Software Development using Scrum: Project Details

Project Overview

Project Name: Perfect धागा

Project Duration:

Sprint Planning Sprint 1:

Sprint Goal

To develop a Register Login functionality.

Sprint Duration:

Start Date: 06 August, 2024 End Date: 12 August, 2024

Sprint Duration	Epic Name	User Story	Story Point	Priorities	Roles
	Register	Tailor Registration/Login	8	High	AGILE MENTOR: Ms. Priyanka Kokate
Start Date: 08/08/23	+ Login	Vendor Registration/Login	8	High	PRODUCT OWNER:
End Date: 12/08/23		Customer Registration/Login	8	High	Anushtha Singh Kushwah SCRUM MASTER:
		Admin Registration/Login	8	High	Naziya Bano DEVELOPMENT TEAM: Mohan Manjhi Anushtha Singh Kushwah Naziya Bano Rahul Bamaniya Harshita Bamaniya

Sprint 2:

Sprint Goal

To develop Home Page, Different User's Dashboard

Sprint Duration:

Start Date: 13 August, 2024 End Date: 19 August, 2024

Sprint Duration	Epic Name	User Story	Story Point	Priorities	Roles
Start Date: 13/08/23 End Date: 19/08/23	User_Story	Home Page Navigation	5	High	AGILE MENTOR: Ms. Priyanka Kokate PRODUCT OWNER: Naziya Bano SCRUM MASTER: Anushtha Singh Kushwah
		Search Category Clothes	5	High	DEVELOPMENT TEAM: Mohan Manjhi Anushtha Singh
		Differentiated Clothes Category Wise	5	High	Kushwah Naziya Bano Rahul Bamaniya Harshita Bamniya

Sprint 3:

Sprint Goal

To develop a Third Party Payment Integration, and filter functionality, detail description of product **Sprint Duration:**

Start Date: 20 August, 2024 End Date: 26 August, 2024

Sprint Duration	Epic Name	User Story	Story Point	Priorities	Roles
Start Date: 20/09/23	User_Story	Third Party Payment Integration	5	Medium	AGILE MENTOR: Ms. Priyanka
End Date: 26/09/23	User Story	Customizing Order(filter and detail)	4	Low	PRODUCT OWNER: Rahul Bamniya SCRUM MASTER: Naziya Bano DEVELOPMENT TEAM: Anushtha Singh Kushwah Rahul Bamaniya Harshita Bamniya Naziya Bano Mohan Manhi

Sprint 4:

Sprint Goal

To implement location tracking for tailors and users, as well as tracking the location of products.

Sprint Duration:

Start Date: 27 August, 2024 End Date: 02 September, 2024

Sprint Duration	Epic Name	User Story	Story Point	Priorities	Roles
Start Date: 27/09/23 End Date:	Customizing Order	Location Tracking for Tailors: User Location Tracking	8	Medium Medium	AGILE MENTOR: Ms .Priyanka Kokate PRODUCT
02/09/23	Delivery	Product Location Tracking:	5	Medium	OWNER: Mohan Manjhi SCRUM MASTER: Rahul Bamaniya DEVELOPMENT TEAM: Anushtha Singh Kushwah Rahul Bamaniya Harshita Bamniya Naziya Bano Mohan Manhi

Sprint 5:

Sprint Goal

To integrate a chat feature that allows communication between tailors, vendors, and users, along with a personal chatbot for assistance.

Sprint Duration:

Start Date: 03 September, 2023 End Date: 09 September, 2023

Sprint Duration	Epic Name	User Story	Story Point	Priorities	Roles
Start Date: 18/09/23	Additional Feature	Chat Feature	3	Low	AGILE MENTOR: Ms. Priyanka Kokate
End Date: 25/09/23		Personal Chatbot:	2	Low	PRODUCT OWNER: Harshita Bamniya
		Backend Integration:	25	High	SCRUM MASTER: Mohan Manjhi DEVELOPMENT
		Database Updates	10	High	TEAM: Anushtha Singh Kushwah Rahul Bamaniya Harshita Bamniya Naziya Bano Mohan Manhi
		User Interface	20	High	

Sprint 6:

Sprint Goal

To complete the remaining functionalities of the project, including purchase history, cart, dashboard, and status tracking.

Sprint Duration:

Start Date: 17 September, 2023 End Date: 23 September, 2023

Sprint Duration	Epic Name	User Story	Story Point	Priorities	Roles
Start Date: 17/09/23 End Date: 23/09/23	User_story	Purchase History Cart Functionality	5	medium High	AGILE MENTOR: Ms. Priyanka Kokate PRODUCT OWNER: Anushtha Singh Kushwah
25/07/25		Status Tracking	10	medium	SCRUM MASTER: Harshita Bamniya
		UI/UX Enhancements	3	low	DEVELOPMENT TEAM: Anushtha Singh Kushwah Rahul Bamaniya Harshita Bamniya Naziya Bano Mohan Manhi

SPRINT REVIEW

Day /Date	Functionality Implemented/Included:	Total Number of Points:	f FeedBack
13/08/23	1.Created the login page and set up the basic registration process for tailor and vendor stakeholders. 2.Backend setup for user authentication and login management. 3.UI/UX for login page designed and integrated.	32 points (UI/UX: 14, Backend: 8, DBMS: 10)	1. The login and registration process was smooth and easy to follow. 2. Added notes for a future "forgot password" feature to improve user experience.
20/08/23	1.Designed and developed the homepage and internal pages (category, product pages).2.Frontend and backend integration for pages.3.UI/UX for homepage and category pages made responsive for different devices.	15 points (Frontend: 5 Backend: 5, DBMS: 5)	 The layout and design were effective, especially on mobile devices. Need to optimize loading times on mobile for better performance.
27/08/23	1.Implemented the payment gateway. 2.Backend integration for handling transactions and payment confirmation. 3.Frontend forms for secure user payment input.	9 points (Backend: 5, Frontend: 2, DBMS: 2)	Payment functionality worked well. Security enhancements and faster transaction times were identified as future improvements.
03/09/23	1.Integrated location tracking for tailor, user, and product. 2.Real-time location updates for users to track their product and service provider.	18 points (Backend: 5, Frontend: 10, DBMS: 3)	Real-time tracking feature worked well. Suggestions to improve location accuracy in low-connectivity areas.
10/09/23	1.Integrated chat functionality for user, tailor, and vendor communication. 2.Personal chatbot for handling basic queries. 3.Real-time messaging via WebSocket integration.	60 points (Backend: 30, Frontend: 20, DBMS: 10)	1. The chat feature performed well. 2. Improvements needed in the chatbot's response accuracy for more complex queries. 3. Real-time messaging speed was noted for future optimization.

24/09/24	tailor, user, and product. 2. Real-time location updates for	33 points (Backend: 15, Frontend: 10, DBMS: 8)	1. Real-time tracking was successful but needs more accuracy in areas with poor connectivity. 2. Future improvements to tracking and cart functionality were identified, including a quick-edit option for items. 3. Dashboard received positive feedback but adding more data visualization would improve user experience.
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SPRINT RETROSPECTIVE

Sprint 1 - 13/08/23

Login Page Implementation

What Went Well:

- Clear requirements and effective collaboration among team members.
- Completed the core functionality within the planned timeline.
- Smooth integration with the backend authentication system.

. What Did Not Go Well:

- Spent more time than expected on debugging and UI issues.
- Limited testing coverage on different devices and browsers.
- Delays due to dependencies on the backend team for API readiness.

. What Have We Learned:

- Importance of early coordination with dependent teams.
- Need for better time management and thorough testing on multiple platforms.

. What Puzzle Still?

- How to optimise the login page for older devices without compromising the design.

Sprint 2 - 20/08/23

. What Went Well:

- - Successfully created the homepage and internal pages (category, product, etc.).
- UI/UX team worked smoothly with the backend team for seamless integration.
- Clear division of tasks helped maintain progress.

. What Did Not Go Well:

- Initial issues with backend API integration caused a slight delay in frontend work.
- Some design feedback was received late, causing minor revisions in the UI.

. What Have We Learned:

- Early feedback from stakeholders is crucial to avoid redesign delays.
- A more streamlined communication channel between frontend and backend is necessary.

. What Puzzle Still?

- How to ensure that UI designs remain consistent across different devices.
- Optimizing backend API calls for better responsiveness

Sprint 3 - 27/08/23

What Went Well:

- Payment integration was successfully completed, and testing went smoothly.
- Collaboration between the frontend and backend teams improved compared to previous sprints.
- The team worked efficiently, and the DBMS side handled data flow without any issues.

. What Did Not Go Well:

- Some challenges were faced when dealing with the payment gateway's documentation.
- The frontend integration took more time than originally estimated.

. What Have We Learned:

- Payment gateway integration should be researched more thoroughly before starting implementation.
- Clear documentation and guidelines need to be established before integration begins.

. What Puzzle Still?

- How to optimize payment processing time for a better user experience.
- Ensuring the security of the payment system across different devices and platforms.

Sprint 4 - 03/09/23

What Went Well:

• Location tracking for both tailor and user, as well as product tracking, was implemented successfully.

- The UI/UX team created a responsive and user-friendly design.
- Backend and frontend teams communicated effectively to resolve blockers quickly.

What Did Not Go Well:

- Real-time tracking had some inconsistencies during initial testing, which took time to debug.
- Backend integration took longer than expected due to unforeseen API issues.

What Have We Learned:

- Real-time feature implementations need thorough testing across different devices before rollout.
- Buffer time should be allotted for potential API issues when dealing with location services.

What Puzzle Still?

- How to improve the accuracy of real-time location data, especially in low-connectivity areas.
- Handling location data efficiently while maintaining app performance.

Sprint 5 - 10/09/23

What Went Well:

- Successfully integrated chat functionality and a personal chatbot for seamless communication between users, tailors, and vendors.
- Backend and data teams worked well to manage chat data flow and chatbot interactions.
- Frontend and backend teams coordinated effectively, allowing for smooth implementation of real-time messaging.

What Did Not Go Well:

- WebSocket setup and real-time chat testing encountered delays, causing minor blockers.
- Chatbot response logic needed more refinement during the sprint.

What Have We Learned:

- Real-time communication features require early testing and debugging to avoid last-minute issues.
- Efficient coordination between data management and UI teams is key for smooth data handling in real-time applications.

What Puzzle Still?

- Optimizing the chatbot to handle multiple requests simultaneously.
- Enhancing WebSocket implementation for real-time chat efficiency.

Sprint 6 - 24/09/23

What Went Well:

- **Collaboration**: The team worked seamlessly across frontend, backend, and data management. There was clear communication and division of tasks.
- **Feature Completion**: All planned features, including the cart, dashboard, purchase history, and status tracking, were successfully completed within the sprint timeframe.
- UI/UX: The design improvements in the user interface were well-received during testing, and the responsiveness across devices was a significant win.

What Did Not Go Well:

- **Testing Delays**: The testing process, especially for the purchase history and status tracking, took longer than anticipated. Handling large amounts of data slowed down verification.
- **Minor Integration Issues**: There were a few unexpected issues with the integration between the frontend and backend APIs, especially with dynamic data updates.

What Have We Learned:

- **Early Testing**: Starting testing earlier in the sprint can help identify issues sooner, especially when dealing with large amounts of data or complex features like status tracking.
- **Data Optimization**: We need to better optimize our database queries and API calls to handle real-time updates without performance degradation..

What Puzzle Still?

• **Real-Time Status Updates**: We still need to explore more efficient ways of handling real-time order status updates to improve performance and response time without overloading the system.

Definition of Done (DoD):

- **Functionality Implementation:** All features and user stories outlined in the project have been successfully implemented, tested, and are working as intended, including registration, login, payment integration, location tracking, chat functionality, and purchase history.
- UI/UX: The interface is fully responsive and functional across multiple devices, providing users with an intuitive experience. All design elements, such as the homepage, product pages, and dashboards, have been completed and aligned with the original project goals.
- **Integration:** Backend and frontend have been seamlessly integrated. All APIs, databases, and external services (e.g., payment gateways, real-time tracking) are working smoothly.
- **Testing:** Test cases for all functionalities have been executed, and no critical bugs or issues remain. All functionalities meet acceptance criteria, with automated tests covering core components.
- **Documentation:** Complete project documentation has been provided, including setup, functionality guides, and user instructions for future enhancements.
- **Stakeholder Approval:** The team has reviewed all features and met the expectations set out by stakeholders, without requiring further feedback or additional changes.

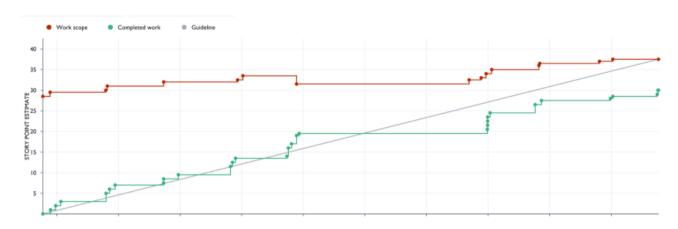
A DoD is a set of criteria that a product increment must meet for the team to consider it complete and ready for customers. It is a shared understanding among the team members of when a product increment is ready for release, even when the increment is large and consists of many items. By clearly defining what "done" means to the project, an team can focus on delivering value with every sprint and minimizing rework.

Definition of Ready (DoR):

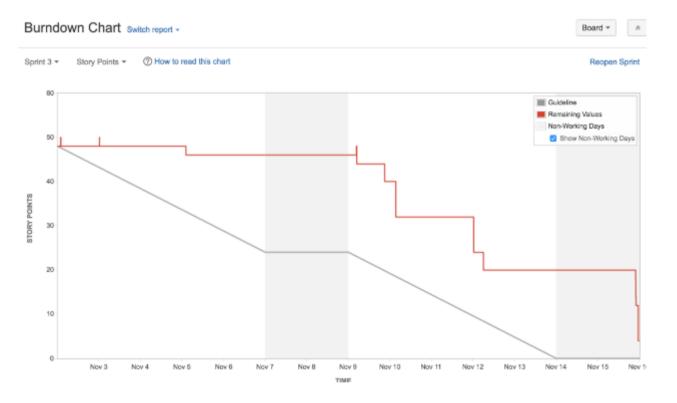
- **Clear User Stories:** Each user story or task is well-defined, with clear acceptance criteria, and is understood by the entire team. There are no ambiguities regarding the functionality or requirements.
- **Dependencies Identified:** Any external dependencies (e.g., APIs, third-party services) needed for the task are identified and accessible. Any blockers or prerequisites have been addressed or mitigated.
- **Design and Mockups:** UI/UX designs, wireframes, or prototypes have been reviewed and approved. The design specifications are clear and available to the development team.
- **Test Cases Defined:** Test cases or testing criteria for the task have been written and are ready to be executed once the functionality is developed.
- **Feasibility Checked:** The technical feasibility of the task has been evaluated, and the required tools, resources, and technologies are available.
- **Estimate Completed:** The team has discussed and agreed on the story points or time estimates for each task based on complexity and workload.
- **Team Availability:** The development team has the capacity to take on the task within the sprint or timebox.

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

Burnup Chart



Burndown Chart



Velocity Chart Velocity report

Velocity report > How t



