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A project submitted in fulfilment of the
requirements for the completion of the course Advance Skills for Project Management Professionals

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IN THE NAME OF ALLAH

THE MOST BENEFICENT AND THE MOST MERCIFUL

APPROVAL FOR EXAMINATION

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Program of Study: Master of Science in Project Management

Project Title: Implementation of PMO at Sunhub

It is to certify that the above student's project has been completed to my satisfaction and, to my belief, its standard is appropriate for submission for examination. I have also conducted a plagiarism test of this thesis using HEC prescribed software and found similarity ___index % that is within the permissible limit set by the HEC for the MS degree thesis. I have also found the project in a format recognized by the BU.

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DECLARATION

We hereby declare that this project report is based on our original work except for citations and quotations which have been duly acknowledged. We also declare that it has not been previously and concurrently submitted for any other degree or award at Bahria University or other institutions.

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Sadia Shabbir

Fatima Ferozi

ABSTRACT

In this report, you can see the construction of the Sunhub Sales Portal, which was built with the use of the Agile Scrum method. The project was completed to fulfill academic needs and demonstrating how Scrum could be applied to the real world with Jira as the primary tool that would be used to plan, do, and monitor the progress. The Sales Portal was designed to unite all the sales activities and enhance communication and openness in the solar trading environment.

The project was completed after one month, and four one-week sprints. Sprints had new features, including onboarding users, providing access to users depending on their role, creating deals, communicating with sales, negotiating, processing payments, and using AI to assist buyers in interacting. In order to enhance collaboration, flexibility and the process of delivery, the team adhered to Scrum practices such as sprint planning, daily stand-up, sprint review and retrospectives.

Jira proved to be significant in dealing with the backlog, sprint progress, and report creation such as a burndown chart, burn-up chart, cumulative flow diagram, and velocity report. The report demonstrates how Agile practices assisted in resolving quality control problems, workflow visibility and estimation problems. It wraps up by the lessons learned and recommendations on the way forward. It also demonstrates the effectiveness of Scrum as the tool in dealing with the contemporary software development projects.

Chapter 1:

1. Organization Introduction:

1.1. Company Overview & Vision

Objective: Understand the company's strategic identity.

Company Evolution Story:

Sunhub is the result of its sister company Yellow Light that began 17 years back, as a solar installation company, and became the largest one in Ohio.

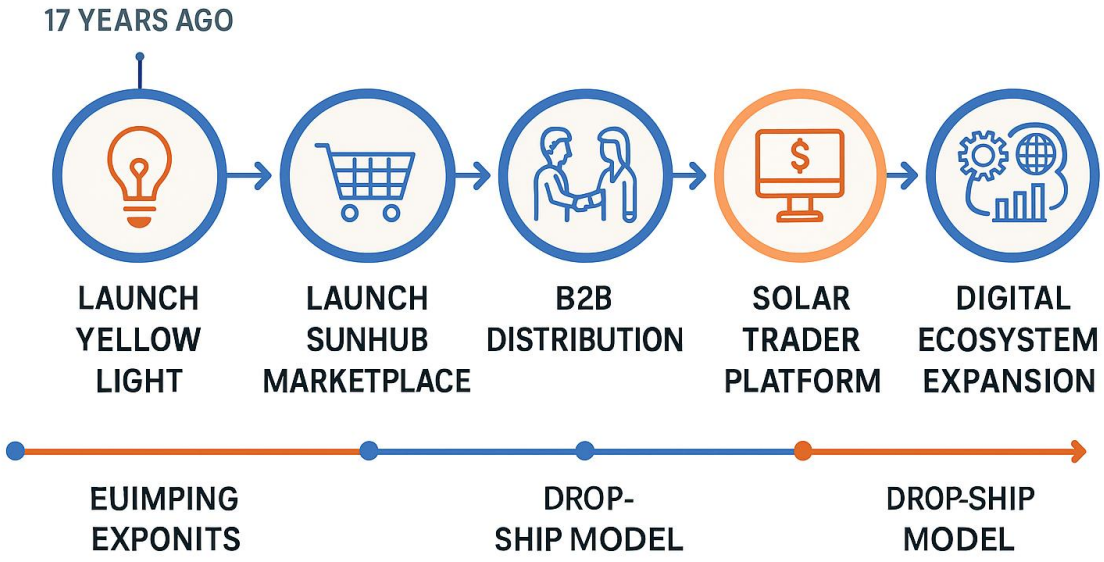


Figure 1 Company Evolution Story

Sunhub was established as a market due to the need to have a platform to sell and buy used solar equipment. This increased the company-supplier relationship and employed a sales department as procurement continued to increase. Then it started concentrating on B2B distribution. Sunhub developed the Solar Trader Platform which is a first-in-industry tool, patented, that enables solar professionals to negotiate live and auto-generates contracts in solar trade language. The reason behind this was due to their perception that there existed a disparity between the manner in which the traditional e-commerce platforms operated and the way solar professionals operated. This platform is based on the drop-ship model, meaning that manufacturers do not need to store stock and can be more flexible. Suntech came to provide marketing, logistics and custom sales portal solutions over time, making it a complete digital ecosystem to the solar industry.

1.2. Vision / Mission / Values

1.2.1. Vision:

To become the largest online B2B distributor of solar industry.

1.2.2. Mission:

To simplify and digitalize the process of buying and distributing solar energy by offering platforms that facilitate the process of negotiation, order management, marketing, and logistics.

1.2.3. Core Values:

- **Innovation**: Being the first with tech-first solutions, such as Solar Trader and sales portals.
- **Ownership**: Team members are in charge and they do a lot simultaneously.
- **Customer Commitment**: Five stars, no post-sale problems, and after-sales.
- **Flexibility**: You will drop-ship and rewrite conditions of negotiation to suit you.
- **Collaboration**: The individuals of various departments collaborate and hold weekly company-wide meetings.

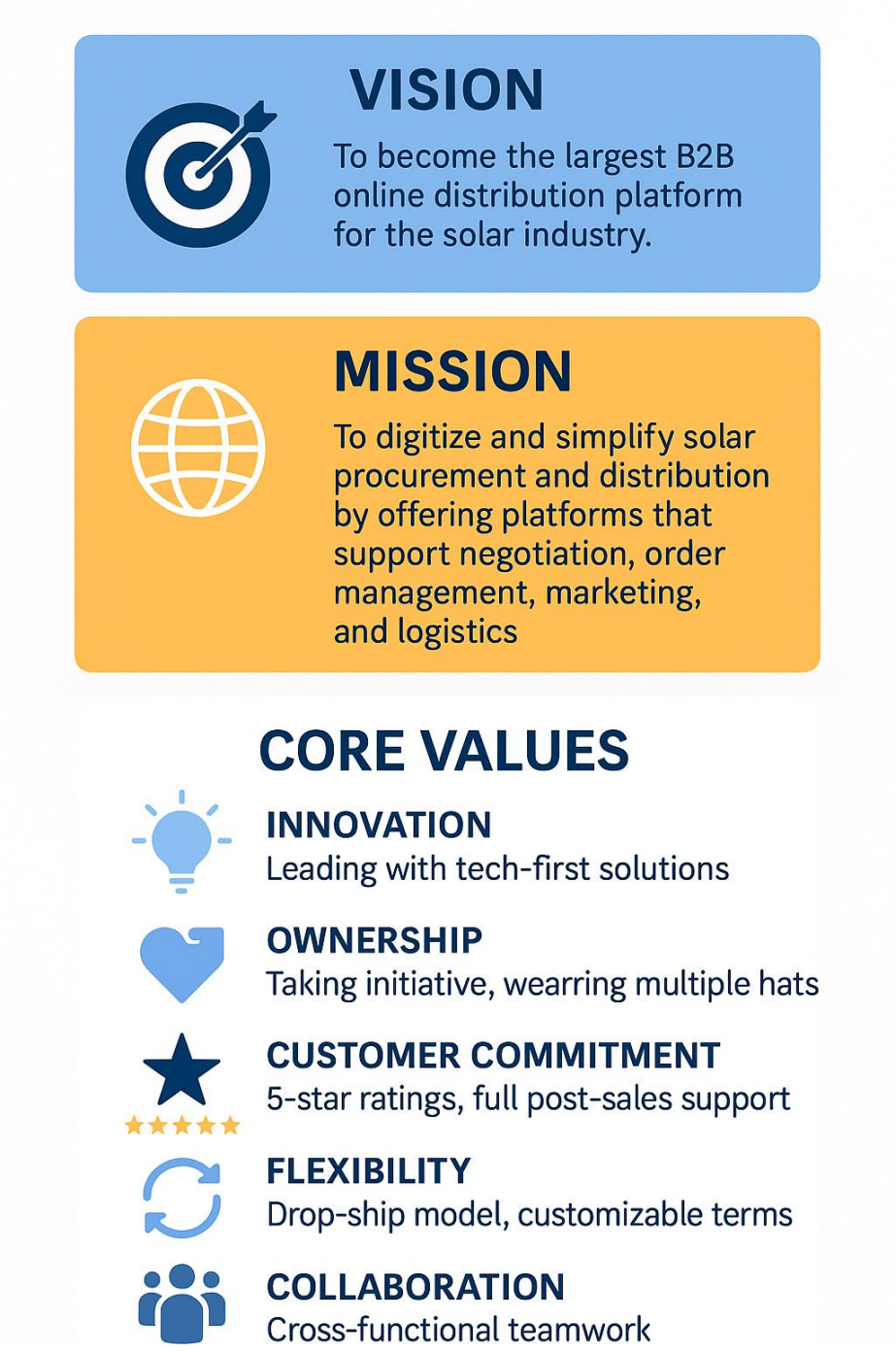


Figure 2 Company Vision, Mission and Core Values

1.3. Organization/Stakeholder Structure:

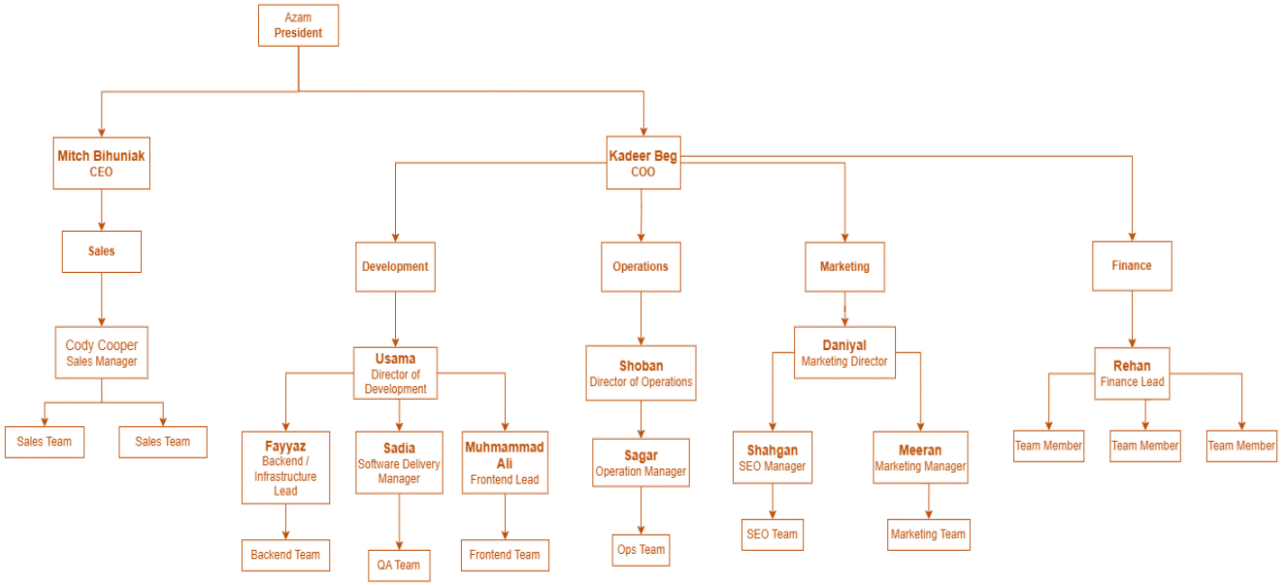


Figure 3 Organization/Stakeholder Structure

1.4. Project for implementation:

Project Overview:

Sunhub's Sales Portal:

The Sunhub Sales Portal is a full-blown sales tool that simplifies the processes of solar suppliers to manage listings, pricing, negotiations, and relationships with customers. The system allows the users to create public or private entries of clients, submit quotes, negotiate

deals via a chat interface with more than two parties, and monitor the status of contracts and payments.

Functioning as a platform, Sunhub can allow the involvement of Sunhub teams, sellers and buyers according to their roles. It also helps in real-time inventory synchronization, automatic discounts and markup calculations and enables users to send email campaign and also dashboards of reporting. The idea of the project is to make the manual processes a thing of the past, simplify the operations, and enhance direct sales capabilities of Sunhub by integrating the workflows into a single portal.

Trader Platform (Active Listings):

Sellers are listed on the public Solar Trader market under the category of active listings. When a new listing is posted to Sunhub, it begins by being pending. The admin moderator checks the item, puts a markup on it, and opens it to all the people to view it and place a bid. The buyer/seller exchange is conducted in a moderated chat. With offers that are made by the buyers, overseen by the moderator, and closed by the deal being agreed upon, Sunhub closes the deal. As soon as both the parties agree upon this, the system will automatically generate a contract and it will be signed by both parties.

Unified Features

- **Single Sign-On & Access Control:** Both sites have the same login to all users. Sellers achieve Premier (and special profile badges) upon entering a master services agreement.

- **Sales Teams & Permissions:** The company account of a seller may also contain multiple sales-rep logins which are grouped together. Access to certain listings or list of clients can be given to each salesperson.
- **Chat & Negotiation:** The portal supports live negotiation - in Sales Portal, direct and in Trader, moderator-mediated.
- **Contract Generation:** There is a formal contract of Sunhub on any completed transaction, irrespective of the platform used.

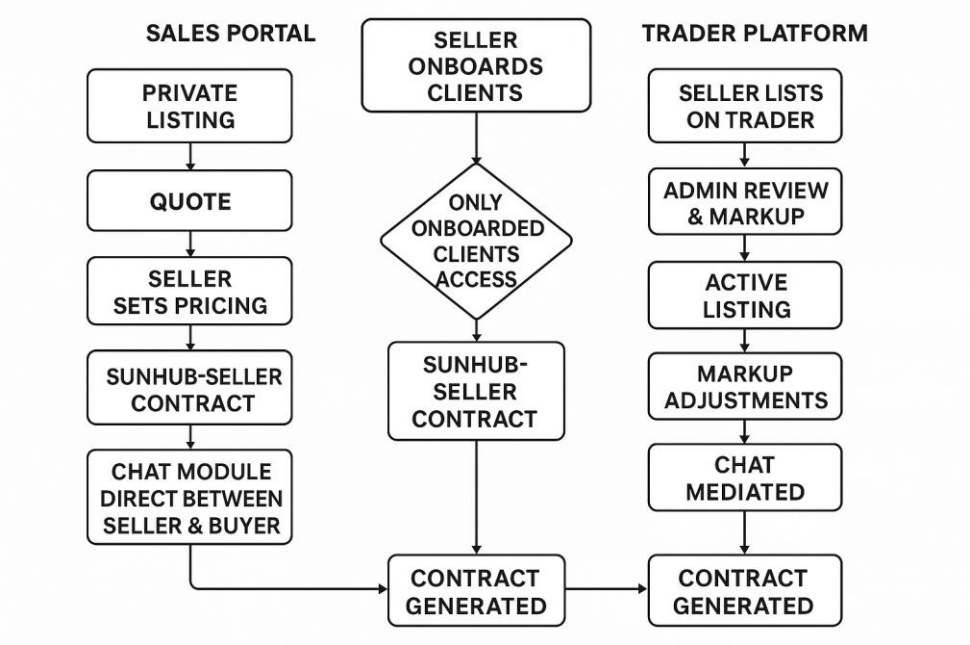


Figure 4 Project Workflow

1.5. Project Charter:

Section	Details
Project Title	Sunhub Sales Portal
Project Start Date	20th November 2025
Project Completion Date	22 December 2025
Budget Information	To be finalized / As approved by management
Product Owner	Ms. Sadia Shabbir
Project Objective	The primary objective of the Sales Portal project is to design and develop a centralized, user-friendly digital platform that enables efficient management of sales activities. The portal aims to streamline product management, customer interactions, order processing, and sales reporting, while improving operational efficiency, transparency, and decision-making for the sales team and management.
Success Criteria	The project will be considered successful when all planned sales portal features are delivered on time, meet business requirements, and are actively usable by sales teams with minimal defects.

Project Approach	• **Clear Requirement Definition:** All features such as product listing, order management, customer records, payments, and reports are defined as user stories in Jira with clear acceptance criteria. • **Agile Scrum Implementation:** Development is carried out in short, time-boxed sprints with sprint planning, daily stand-ups, sprint reviews, and retrospectives managed through Jira. • **Feature-Based Development & Tracking:** Features are broken down into epics, stories, and tasks. Progress is tracked using Jira boards, burndown charts, and sprint reports. • **Continuous Testing & Quality Assurance:** Functional testing is performed in each sprint, and bugs are logged, tracked, and resolved using Jira. • **Stakeholder Feedback & Iteration:** Regular stakeholder feedback is incorporated after sprint reviews, and enhancements are prioritized based on business value. • **Timely Delivery & Performance Measurement:** Success is measured through on-time sprint completion, reduced defects, successful deployment, and user satisfaction.
Roles & Responsibilities	• **Product Owner:** Sadia Shabbir (sadiashabbir@gmail.com) • **Scrum Master:** Fatima Ferozi (fatimaferozi@gmail.com) • **Frontend Developer:** Amina (amina111@gmail.com) • **Backend Developer:** Maha (maha123@gmail.com) • **QA Engineer:** Muhammad Ali (M.ali145@gmail.com)
Project Sponsor	Mr. John
Sign-Off Status	Approved

Table 1 Project Charter

Chapter 2:

2. JIRA (Project Management Tool)

JIRA is a project management and problem tracking tool that Atlassian has made very popular. It is primarily used to aid the Agile and Scrum practices, which assist the teams in planning, tracking, and managing the software development projects in a better manner. JIRA allows businesses to create and manage epics, user stories, tasks and bugs and displays them the status of their projects in real-time.

JIRA helps software development teams to monitor any issues, plan their work, priorities, and ensure that project requirements are satisfied within the timeframe. Small and large businesses can use it since it is flexible and may expand with it.

2.1. Competitors of JIRA

JIRA is one of the most common tools of project management, and a number of other tools exist on the market that will do the same tasks. Some of the most important

- **Trello** – A simple, card-based project management tool suitable for small teams
- **Asana** – A task and workflow management tool focused on productivity
- **Monday.com** – A visual project management platform with customizable workflows
- **ClickUp** – An all-in-one productivity and task management tool
- **Azure DevOps** – Azure DevOps is a Microsoft tool for software development and DevOps teams.

- **Basecamp** – Basecamp is a simple tool for managing projects and working together.

Each of these tools has its own strengths, but they may not have all the advanced features needed for complicated Agile software development projects.

2.2. Why JIRA Was Chosen for This Project

Jira is the best fit in the Sunhub Sales Portal project since it best suits the project needs and it is compatible with the Agile Project Management practices. Unlike many other tools, JIRA has complete support of the Scrum concepts including epics, user stories, sprints, backlog, and burndown charts.

JIRA allows you to configure workflow, type of issues and fields according to your project. It has progressed reporting features, such as sprint reports, velocity charts and issues tracking dashboards that assist you in monitoring progress and performance with precision.

In addition, JIRA can be deployed together with other development tools such as GitHub, Bitbucket and Confluence and thus it is one of the best tools to use to manage software development projects.

Chapter 3:

3. Project Planning

Project planning is quite crucial in ensuring that it is carried out in a well-structured and managed manner. Even technically well-defined project may face such issues as delays,

cost increase or quality problems unless it is well planned. This step is useful in clarifying what is to be done, how it is to be done and who will head each task.

In the case of the Sunhub Sales Portal project, the planning has been done and then the development activities initiated. The Agile Scrum standards were adhered to and Jira was the main tool of project planning, tracking and monitoring. This chapter describes the manner in which various areas of planning including scope, estimation, scheduling, resources, cost, quality and risks were managed in the project.

3.1. Product Vision Statement

An intelligent, centralized sales model that would streamline the solar trading process, improve buyer-seller relationships and automate the process of negotiations between business and business.

3.2. Product Vision Board

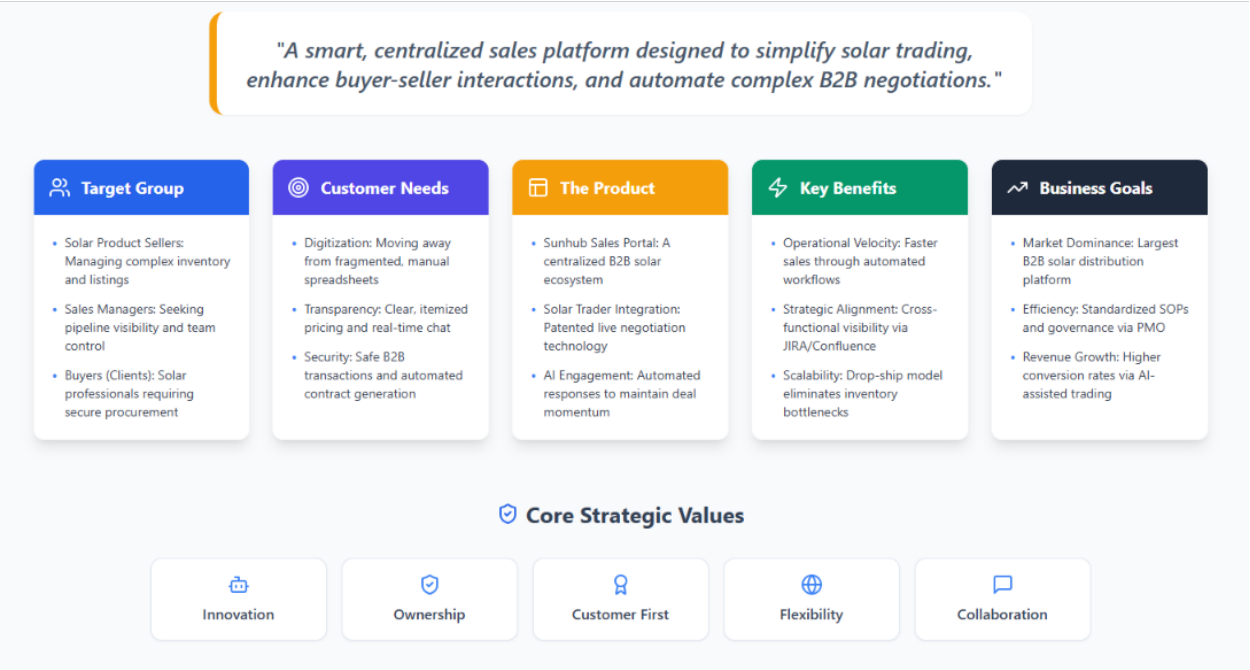


Figure 5 Product Vision Board

3.3. Scrum Methodology

Here we have adopted the Scrum Methodology in this project. Scrum is an Agile framework paying attention to development in iterative mode, feedback (continuous), and adaptable planning. Scrum was used in this project in the development of the Sales Portal to make sure that the requirements were defined in the epics or user stories, that work was done in sprints and that the deliverables were regularly reviewed.

3.4. Project Scope Planning

The Sunhub Sales Portal was broad enough to cover all the core features that were necessary to handle the sales activities online. These were company and user onboarding,

role-based access, deal creation, offers and sales quotes, chat-based negotiation, AI support, as well as payment processing.

There are activities that were intentionally excluded as part of the project scope such as physical inventory, performing logistics, creating mobile applications and long-term support post-deployment. By keeping these things out of scope, the team was in a position to remain focused on the delivery of the agreed-upon system in time.

3.5. Work Breakdown Structure (WBS) Planning

To better manage the project, we took up a Work Breakdown Structure which was used to divide the work into smaller and manageable components. The system was divided into two major epics, which were further divided into user stories and tasks in Jira. In this manner the project was not a large-scale undertaking.

Epic 1: Onboarding, Roles, and Deal Creation

Epic 2: Offers, Quotes, Negotiation, and AI Automation

Such disintegration facilitated the allocation of responsibilities, prediction of effort, and progress. The user stories were a reflection of individual functional need and corresponding development and testing tasks were developed beneath the user stories. This would enhance clarity and none of the activities was left out as it was important.

3.6. Project Features:

These are the following key features have created to breakdown the work further in User stories.

1. Company & User Onboarding
2. Role-Based Access Control
3. Private Deal Creation
4. Public Deal Creation (Trader Integration)
5. Send Offer
6. Send Sales Quote
7. Chat & Negotiation System
8. Payment Processing & Settlement

These features represent the complete functional scope of the Sales Portal.

Sprint / Iteration	Sprint Duration	Sprint Length (Days)	Epic	User Stories Delivered	Key Deliverables
Sprint 1	Week 1	5 working Days	**Epic 1: Onboarding, Roles and Deal Creation**	• **Story 1:** Company Onboarding • **Story 2:** Role-Based Access Control	Company onboarding flow, role-based access for Admin, Manager, Salesperson, and Client

Sprint 2	Week 2	5 working Days	**Epic 1: Onboarding, Roles and Deal Creation**	• **Story 3:** Private Deal Creation • **Story 4:** Public Deal Creation (Trader Integration)	Private deal listing, public deal publishing through Trader platform integration
Sprint 3	Week 3	5 working Days	**Epic 2: Offers, Quotes, Negotiation and AI Automation**	• **Story 5:** Send Offer • **Story 6:** Send Sales Quote	Offer sharing, sales quote creation with custom price and quantity, chat initiation
Sprint 4	Week 4	5 working Days	**Epic 2: Offers, Quotes, Negotiation and AI Automation**	• **Story 7:** Chat & Negotiation System • **Story 8:** Payment Processing	Buyer–seller chat, negotiation workflow, contract generation, payment processing

Table 2 Feature Breakdown into Sprint

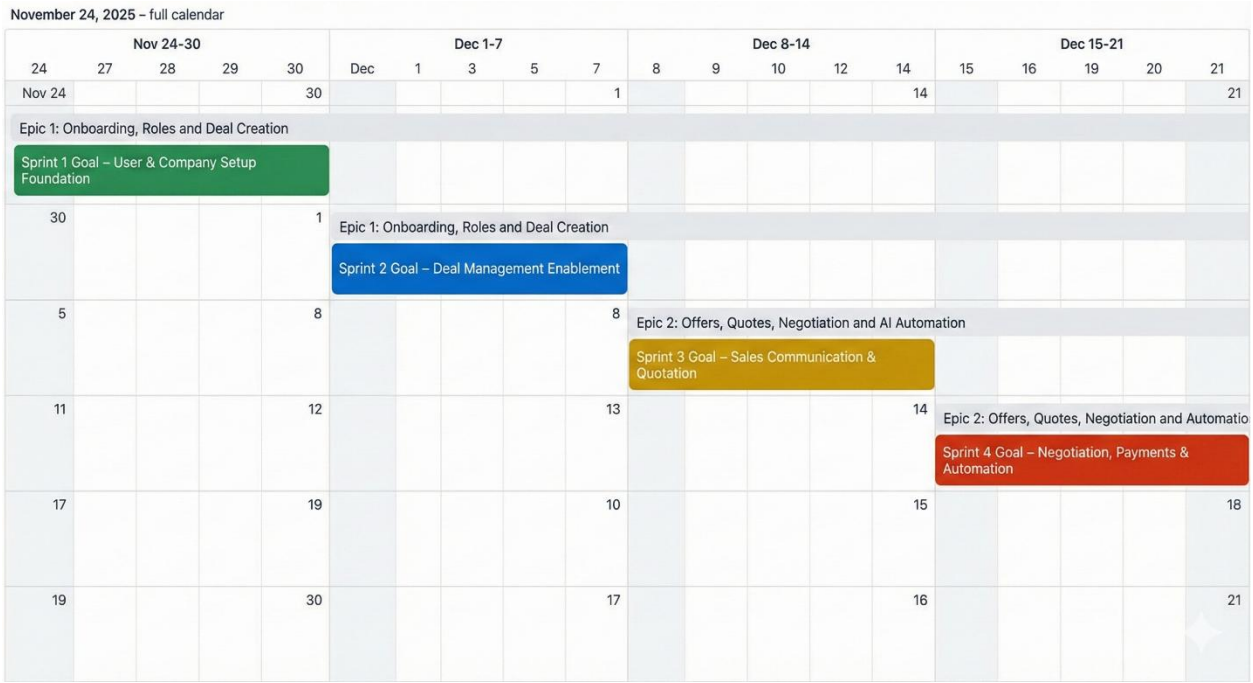
3.7. Sprint and Schedule Planning

The total time of Sunhub Sales Portal is one month that has been split into four sprints of one week. Sprint had been planned to provide two user stories, hence 40 story points per

sprint. This is what we have developed based on Agile work level. We have first an Epics, then we are broken down into Stories, then Tasks.

Sprint planning helped in ensuring that the work was evenly distributed and reviewing of progress was possible at the end of every week. Such small iteration cycle gave early feedback and speedy corrections where needed. At the fourth sprint, all the scheduled user stories were to be finalized.

3.8. Product Roadmap



3.9. Personas

Persona 1: The Sales Manager

Attribute	Description
Name & Role	**Marcus Sterling** Regional Sales Manager
Mindset	Analytical and pressed for time. Values efficiency and despises administrative tasks that slow down selling.
Professional Goals	• Hit quarterly revenue targets. • Reduce new hire ramp-up time. • Improve forecast accuracy with reliable data.
Key Motivations	• **Control & Clarity:** Knowing pipeline status without chasing people. • **Team Success:** Seeing reps earn commissions. • **Efficiency:** Eliminating redundant steps.
Pain Points	• **Lack of Visibility:** Can't see critical deal details until it's too late. • **Disjointed Onboarding:** New reps are overwhelmed by too many tools. • **Approval Bottlenecks:** Spending too much time manually reviewing routine quotes.
Ideal Portal Scenario	Logs in to a main dashboard showing real-time team performance. Identifies a stuck deal, reviews the chat history, and leaves an internal note for the rep to adjust terms—all in under 5 minutes.

Table 3 Persona 1: The Sales Manager

Persona 2: The Salesperson:

Attribute	Description
Name & Role	**Sarah Jenkins** Senior Account Executive
Mindset	Highly motivated by commission and competitive. Tech-savvy but impatient with tools that slow her down. Time is money.
Professional Goals	• Exceed monthly personal quota. • Be the first to respond to leads. • Build trust through fast, transparent communication.
Key Motivations	• **Financial Reward:** Commission is the primary driver. • **Winning:** Wants to be top of the leaderboard. • **Autonomy:** Wants to manage deals her way.
Pain Points	• **Context Switching:** Hates jumping between multiple tools to send one quote. • **Slow Quote Generation:** Manual assembly of complex quotes takes too long. • **Losing Track:** Struggling to remember who owes a response across many active deals.
Ideal Portal Scenario	Receives an inquiry, uses AI to generate a quote based on previous preferences in under 2 minutes. Sends it via the portal and handles follow-up questions instantly through the integrated chat.

Table 4 Persona 2: The Salesperson:

Persona 3: The Buyer (Client):

Attribute	Description
Name & Role	**David Chen** Procurement Manager
Mindset	Pragmatic, budget-conscious, and risk-averse. Values transparency and security above slick sales pitches.
Professional Goals	• Secure the best value (cost vs. quality). • Mitigate risk and ensure transaction security. • Streamline the procurement process.
Key Motivations	• **Reliability:** Partners who deliver as promised. • **Transparency:** Clear, itemized pricing with no hidden fees. • **Security:** Safe handling of large transactions.
Pain Points	• **Endless Email Chains:** Digging through emails for the latest quote version. • **Opaque Pricing:** Feeling like pricing isn't transparent. • **Payment Anxiety:** Worrying about the security of wiring large sums to new suppliers.

Ideal Portal Scenario	Views a clearly itemized quote securely. Uses the portal's chat to negotiate shipping terms. Upon agreement, the quote updates in real-time, and he clicks "Accept & Pay Securely" to complete the transaction instantly.

Table 5 Persona 3: The Buyer (Client)

3.10. Wireframes

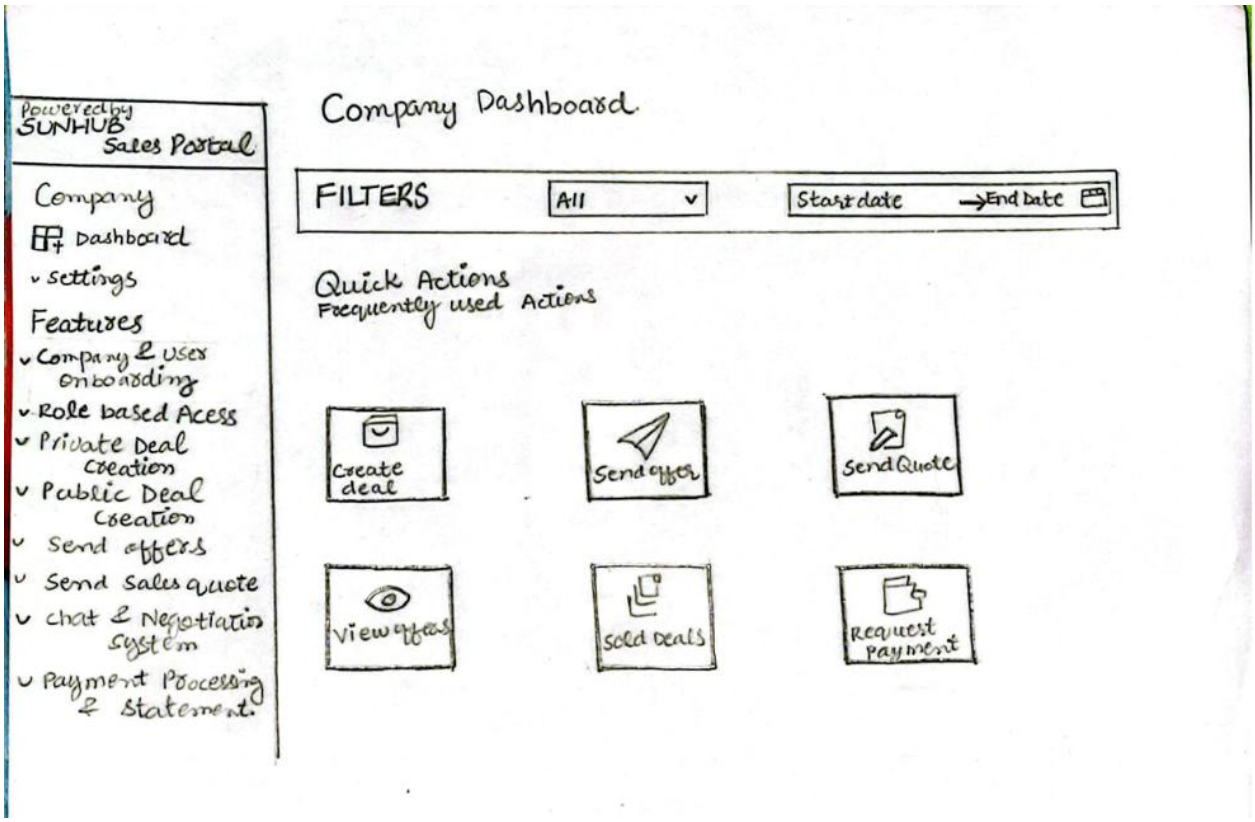


Figure 6 Wireframes 1

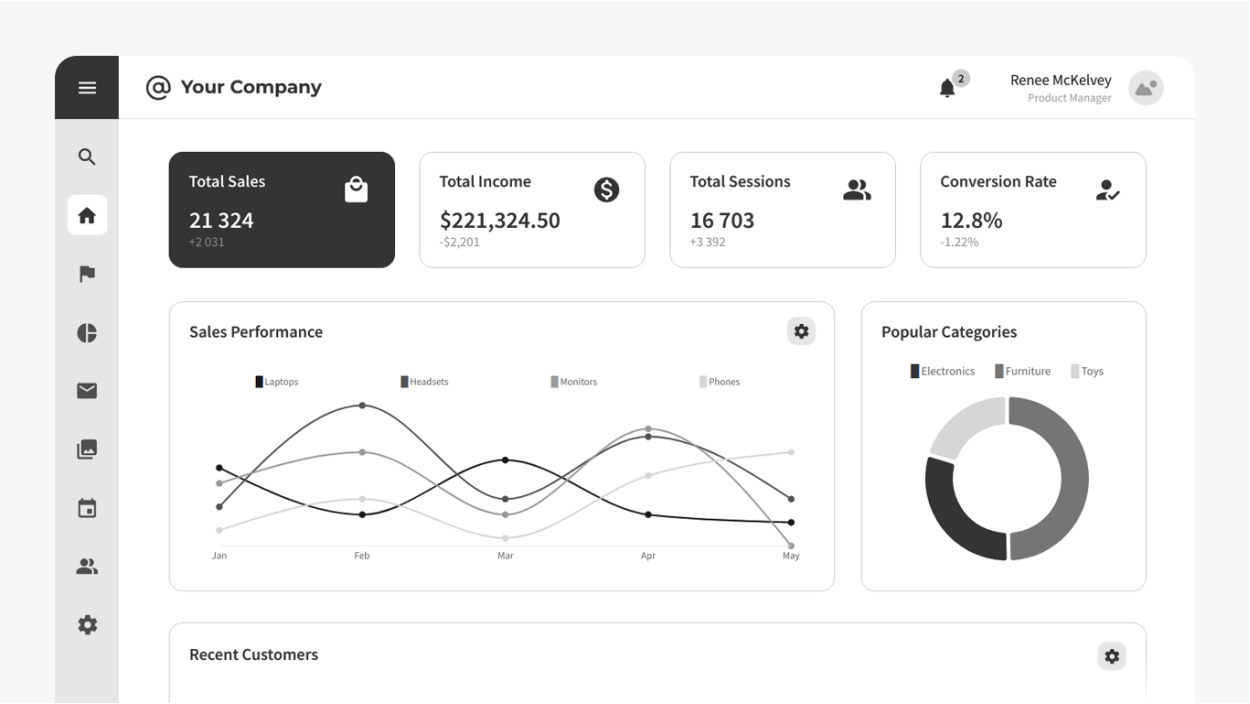


Figure 7 Wireframe 2

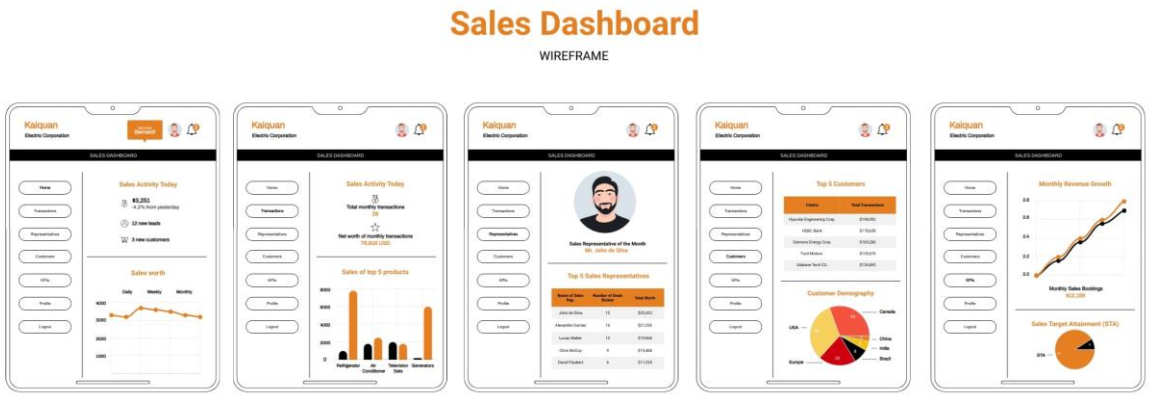


Figure 8 Wireframe 3

3.11. Agile Work Level:

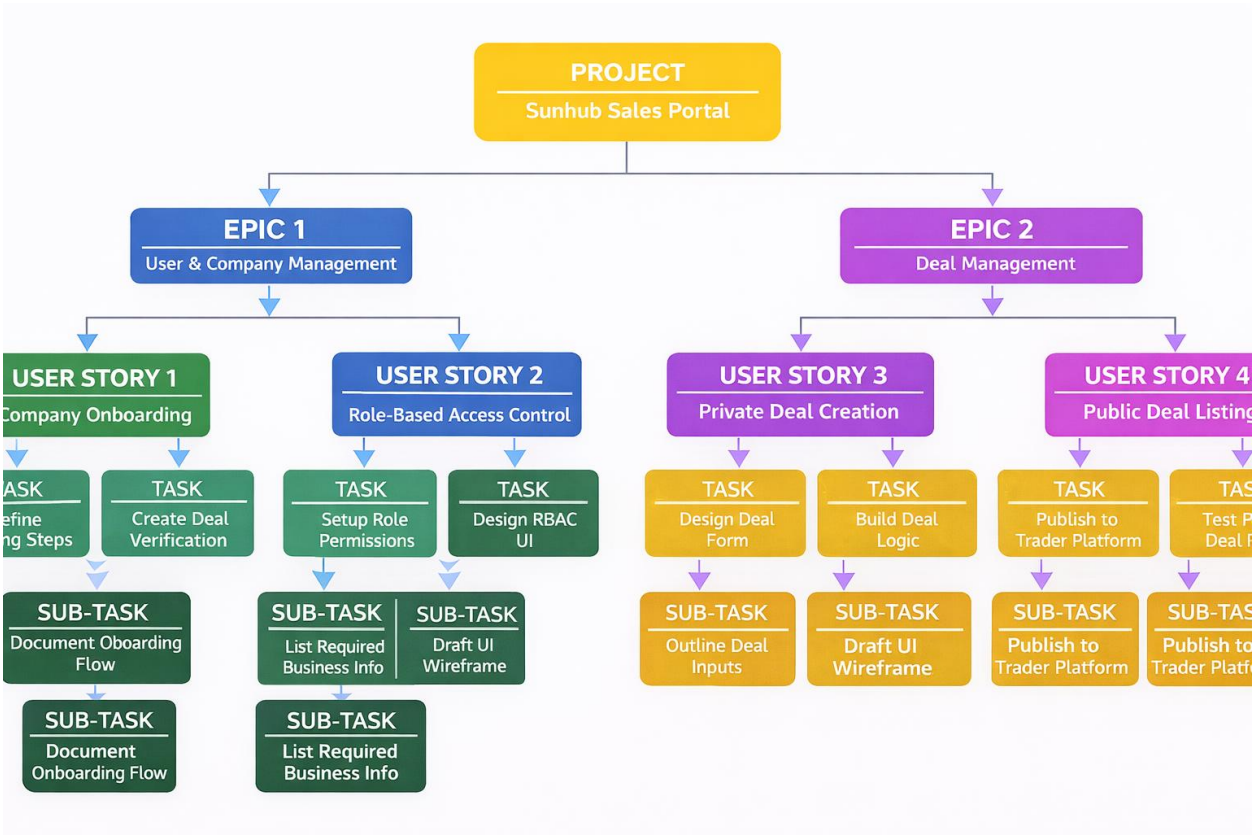


Figure 9 Agile Work Level:

3.12. Value Based Analysis and Costing:

Our project is doing Value-based analysis. This is one method to prioritize the features of the project in terms of the value they will add to the business versus the amount of time and money that they will require to develop. This approach ensures that the high-value features are provided first and achieve the greatest profit-making (ROI) rather than considering all the features equally.

3.12.1. Value-Based Decomposition

We analyzed and breakdown these feature into the **business value** and **implementation effort**.

3.12.2. Value Criteria Used

- Impact on revenue generation
- Improvement in operational efficiency
- Importance for user experience
- Dependency for other features

3.12.3. Effort Criteria Used:

- Development complexity
- Integration requirements
- Testing effort

3.13. Estimation Planning Using Story Points

To determine the amount of work that the project would involve, we relied on story points, which is a popular agile estimation technique. The reason we preferred story points over time-based estimates is that we can compare effort and complexity without having to perform the precise hour calculations.

To simplify and be consistent, 20 story points were assigned to each of the user stories in the Sunhub Sales Portal project. The project was to have 8 user stories hence the cumulative number of story points that were anticipated was 160. This homogenous estimate served to put things in check across sprints and simplified the process of planning sprints.

Feature	Total Value	% Total Value	Total Effort	% Total Effort	Total ROI	% TROI	Rank Order
Company & User Onboarding	700	21.54	20	12.5	1.72	21.5	1
Role-Based Access Control	650	20	20	12.5	1.6	20	2
Private Deal Creation	500	15.38	20	12.5	1.23	15.38	3
Public Deal Creation (Trader Integration)	400	12.31	20	12.5	0.98	12.25	4
Send Offer	350	10.77	20	12.5	0.86	10.75	5
Send Sales Quote	300	9.23	20	12.5	0.74	9.25	6
Chat & Negotiation System	250	7.69	20	12.5	0.62	7.75	7
Payment Processing & Settlement	100	3.08	20	12.5	0.23	2.88	8
Total	**3250**	**100%**	**160**	**100%**	**8**	**100%**	

Table 6 Estimation Planning Using Story Points

3.14. Resource Planning

Resource planning was everything to do with determining the roles required to make the Sunhub Portal project successful and ensuring that everybody was aware of the roles that were to be undertaken by whom. The project team consisted of five individuals: a Product owner, a Scrum master, a Frontend developer, a Backend developer and a QA engineer.

Every member of the team was assigned to do specific tasks due to his or her competencies. We did this with Jira to provide people with tasks, monitor their workloads, and check what each one of them was doing. This served to hold individuals accountable and ensured that resources were put into good use in the course of the project.

The expected duration of the project is 30 days. The project will involve five individuals working on it. The following are their hourly rate and hours of availability:

Role	Hourly Rate	Per Day Cost
Product Owner	3,750	30,000
Scrum Master	3,000	24,000
Frontend Developer	2,500	20,000
Backend Developer	2812.5	22,000
QA Engineer	2,175	17,400

Table 7 Resource Planning

3.15. Costing of Project with 1 Week Iteration:

The agile cost estimation approach employed by the project was not based on a determined budget, rather, it was an iterative cost estimation approach. The overall cost of labor was considered and it comprises the salary, benefits, and project operation expenses of the project team.

To calculate the cost of the project; we looked at each sprint individually. This gave the opportunity to follow and observe the spending amount. The overall project cost was

calculated as a summation of the cost of each of the four sprints. This approach enabled monitoring costs and at the same time provided value and made monitoring of finances easier all through.

- All Employee will work 100% of the time.
- 1 Iteration is 5 day long, because will setup the Sprint for 1 week.
- The complete project is divided into 4 Sprints for 4 Weeks.
- Employees will work 8 hours a day.

Role	Annual Salary	**Fully burdened labor cost**	**Cost per iteration**	Time on Project	**Adjusted cost per iteration**
Product Owner	500,000	600,000	150,000	**100%**	150,000
Scrum Master	400,000	500,000	120,000	**100%**	120,000
Frontend Developer	300,000	400,000	100,000	**100%**	100,000
Backend Developer	350,000	450,000	**112,500**	**100%**	**112,500**
QA Engineer	280,000	350,000	**87,500**	**100%**	**87,500**

Table 8 Costing of Project with 1 Week Iteration

3.16. Risk Planning

We did take the risk of planning to identify potential issues that would make the project slow. Some of the common risks that were identified during planning included changes in scope, wrong estimates, technical integration and lack of resources.

In order to reduce the impact of these risks, such strategies as regular reviews of sprints, backlog prioritization, continuous testing, and early feedback of stakeholders were employed. This initiative approach contributed to correcting issues before they became too large.

3.17. Quality Planning

Under Quality planning, we made sure that the system developed was functional and business-oriented. The quality criteria were also upheld through the establishment of clear acceptance criteria of each user story.

We have also developed the DOD in a bid to ensure that our Quality standard are achieved in line with requirement.

3.17.1. Definition of Done:

A user story is done when all the functional and quality requirements were met. Under the Definition of Done of the Sunhub Sales Portal project, the following criteria are present.

- The functionality is fully developed according to the approved user story and acceptance criteria

- Code has been reviewed and merged into the main branch
- The feature has been tested and verified by the QA engineer
- No critical or high-priority bugs are open
- The functionality works as expected on the Sales Portal
- Required documentation and comments are completed
- The Product Owner has reviewed and accepted the feature

Only when all these conditions are fulfilled is a user story marked as **Done** in Jira.

Each sprint involved testing activities that were conducted and any defects detected were registered and followed up with Jira. Only when a user story fulfilled the Definition of Done, it will be considered complete so that consistency and reliability of delivered features are ensured.

3.18. Communication and Monitoring Plan

The Jira-based collaboration and the use of agile ceremonies ensured that the communication remained transparent during the project. Meetings, reviewing, and discussions of the sprint plan on a regular basis helped keep everyone in the same track.

Scrum Ceremony	Purpose	Frequency in Sprint	Planned Duration	Participants
Sprint Planning	To plan sprint goals, select user stories from backlog, and break them into tasks	Once (at start of sprint)	**2 hours**	Product Owner, Scrum Master, Development Team

Daily Stand-up	To discuss progress, blockers, and next steps	Daily (5 times per sprint)	**15 minutes per day** (Total: **75 minutes / 1.25 hours**)	Scrum Master, Development Team
Backlog Refinement	To review upcoming user stories, clarify requirements, and update estimates	Once (mid-sprint)	**1 hour**	Product Owner, Scrum Master, Development Team
Sprint Review	To demonstrate completed work to stakeholders and gather feedback	Once (end of sprint)	**1.5 hours**	Product Owner, Scrum Master, Development Team, Stakeholders
Sprint Retrospective	To reflect on what went well, what didn't, and identify improvements	Once (end of sprint)	**1 hour**	Scrum Master, Development Team

Table 9 Communication and Monitoring Plan

3.18.1. Calendar Settings as per Scrum Ceremonies:

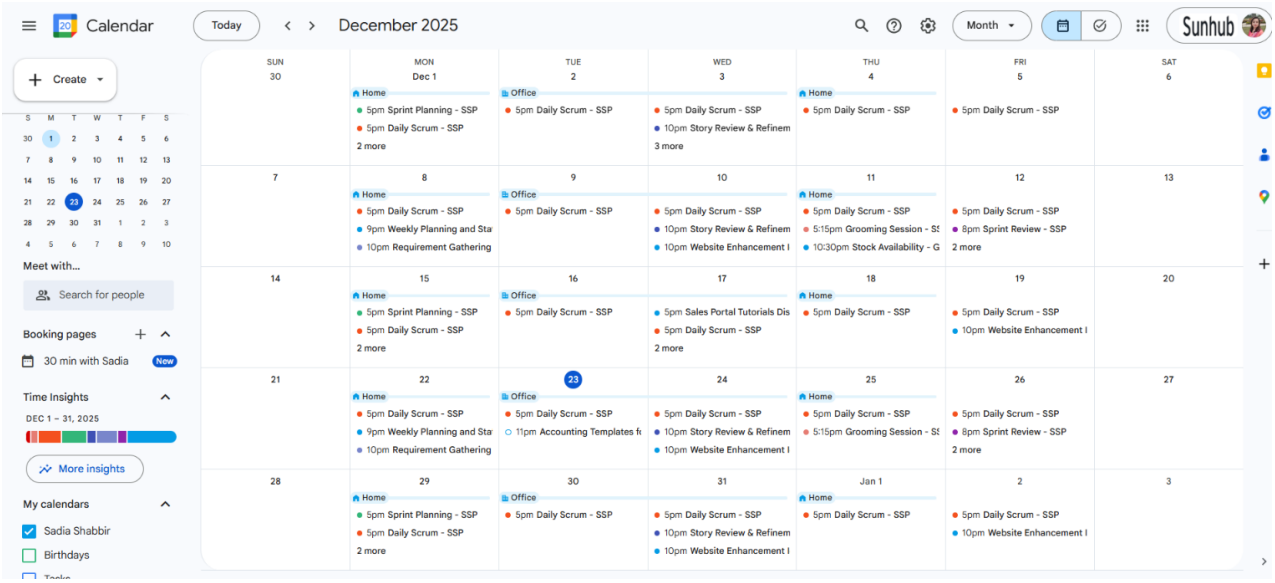


Figure 10 Calendar Settings as per Scrum Ceremonies

3.19. Jira Workflow for our Sunhub Sales Portal Project:

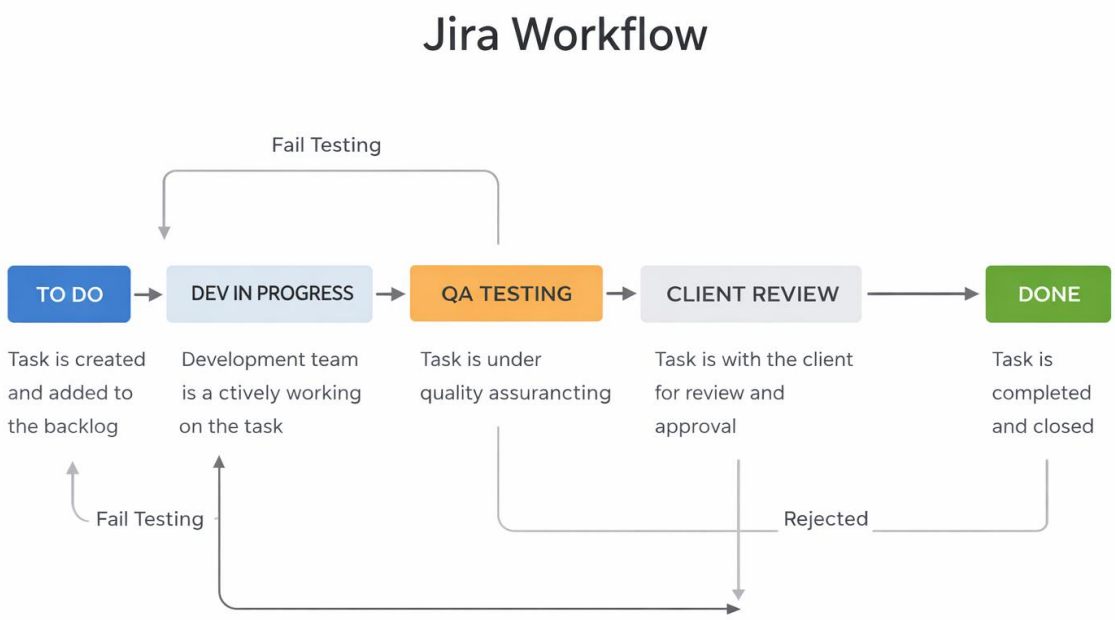


Figure 11 Jira Workflow

Project progress was monitored using Jira boards, sprint reports, and burndown charts. These tools provided real-time visibility into completed, in-progress, and pending work, making it easier to track performance and identify potential delays

Chapter 4:

4. Project Execution:

The project had four sprints of one week each. The goals of each sprint were specific and a list of user stories that was selected in reference to the product backlog. The strategy based on sprints enabled the team to remain concentrated on little work but could deliver values at the end of each iteration.

Each sprint began with sprint planning as the goals of the sprint were established, the user stories were selected and separated into development and testing tasks. We also held a stand-up meeting every day throughout the sprint to discuss the state of affairs, what was holding back our progress, and how to proceed with it. This frequent communication ensured that the team was on the same wavelength and able to solve problems within a short time.

4.1. Sprint-Based Execution Approach:

The project had four sprints of one week each. The objectives of each sprint were very clear and there is a selected group of user stories in the product backlog.

The sprinting approach to work enabled the team to remain focussed on a small amount of work and also have value delivered by the end of each iteration.

The planning of the sprint was performed at the beginning of each sprint to define the objectives of the sprint, select user stories and subdivide them into development and testing tasks. Daily stand-ups during the sprint were used to discuss progress, identify issues, and

strategize on the next action. This frequent contact enabled the team to remain on the same wavelength and address issues in a short period.

4.2. Formation of Scrum Team:

Scrum Team:

A Scrum Team is a cross-functional, self-managing and small team that collaborates in delivering value in short, repetitive cycles called Sprints that is based on the Scrum framework.

Core members of the team:

- Product Owner
- Scrum Master
- Developers
- Scrum Roles

Product Owner:

Defined project requirements, created epics and user stories, and prioritized the product backlog.

Scrum Master:

Facilitated the Scrum process, ensured adherence to Scrum practices, and removed impediments for the development team.

Development Team:

Implemented the user stories, executed tasks, and reported progress via Jira sprint boards.

The team members of this project are as follows:

4.3. Scrum Artifacts

Product Backlog:

Complete list of project requirements in Jira, including all epics, user stories, and tasks.

Sprint Backlog:

Subset of user stories and tasks selected for a particular sprint.

Increment:

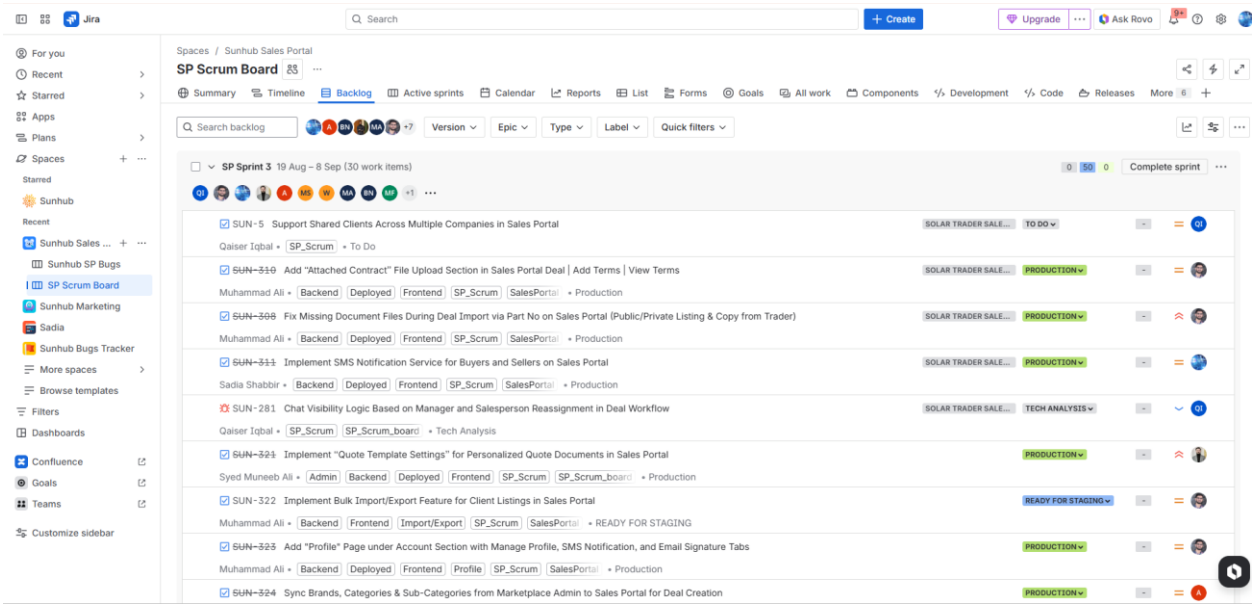
Deliverable functionality at the end of each sprint, reviewed and ready for stakeholder validation.

4.4. Prioritized Product Backlog:

In a Scrum project, a Prioritized Backlog is a list of work items that must be done in an orderly fashion. The tasks will be ordered by their priority (top to bottom) to ensure that the team will always do what will bring the most value in the first place.

The Prioritized Backlog often refers to the Product Backlog in Scrum.

Prioritized Backlog of Sales Portal is provided below:



4.5. Scrum Events

Sprint Planning:

Selection of user stories from the backlog to include in the sprint.

Daily Scrum:

Short team meetings to track progress and resolve issues.

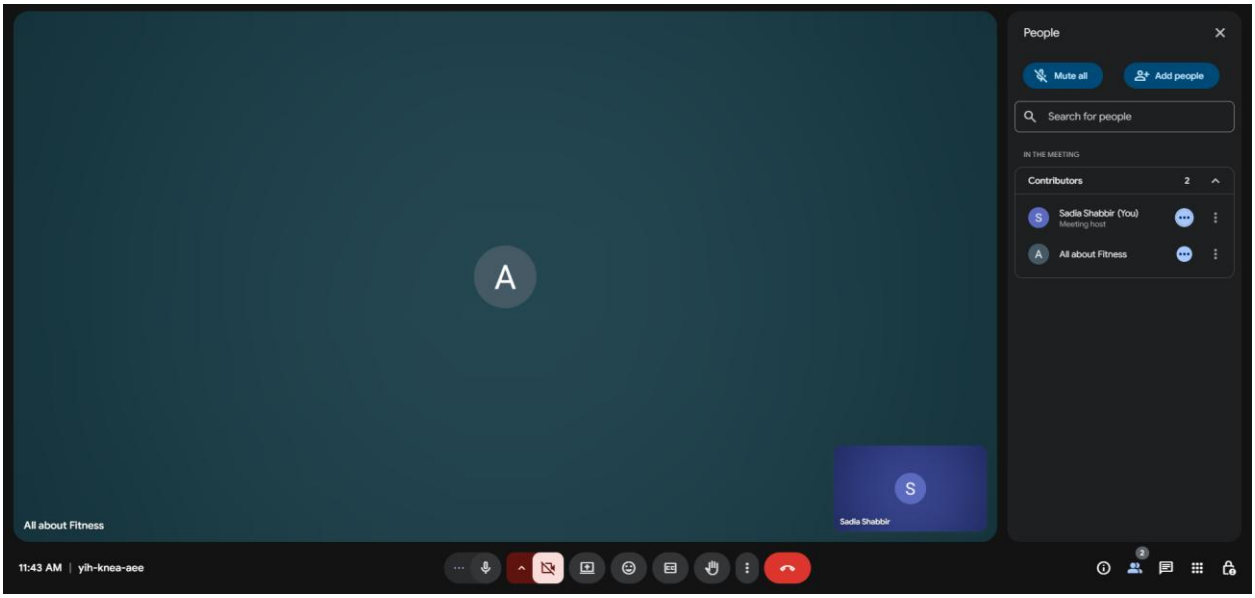
Sprint Review:

Demonstration of completed work to stakeholders for feedback.

Sprint Retrospective:

Reflection on process improvement for subsequent sprints.

Sprint Planning Meeting:



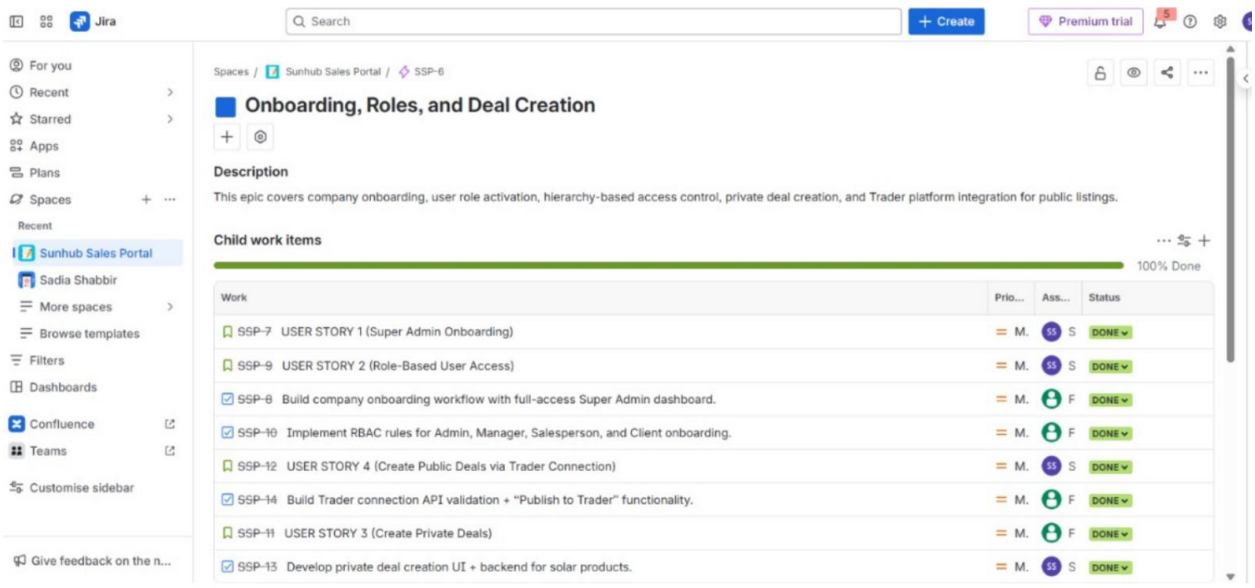
4.6. Jira Issue Types Used in the Project

Jira Epics:

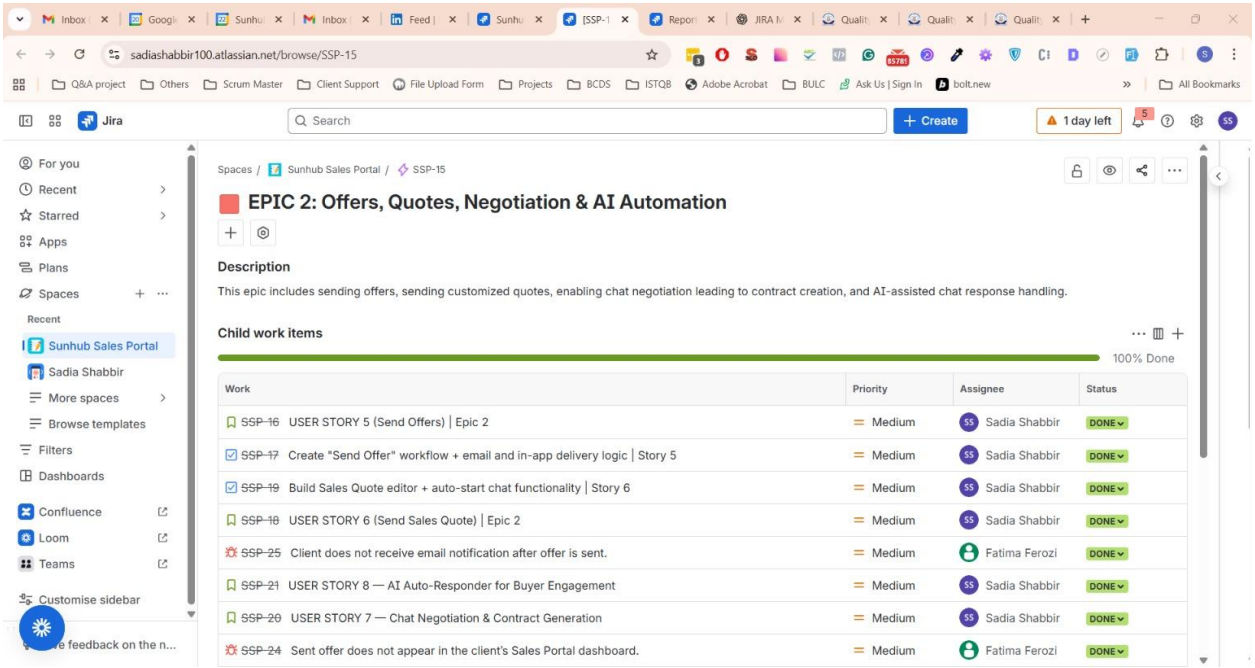
High-level features or themes (e.g., Onboarding, Deals, Offers).

We have divided our Project into 2 Jira Epic:

Epic 1:

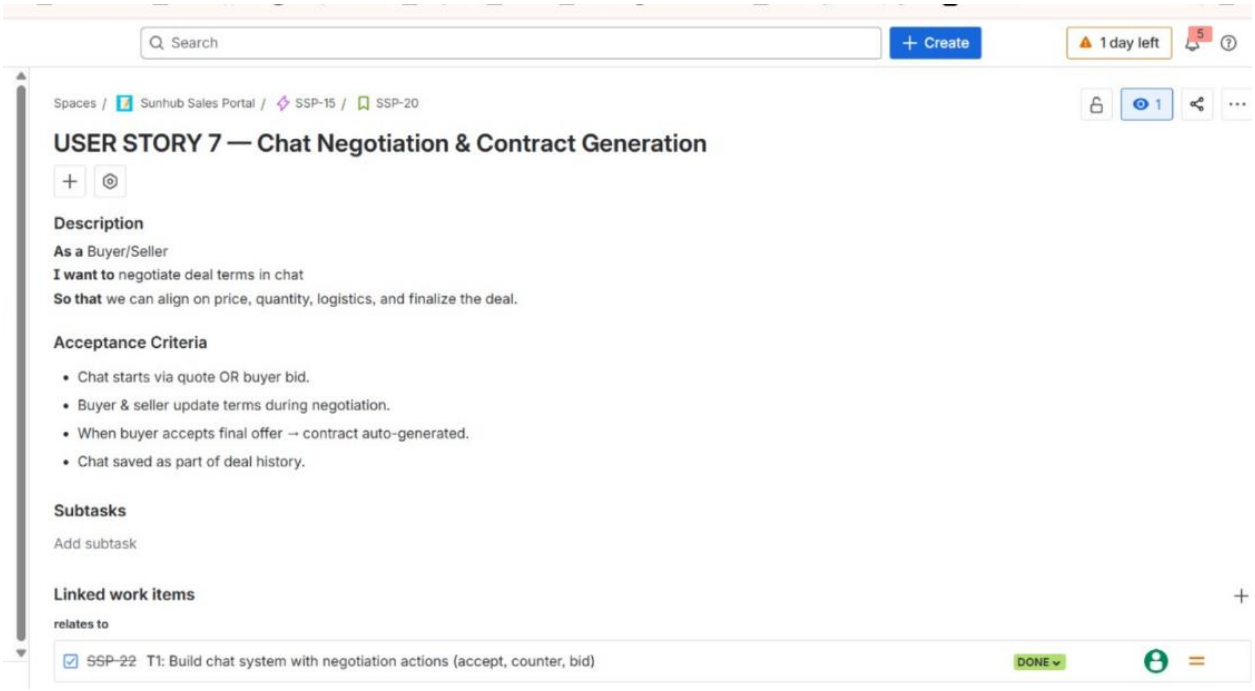


Epic 2:



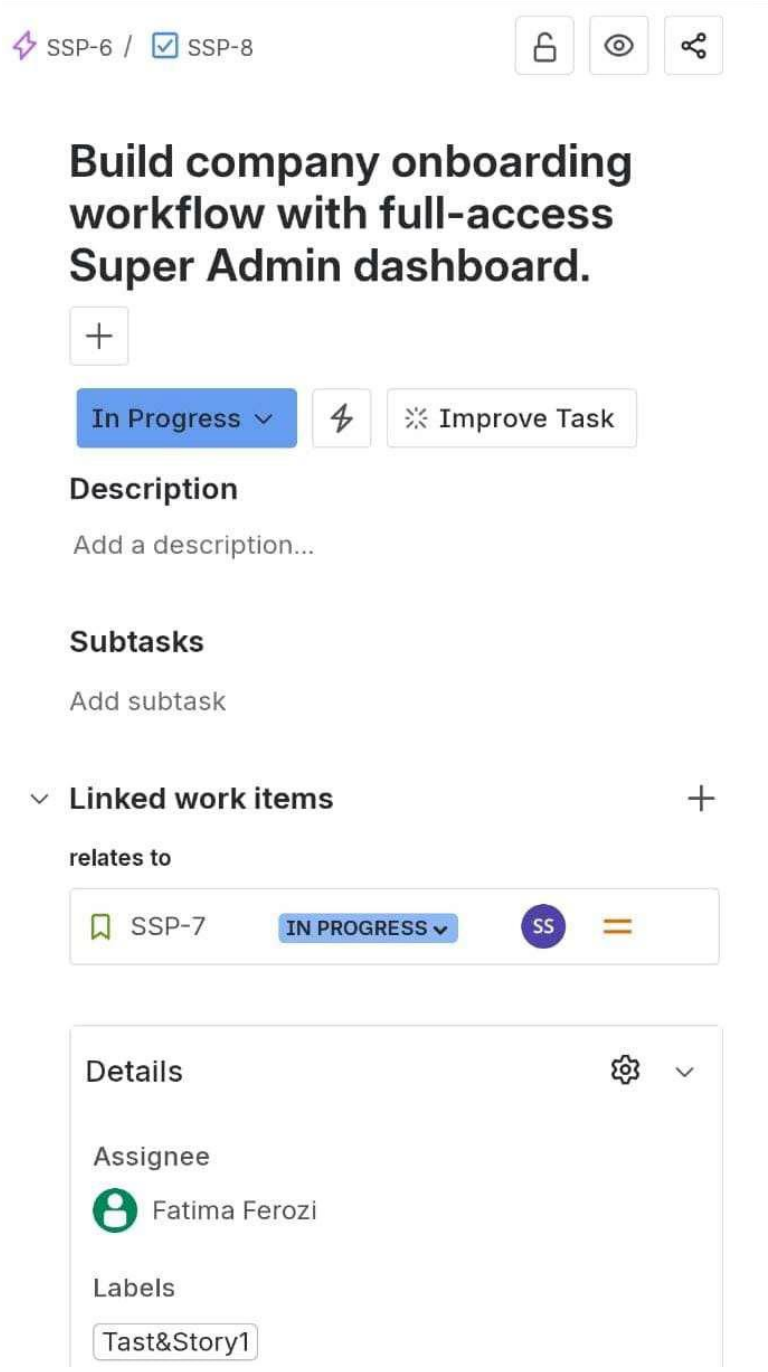
User Stories:

Functional requirements tied to epics (e.g., Super Admin onboarding, sending offers).



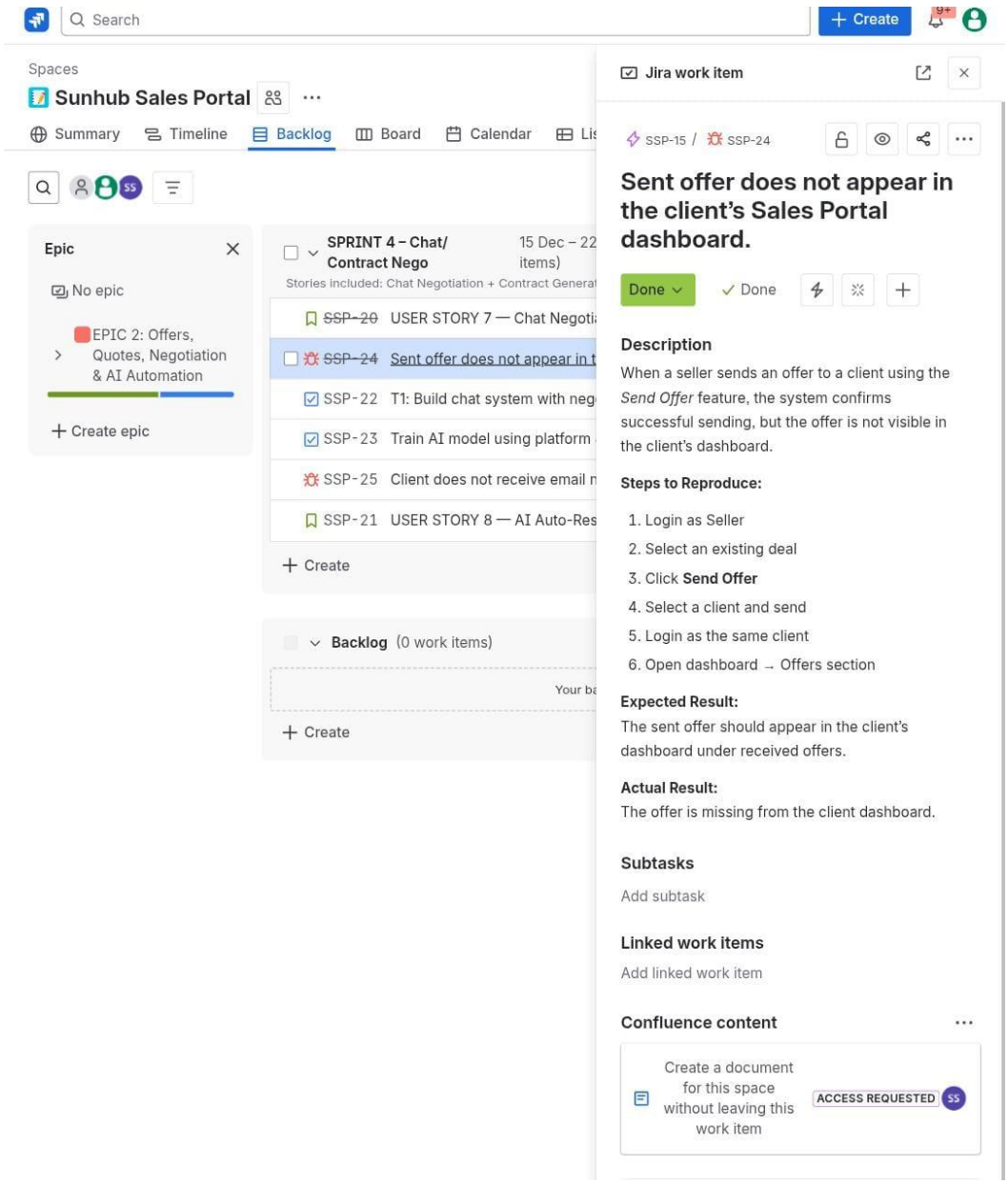
Tasks:

Detailed implementation steps for each user story (e.g., building onboarding workflows, implementing RBAC).



Bugs:

Defects identified during testing, tracked and prioritized for resolution.



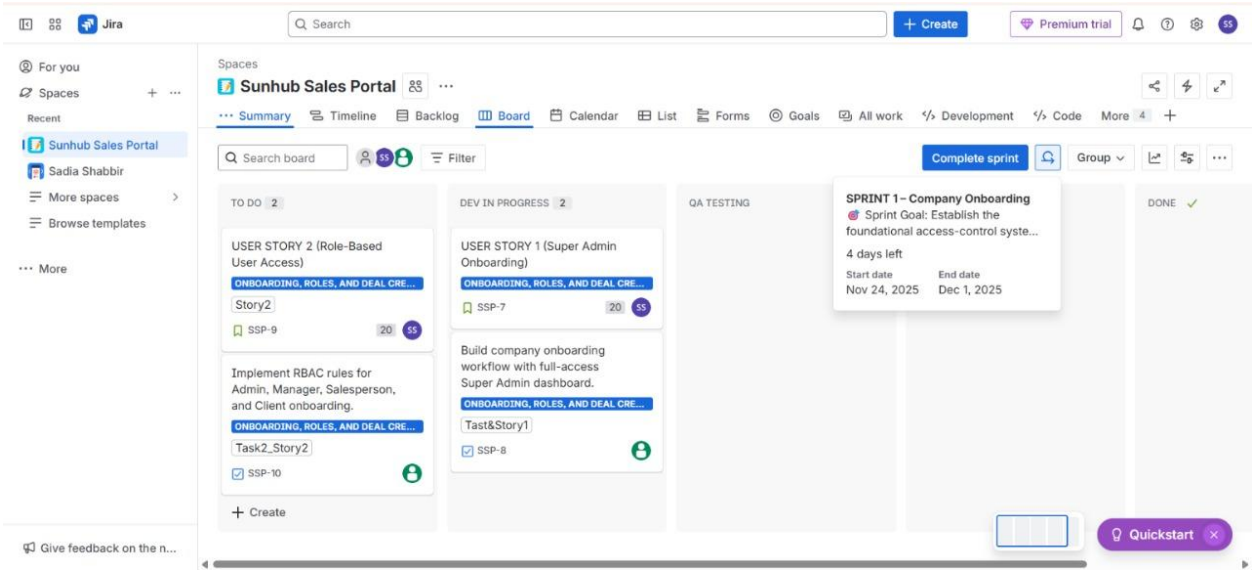
4.7. Sprint Setup in Jira:

4.71. Sprint 1 Goal – Establishing the System Foundation:

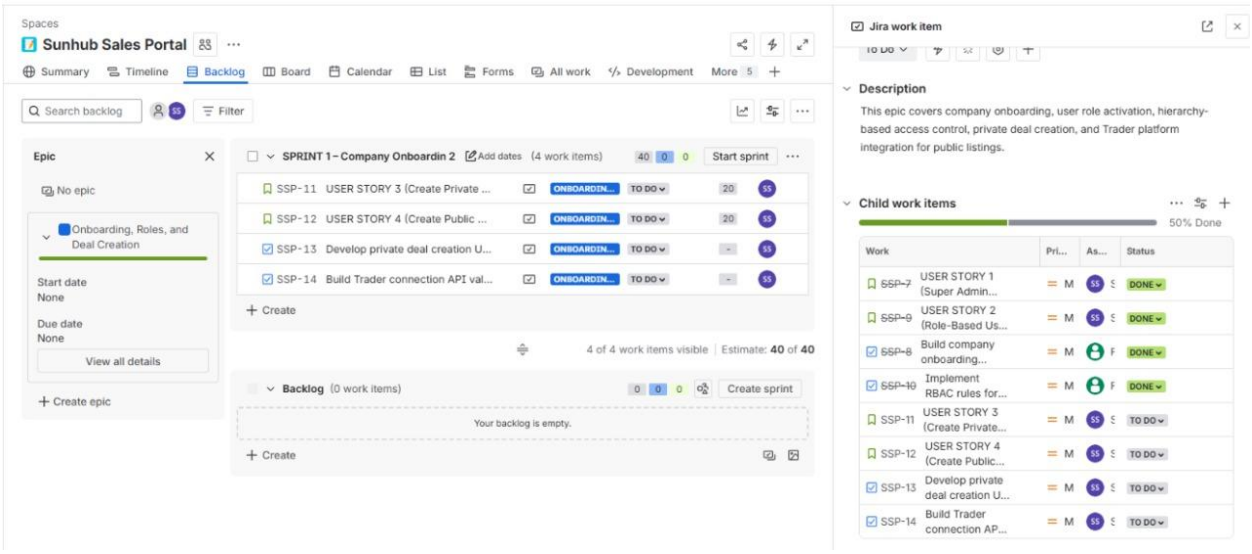
The goal of Sprint 1 is related to build the foundational structure of the Sunhub Sales Portal. This sprint focused on enabling company onboarding and implementing role-based access control so that different users could securely access the system according to their roles. The

end of the sprint, the basic user and company setup is functional, allowing further development to be built on a stable foundation.

Starting Sprint:



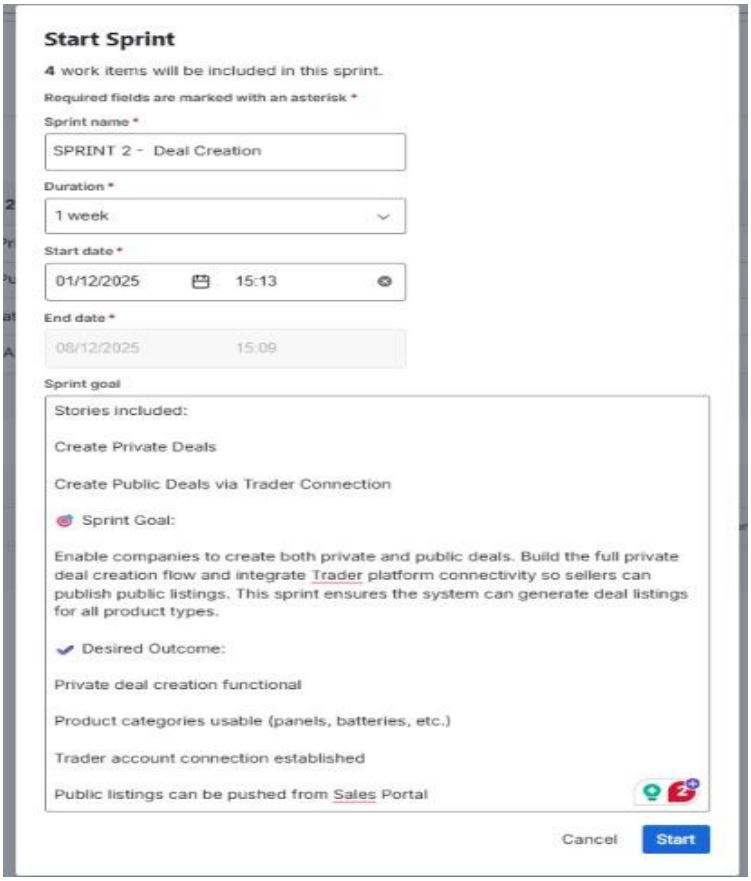
After Closing:



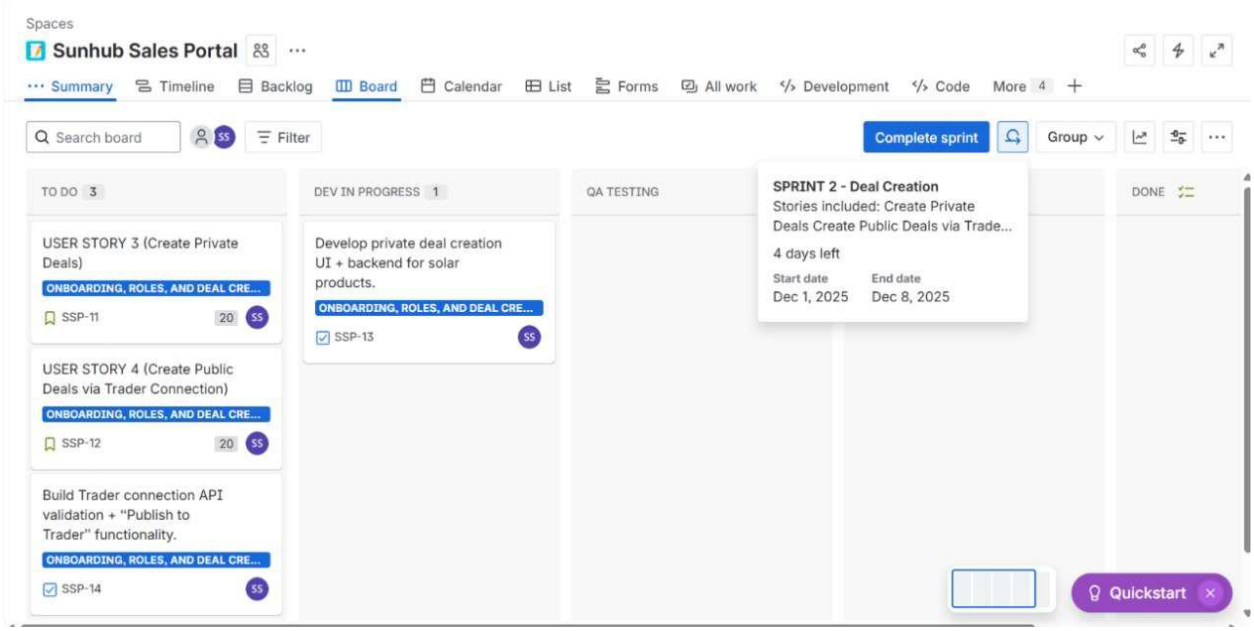
4.7.2. Sprint 2 Goal – Enabling Deal Management

Sprint 2 was aimed at providing sellers with an opportunity to create and negotiate product transactions through Sales Portal. This sprint was focusing on integrating with Trader platform to enable it to be possible to create a private deal and a public deal. By the conclusion of this sprint, the users were able to add their product lists and manage the level of visibility of deals, which is a significant aspect of the sales process.

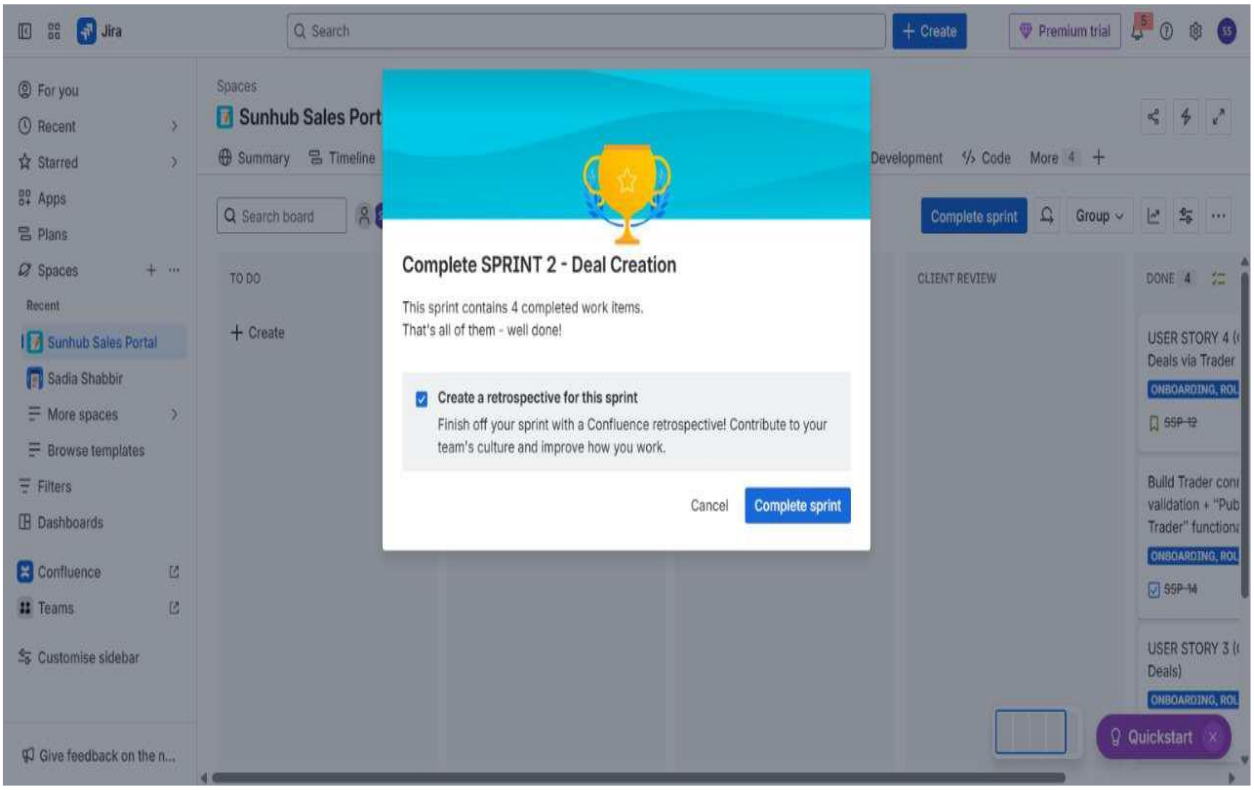
Setting up Second Sprint:



Jira Board While Sprint is executed:

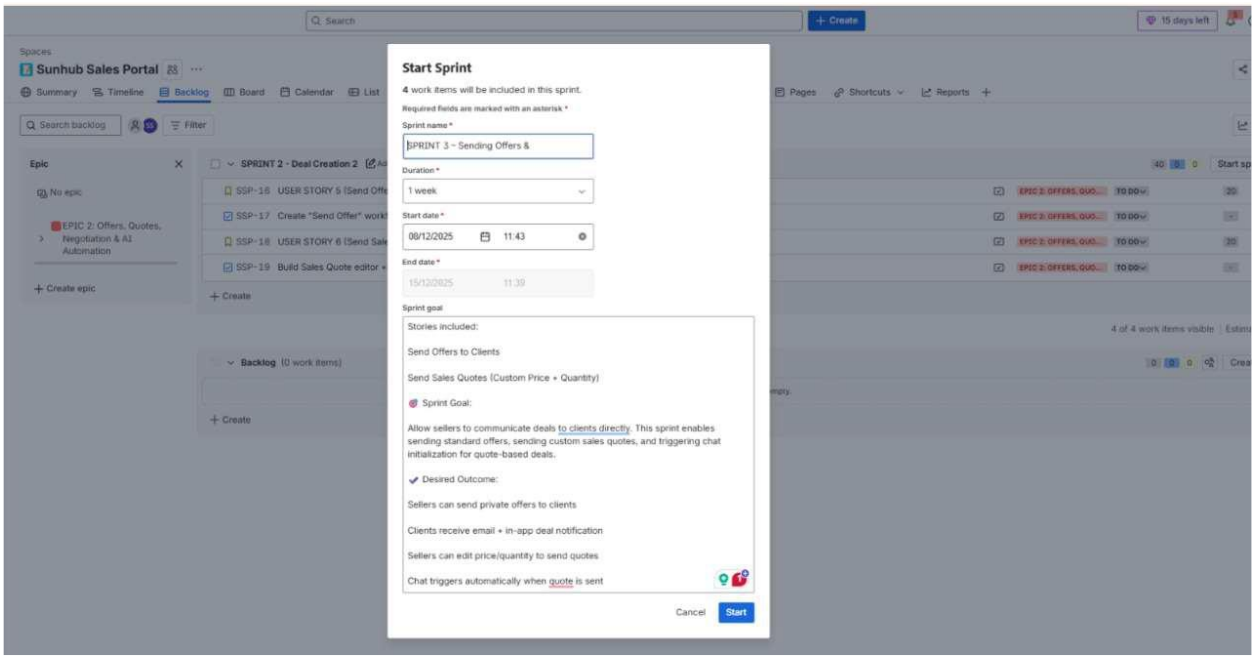


Sprint Completion:

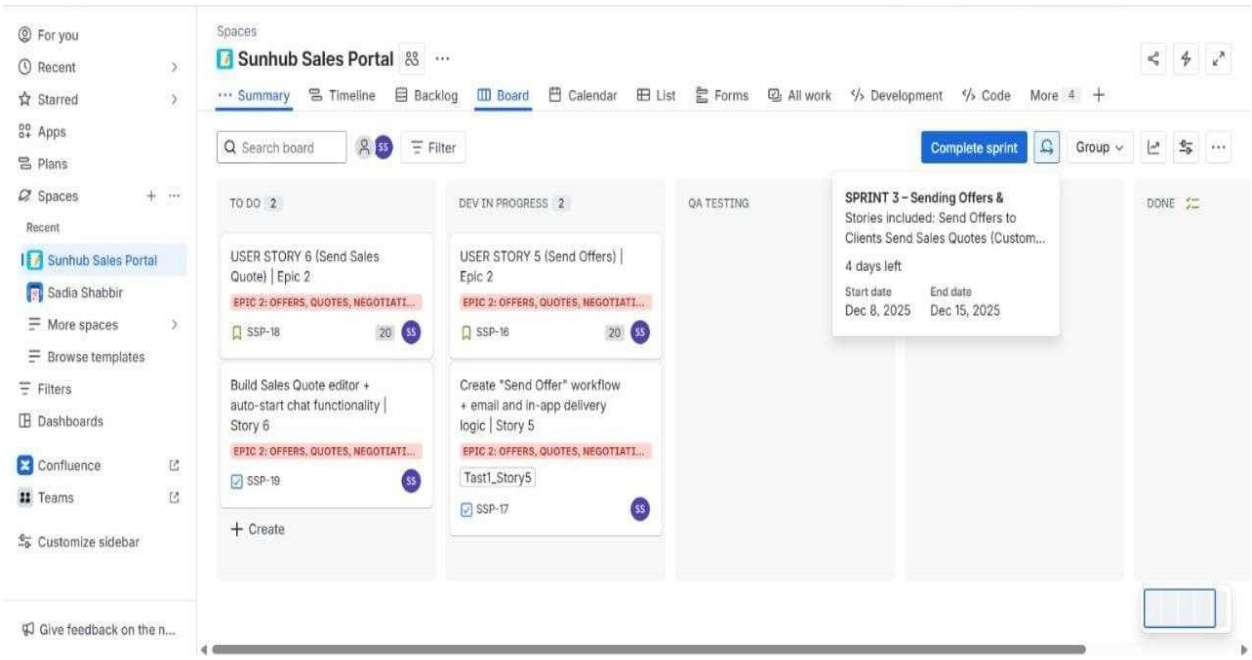


4.7.3. Sprint 3 Goal – Improving Sales Communication

Sprint Started:



Sprint In-progress:



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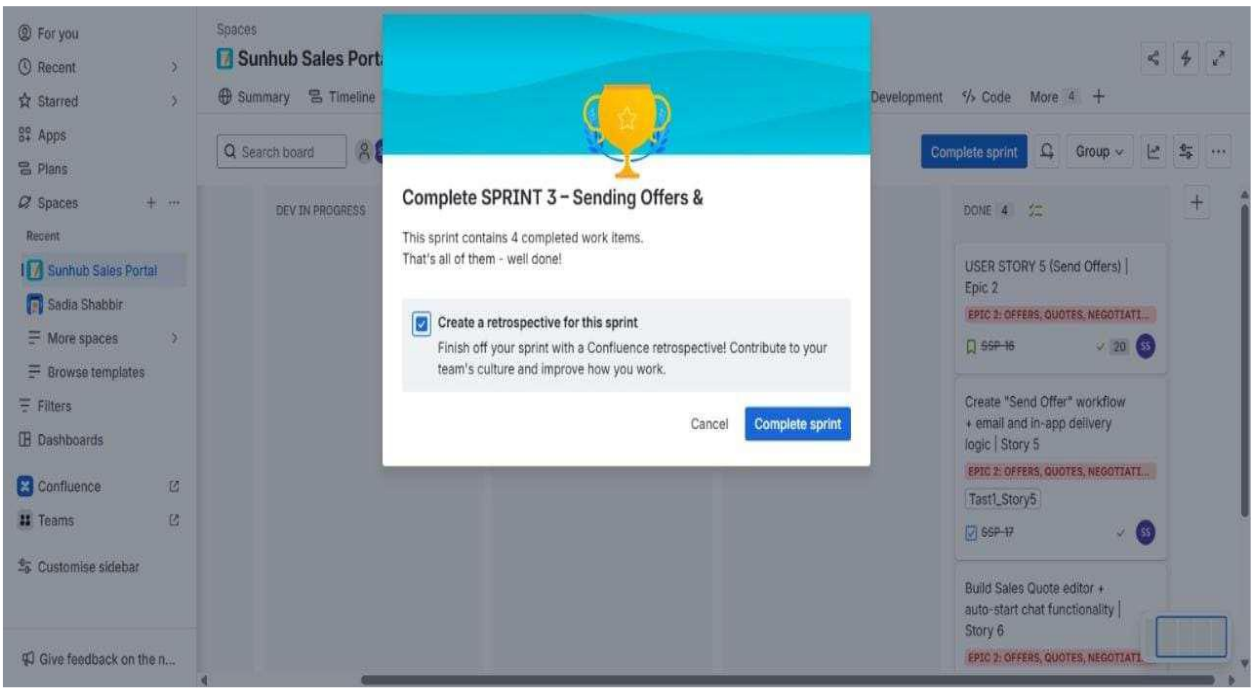
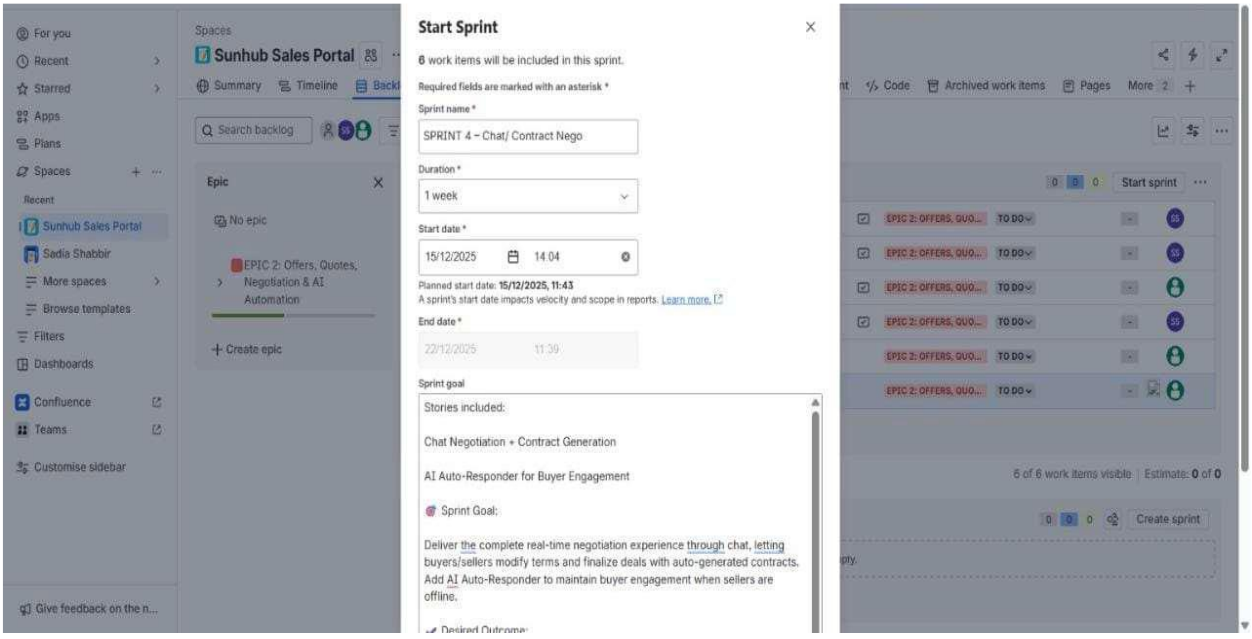


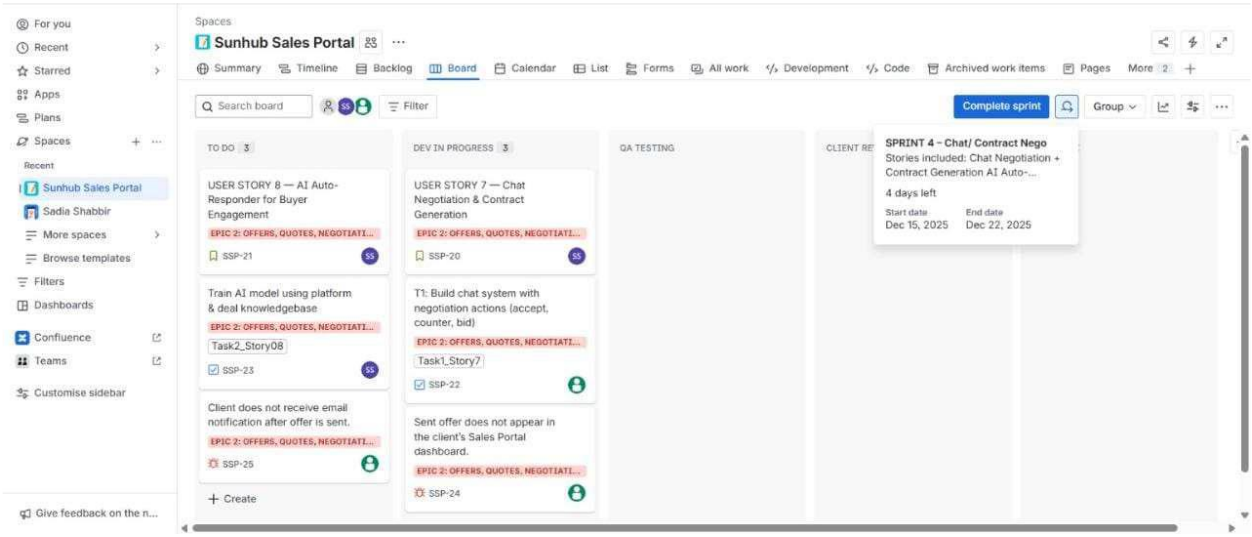
4.7.4. Sprint 4 Goal – Completing the Sales Lifecycle

Sprint 4 was aimed at completing the entire sales process by introducing negotiation, payment, and automation functionality. The primary objectives of this sprint were to ensure that it was possible to conduct chat-based negotiations, create contracts, request payments and settles. In addition, an auto-response option based on AI was also introduced, allowing the buyer to communicate with the system even in the cases when the sellers were not online. This ensured that the system never had gaps and that the individuals were in a constant state of interaction with the system.

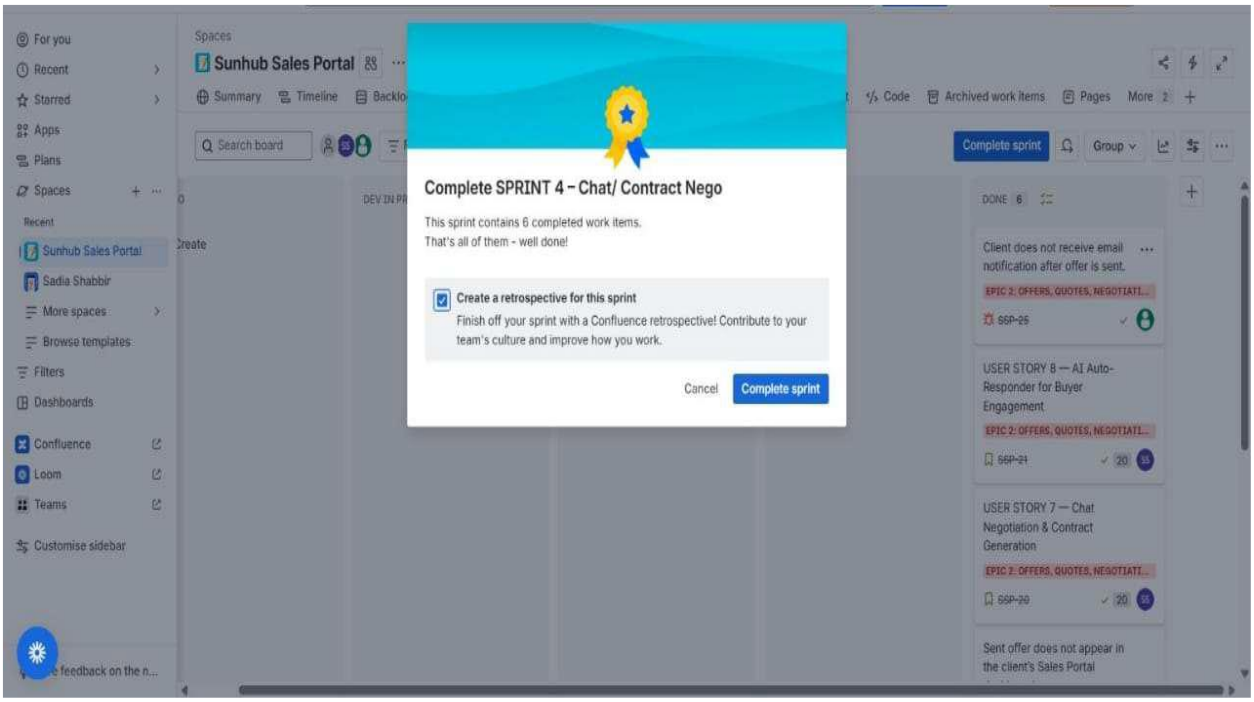
Sprint Started:



Sprint Inprogress:



Sprint Completion:



4.8. Sprint Reports

The sprint reports provided by Jira provided a complete view of the amount of work completed as well as the amount of work remaining to be completed per sprint. Such reports contained such information as:

- Stories done vs. stories intended.
- Tasks in progress and completed.
- Burndown charts of remaining effort in the sprint.
- Team performance velocity measures.

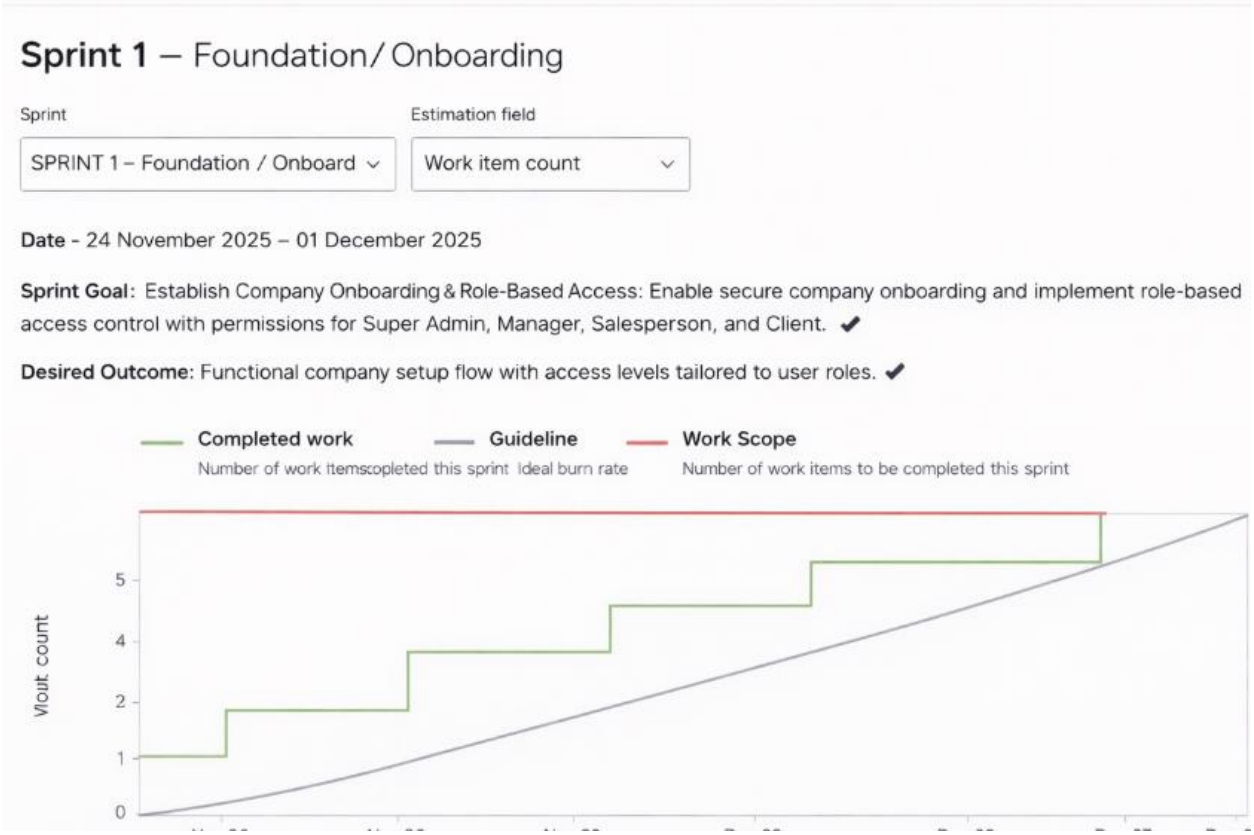
The implementation of both Epic 1 and Epic 2 stories, the process of overcoming issues, and the efficiency of the team were tracked using Sprint reports when the process was carried out iteratively.

4.8.1. Burnup report

Sprint 1:

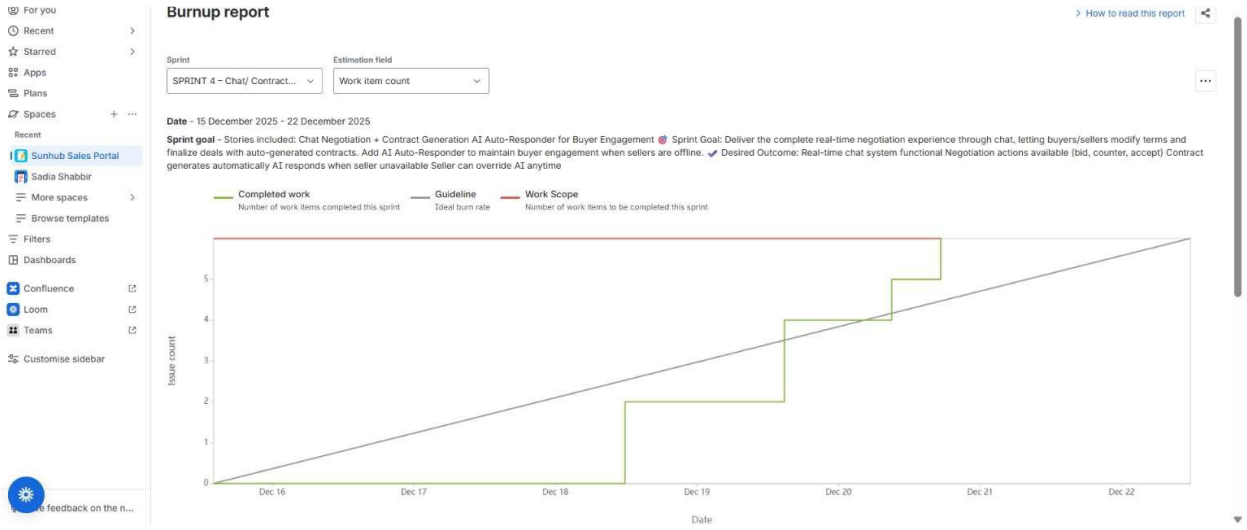
In the burn-up report of Sprint 1, I can deduce that the work which was completed in the sprint increased gradually over time. The final work line is highly adherent to the guideline which is that work was completed at a constant pace. The scope of the work remained the same, and it demonstrates that the planning in the form of the sprint was high-quality and there were no significant changes in the scope. All the work items planned were

completed successfully at the end of the sprint, which indicated that the sprint goal was achieved.



Sprint 4:

According to the Sprint 4 burn-up report, there was a slow start in work and a rapid ending of the sprint. It implies that even more challenging responsibilities such as chat negotiation, contract generation, and AI auto-responder were completed at a later stage of the sprint. The total scope line illustrates the total work planned to be completed upon the completion of the work. Generally the sprint turned out to be successful, although work was completed nearer to.



4.8.2. Burndown Report:

Sprint 1:

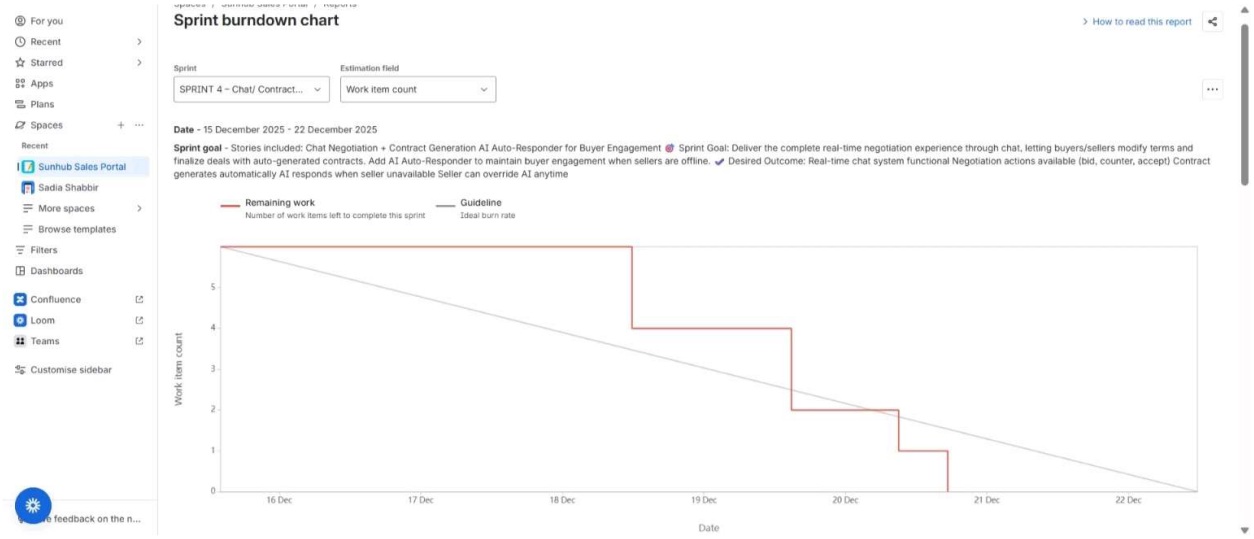
Sprint 1 burndown chart indicates that the remaining amount of work to be done gradually and steadily gets reduced during the sprint. The team was very adherent to the set guideline, which represents that they thought through the sprint and evenly allocated tasks.

There were not any significant issues and delays, and the work was completed continuously during the sprint. All the planned activities were accomplished at the end of the sprint, which demonstrated that the sprint goal was achieved.

Sprint4:

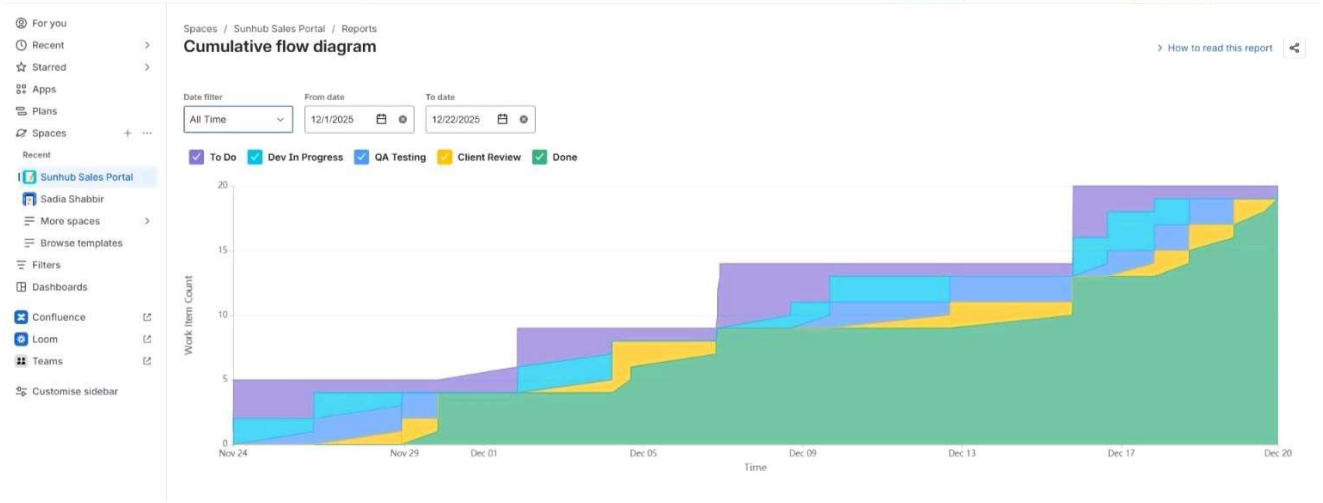
Sprint 4 burndown chart indicates that the remaining work was carried out during the second half of the sprint. This trend signifies how difficult it was to incorporate such features as chat negotiation, the creation of contracts, and an AI auto-responder that required additional effort and integration. Although initially it was a slow process, the remainder of the work proceeded very rapidly towards the end. All the planned activities had been

completed before the sprint ended and this demonstrated that the sprint objective had been achieved.



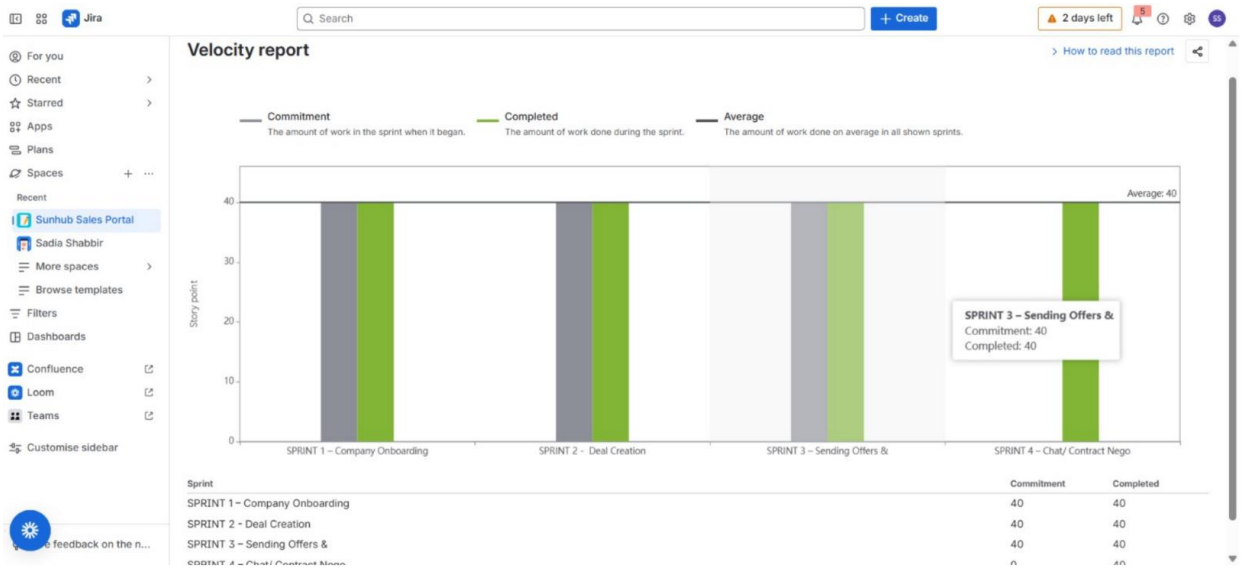
4.8.3. Cumulative Flow Diagram:

The cumulative flow diagram is used to demonstrate the way work items have passed through the various phases of the workflow throughout the project. The gradual increase of the Done section indicates that the tasks are completed gradually. The dimensions of the intermediate processes, such as Dev In-Progress, QA Testing and Client Review, remain relatively flat, which implies the flow of work is fluent and the work-in-progress under control. The bottlenecks are nonexistent, however, small alterations indicate usual task movement between phases. As illustrated in the diagram, the overall flow of the execution process of the project is stable and well-managed.



4.8.4. Velocity Diagram:

According to the velocity report project fared well in all the four sprints. The team accepted to accomplish 40 story points per sprint and they completed all the 40 points, a reflection of the fact they made correct estimates and had planned their sprints. The average speed remains constant during the project that is, delivery can be anticipated and productivity of the team remains high. Overall, the report indicates that the team had a consistent speed and never missed their spring commitments.



Chapter 5:

5. Project Conclusion and Lessons Learned

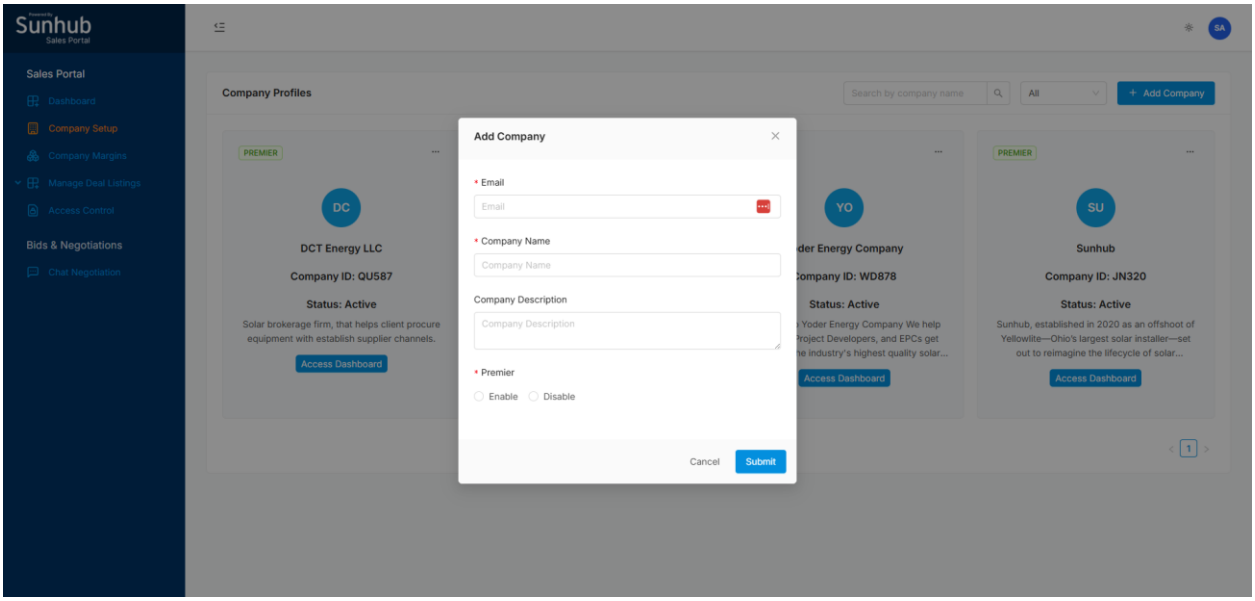
5.1. Project Summary

The objective of the Sunhub Sales Portal project was to establish a central location where the sales activities could be established and controlled in an efficient and orderly manner. The project was planned and implemented with the Agile Scrum method and primarily Jira was employed to plan, implement, and monitor the progress of the project. Four one-week sprints enabled the team to provide features in small steps, and at the same time, maintain a focus on progress.

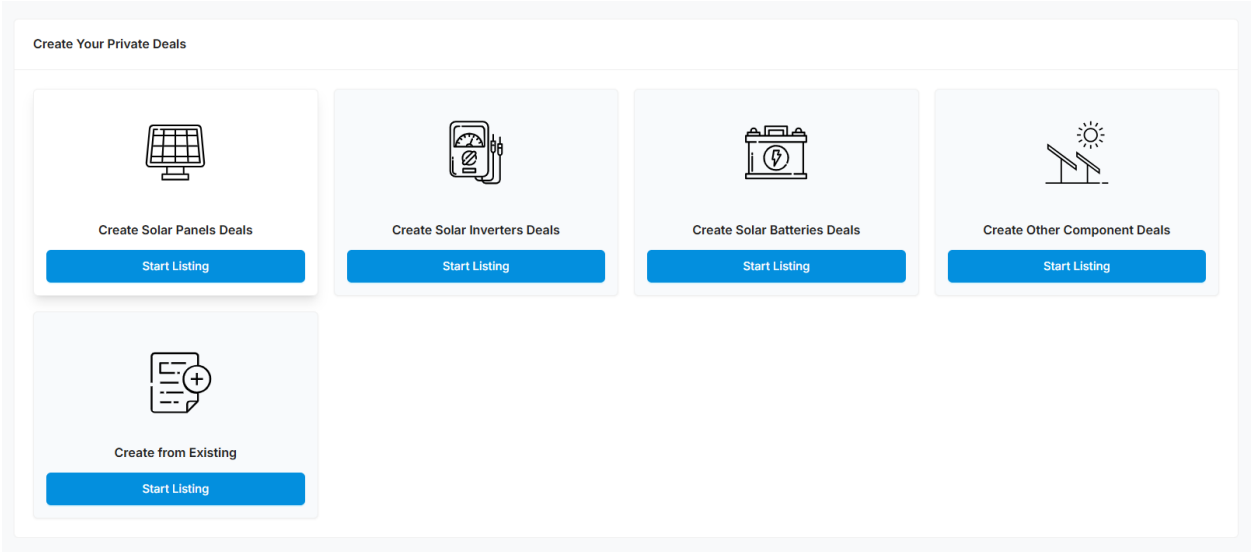
5.2. Achievement of Project Objectives

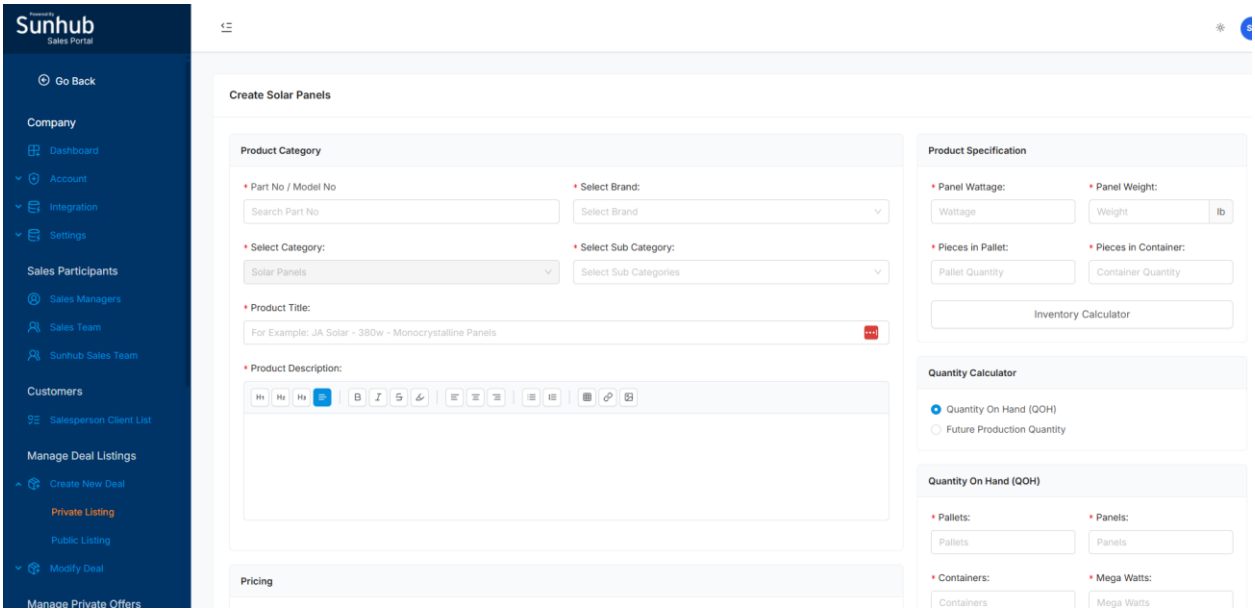
The project achieved all its objectives. We were in a position to incorporate the major features that we had planned at the beginning of the project. These were onboarding new companies, providing access to people depending on their position, making deals, handling offers and sales quotes, negotiating on a chat, and payment processing. The sprints were contributing working pieces to the system and this helped ensure that the system remained on track to meet the business requirements.

Sprint 1 Achievement:

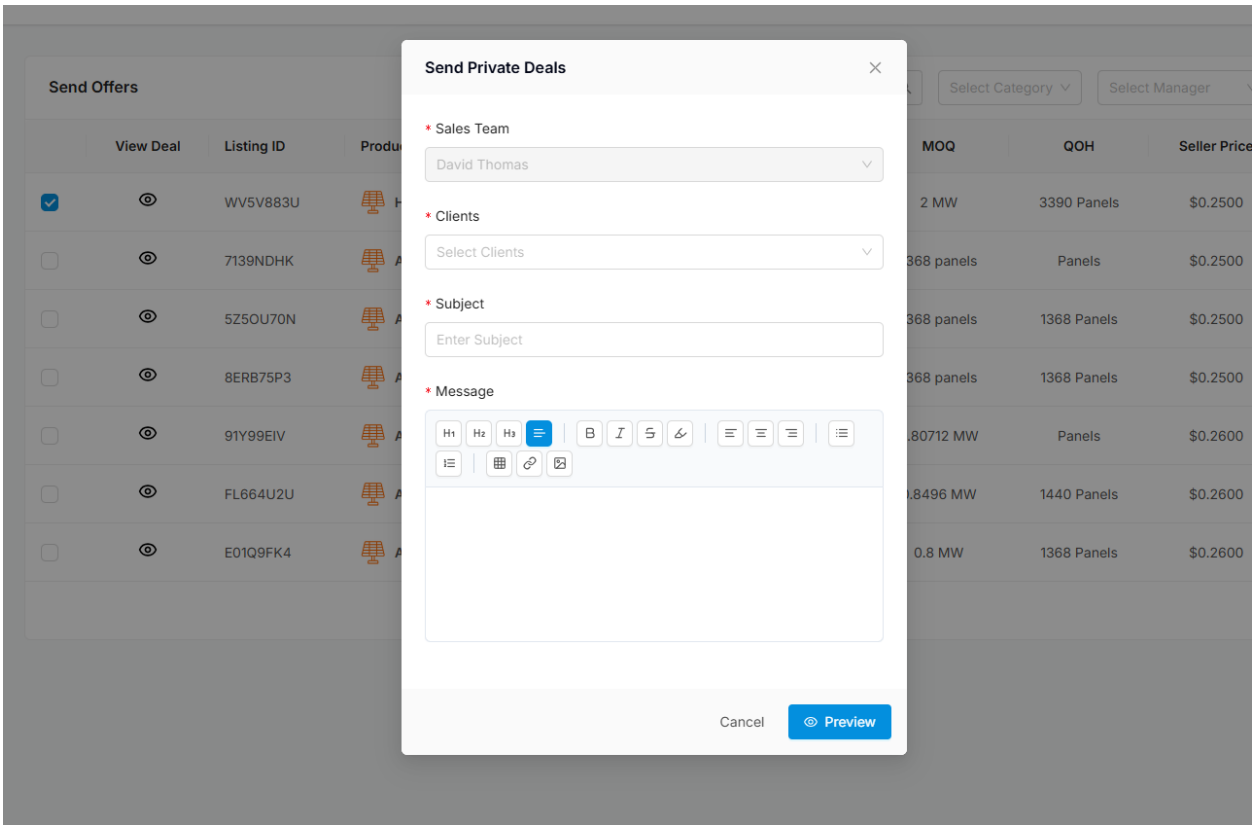


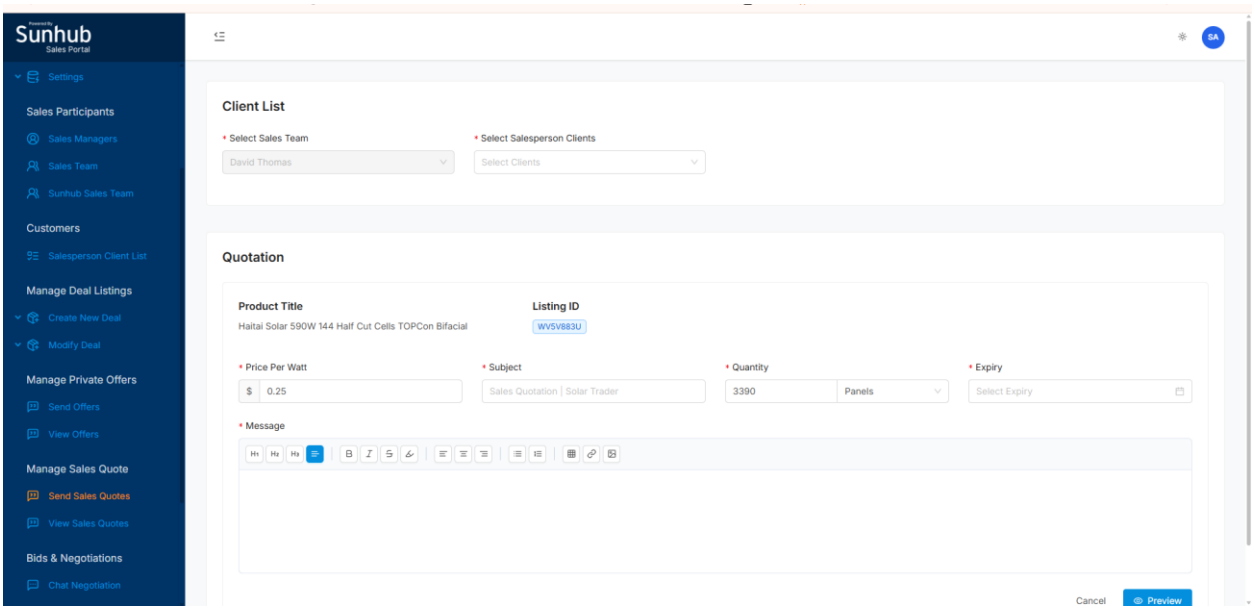
Sprint 2 Achievement:



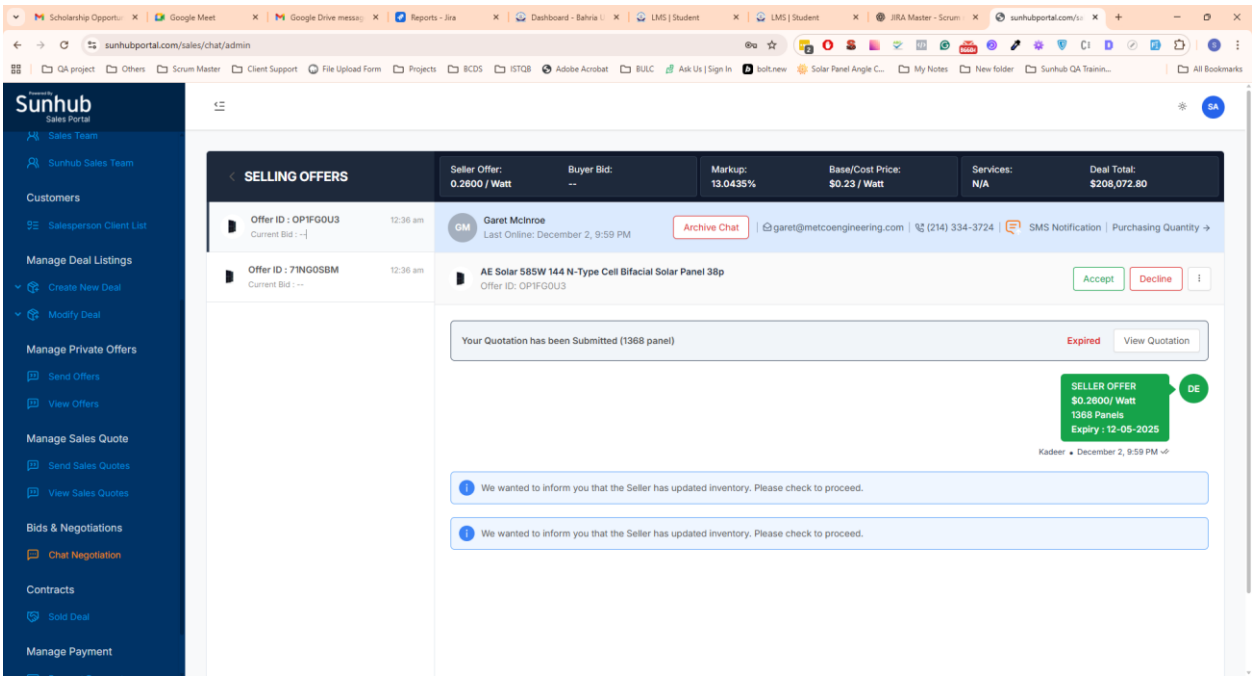


Sprint 3 Achievement:





Sprint 4 Achievement:

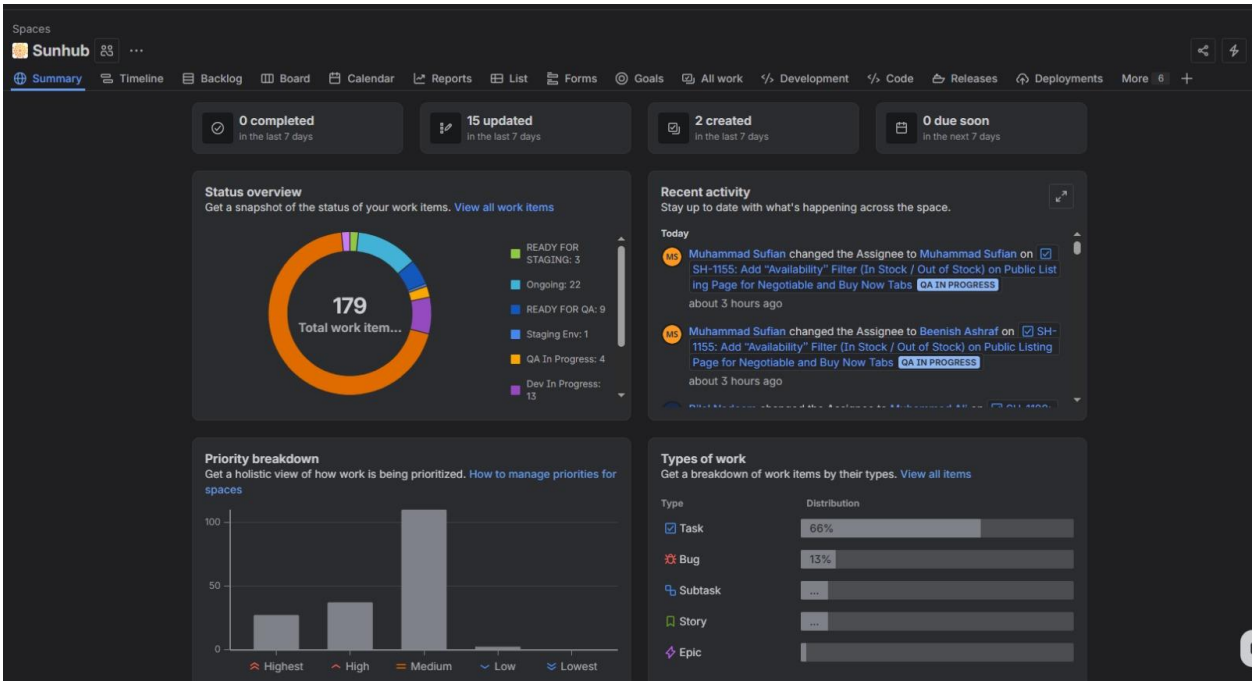


5.3. Scrum and Jira Implementation

We have used the Scrum practices throughout the entire project. The daily stand-up meetings ensured that the team discussed with one another on a regular basis, and the sprint planning was used to establish clear goals. Sprints reviews provided an opportunity to present completed work and receive feedback, and retrospectives made the team reflect on the ways in which they could improve.

Jira would make it difficult to manage the project. It was applied to track the backlog of the product, scheduling the sprints, monitoring the progress of the tasks, and correcting bugs. Jira made the status of the project at any given time easier to view due to the reports and boards.

Jira Summery Dashboard:



5.4. Value Delivered by the Project

The Sunhub Sales Portal is practical since it simplifies the process of sales and allows buyers and sellers to communicate more effectively. Deal management, quotes and negotiations are digitized in the system making them easy. This reduces manpower and simplifies things. The weekly release of features ensured that the product continued to improve rather than at the point of the project termination

5.5. Challenges Faced During the Project

The following are the problems that we have encountered when working on the project.

One could hardly properly estimate the amount of work required initially, particularly on features requiring integrations and responses based on AI. Features also had dependencies which had to be strategically planned. Periodically refining the backlog, open communication amongst the team and frequent meetings with the Product Owner assisted the team in resolving these issues.

5.6. Lessons Learned

During the process of working on this project, there were many useful things that we learned that made the sprints run smoother and the entire project turn out to be a success. These lessons demonstrate the value of planning, communicating with one another and doing the right thing in an Agile environment.

- Pre-sprint planning before planning the sprint, be sure the backlog is clear.
- Majorly enhanced accuracy of estimates.
- The short sprints ensured that feedback is easier to receive and the problems are identified at an earlier stage.
- A well-defined Definition of Done was useful in ensuring the quality of user stories remained the same.
- Frequent interaction in the group was instrumental in resolving issues fast.
- The constant cooperation of the team members enhanced the performance of the sprint.

5.7. Future Enhancements

The original objectives of the project were achieved, yet it can be improved and developed even further. The existing system can be improved through addition of features, simplicity in use, and scaling down with the addition of more features in the future. Installation of sophisticated reporting and analytics.

- Creation of a mobile version of Sales Portal.
- Improvement of AI-based suggestions and automatization.
- Interconnection with other third-party platforms and services.
- More optimizing the performance of the system and the user experience.

5.8. Final Conclusion

The Sunhub Sales Portal project demonstrates that the Agile Scrum method could be applied in the reality of software development project. The milestones and timelines enabled the completion of the project on time through proper planning and execution as well as constant collaboration. The experience of the project demonstrates the value of applying iterative development, engaging stakeholders, and continuing to learn to achieve good outcomes.

THANK YOU ☺

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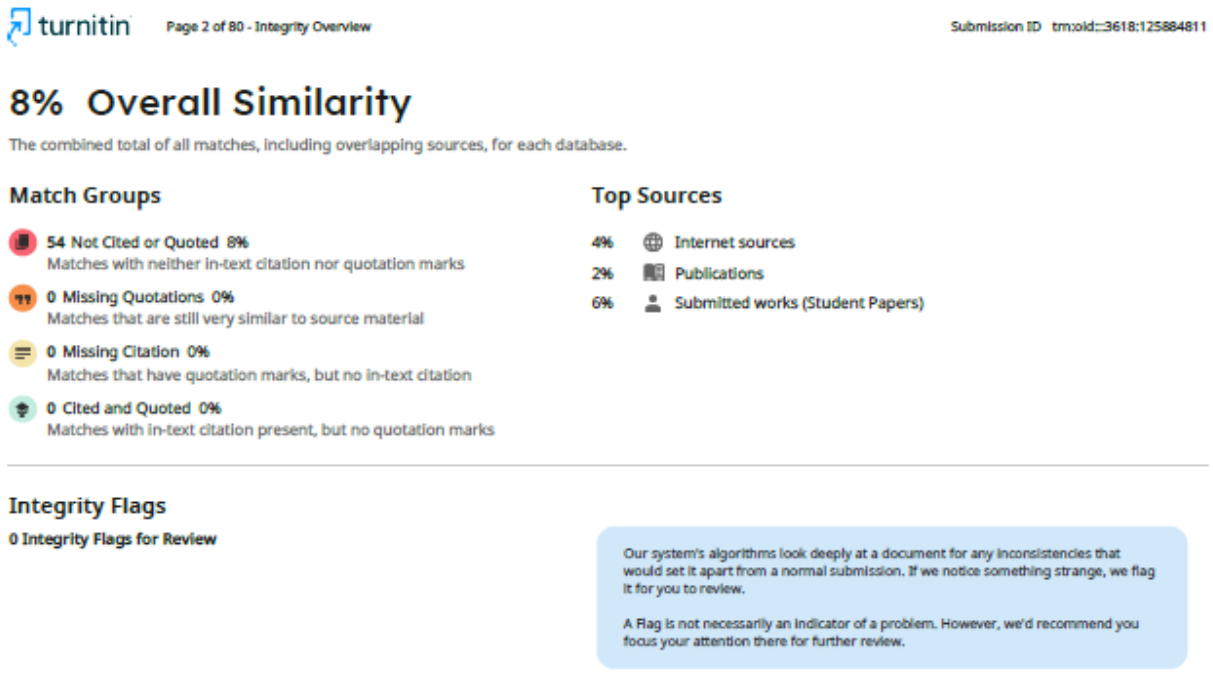

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Integrity Flags

0 Integrity Flags for Review

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.