Phoenix, Chennai |
| **Prepared By** | Alexchander.K |
| **Attendees** | Daniel | SM |
| Bradley | PO |
| Brad | Dev 1 |
| Couper | Dev 2 |
| Alexchander.K | Dev 3 |

|  | Pawan | Tester |
| --- | --- | --- |
| Rohit | Tester |

| **Sprint status** | **Things to demo** | **Quick updates** | **What’s next** |
| --- | --- | --- | --- |
| **Sprint 1: Done** | how login, package booking, basic tracking, and admin dashboard functionalities.  | All features enable | Deploy in live environment |

**Sprint retrospective meeting**

| **Date** | 10 Feb 2025 |
| --- | --- |
| **Time** | 11.00 am to 1.00 pm |
| **Location** | Phoenix, Chennai |
| **Prepared By** | Alexchander.K |
| **Attendees** | Daniel | SM |
| Bradley | PO |
| Brad | Dev 1 |
| Couper | Dev 2 |
| Alexchander.K | Dev 3 |
| Pawan | Tester |
| Rohit | Tester |

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

**Daily Stand-up meeting**

| **Question** | **Name/ Role** | **Week “X” (from 17-02-2025 to 22-02-2025)** |
| --- | --- | --- |
| **Monda****y** | **Tuesday** | **Wednesda****y** | **Thursday** | **Friday** | **Saturda****y** | **Sunda****y** |
| **What did** |  | **Developer** | Have | Complete | Login page | Complete | Search |  |  |
| **you do** | **1** | worked | d login | completed | d | option |
| **yesterday** | **Developer** | in login | page |  | searching | complete |
| **?** | **2** | page |  |  | page | d |
|  | **Developer** |  |  |  |  |  |
|  | **3** |  |  |  |  |  |
| **What will** |  | **Developer** | Have to | Recoding | Code on | Recoding | Booking |  |  |
| **you do** | **1** | complet | login has | searching | error | tickets |
| **today?** | **Developer** | e by | some | train | codes | option |
|  | **2** | today | errors |  |  |  |
|  | **Developer** |  |  |  |  |  |
|  | **3** |  |  |  |  |  |
| **What (if** |  | **Developer** | Few | nope | Few bugs | nope | Few bugs |  |  |
| **any) is** | **1** | bugs |  |  |  |  |
| **blocking** | **Developer** |  |  |  |  |  |
| **your** | **2** |  |  |  |  |  |
| **progress?** | **Developer** |  |  |  |  |  |
|  | **3** |  |  |  |  |  |