Assignment 1: Agile Project Planning -

Create a one-page project plan for a new software feature using Agile planning techniques. Include backlog items with estimated story points and a prioritized list of user stories.

Project Plan: Implementing Search Functionality

Introduction:

The objective of this project is to develop a robust search feature that allows users to efficiently find products within our platform. This feature is crucial for enhancing user experience and improving product discoverability. By implementing a comprehensive search functionality, we aim to increase user engagement and satisfaction.

Team:

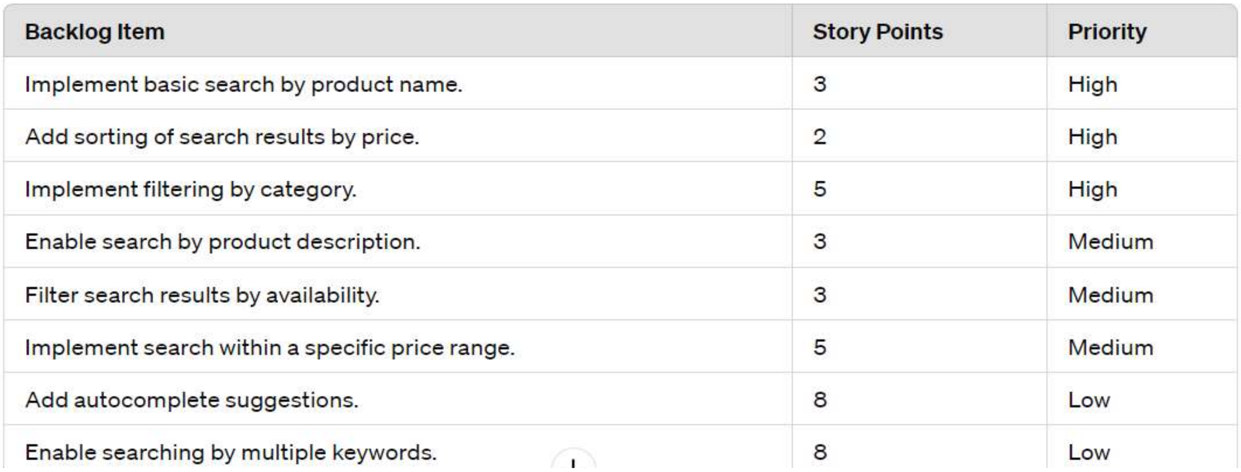
- Product Owner: Julias Ceaser
- Scrum Master: Jennifer Christine
- Development Team: Team size [5-10 Members]

Sprint Duration: 2 weeks

Backlog Overview: The product backlog consists of prioritized user stories with estimated story points. Each backlog item represents a specific functionality or enhancement of the search feature. Prioritization is based on the importance and complexity of each item.

Backlog Items:

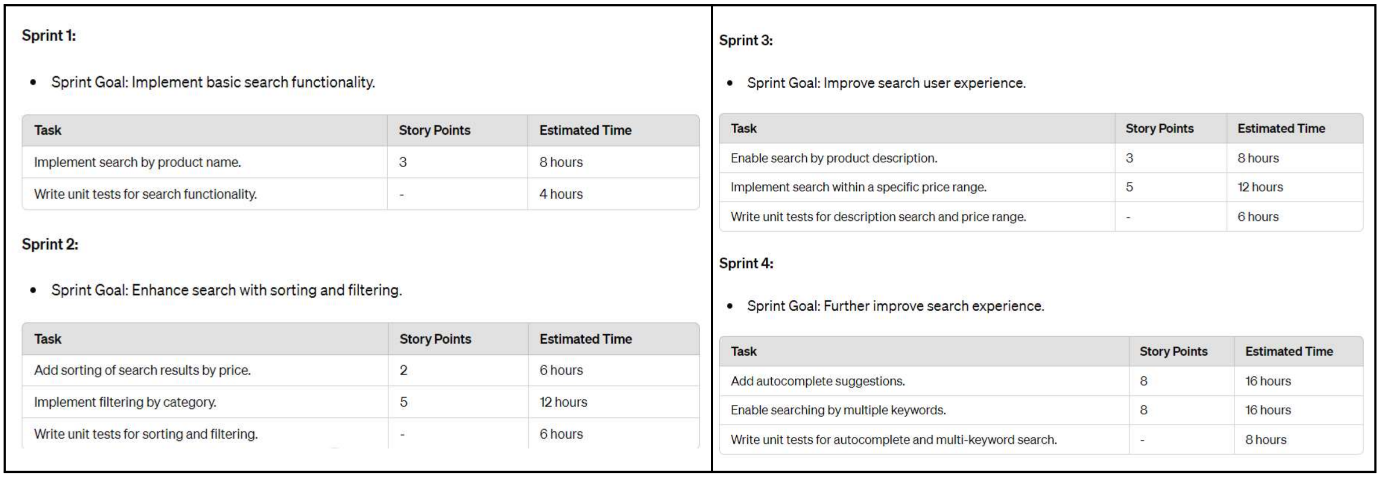
1. **Implement basic search by product name:** Users can search for products by their names.
2. **Add sorting of search results by price:** Users can sort search results based on price.
3. **Implement filtering by category:** Users can filter search results by category.
4. **Enable search by product description:** Users can search for products using keywords in their descriptions.
5. **Filter search results by availability:** Users can filter search results by availability status.
6. **Implement search within a specific price range:** Users can specify a price range for their search.
7. **Add autocomplete suggestions:** Users receive real-time suggestions as they type their search queries.
8. **Enable searching by multiple keywords:** Users can use multiple keywords to refine their search.



Backlog Item	Story Points	Priority
Implement basic search by product name.	3	High
Add sorting of search results by price.	2	High
Implement filtering by category.	5	High
Enable search by product description.	3	Medium
Filter search results by availability.	3	Medium
Implement search within a specific price range.	5	Medium
Add autocomplete suggestions.	8	Low
Enable searching by multiple keywords.	8	Low

Sprint Planning:

- Sprint 1 focuses on implementing basic search functionality and sorting by price.
- Sprint 2 enhances search with filtering by category and availability.
- Sprint 3 improves user experience with search by description and price range.
- Sprint 4 further enhances user experience with autocomplete and multi-keyword search.



Sprint 1:

- Sprint Goal: Implement basic search functionality.

Task	Story Points	Estimated Time
Implement search by product name.	3	8 hours
Write unit tests for search functionality.	-	4 hours

Sprint 2:

- Sprint Goal: Enhance search with sorting and filtering.

Task	Story Points	Estimated Time
Add sorting of search results by price.	2	6 hours
Implement filtering by category.	5	12 hours
Write unit tests for sorting and filtering.	-	6 hours

Sprint 3:

- Sprint Goal: Improve search user experience.

Task	Story Points	Estimated Time
Enable search by product description.	3	8 hours
Implement search within a specific price range.	5	12 hours
Write unit tests for description search and price range.	-	6 hours

Sprint 4:

- Sprint Goal: Further improve search experience.

Task	Story Points	Estimated Time
Add autocomplete suggestions.	8	16 hours
Enable searching by multiple keywords.	8	16 hours
Write unit tests for autocomplete and multi-keyword search.	-	8 hours

Backlog Refinement:

- Review and prioritize backlog items.
- Break down larger stories into smaller tasks.
- Estimate story points for new backlog items.

Review and Retrospective:

- Conduct sprint review meetings to demonstrate completed features.
- Hold sprint retrospective meetings to discuss improvements and issues.

Risk Management:

- Identify potential risks such as technical challenges or scope creep.
- Mitigation strategies include regular communication, flexible planning, and addressing issues promptly.

CI/CD:

- Set up CI/CD pipeline for automated testing and deployment.
- Ensure smooth and automated deployment process.

Dependencies:

- Frontend team: Implement UI changes for search interface.
- Database team: Ensure database schema supports search functionality efficiently.

Communication:

- Conduct daily standup meetings.
- Utilize Slack channels for quick communication.
- Schedule regular sprint planning and review meetings.

Metrics:

- Track user engagement with the search feature.
- Gather user feedback on search functionality.
- Monitor bug reports and their resolution time.

Assignment 2: Daily Standup Simulation -

Write a script for a Daily Standup meeting for a development team working on the software feature from Assignment 1. Address a common challenge and incorporate a solution into the communication flow.

Team Lead: Good morning everyone. Let's start our Daily Standup.

Developer 1: Good morning. Yesterday, I completed implementing the basic search by product name. It's working fine, but I encountered a challenge with the sorting algorithm. It's not sorting prices accurately.

Team Lead: Thank you for the update. It's crucial to ensure our sorting algorithm is accurate. Could you provide more details on the issue you encountered?

Developer 1: Sure. It seems the sorting algorithm is not handling decimal numbers properly, resulting in incorrect sorting of prices.

Team Lead:Okay, thanks for highlighting that. We definitely need to address this issue promptly. Developer 2, can you take a look at the sorting algorithm and see if you can identify the problem?

Developer 2: Absolutely. I'll investigate the sorting algorithm and work on fixing the issue today.

Team Lead: Great, thank you. Developer 3, what progress did you make yesterday?

Developer 3: I finished implementing filtering by category. It's working smoothly, but I noticed that some categories are not displaying all relevant products.

Team Lead:That's an important observation. It could be an issue with the data retrieval. Let's investigate further. Could you look into this and collaborate with Developer 1 to ensure the search and filtering are aligned?

Developer 3: Sure, I'll coordinate with Developer 1 to resolve this.

Team Lead: Excellent, thank you. Developer 4, any updates from your side?

Developer 4: I completed writing unit tests for search by product description. They're passing successfully.

Team Lead:Good job. It's crucial to maintain strong test coverage. Let's continue to ensure our tests are comprehensive.

Developer 4: Will do.

Team Lead: Alright, for today, let's focus on addressing the sorting issue, ensuring accurate filtering, and continuing with our planned tasks. If anyone encounters any roadblocks, please don't hesitate to reach out for assistance. Let's keep the communication lines open.

Team Lead: Anything else before we wrap up?

Developer 1: Just one more thing. We've received some feedback from the QA team regarding a minor UI bug in the search results page.

Team Lead: Thanks for bringing that up. Let's make sure to address it today as well.

Team Lead: Alright, let's get to work. Remember, our goal is to deliver a high-quality search feature. If you need any support, feel free to reach out. Have a productive day everyone!

This script demonstrates a specific challenge (sorting algorithm issue) and how the team addresses it within the communication flow of the Daily Standup meeting. It emphasizes collaboration, problem-solving, and maintaining focus on the project goals.