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Wipro Assignments

Agile Methodologies & Effective Communication

Assignment 1 To 2

Assignment 1 :

Que. Agile Project Planning - Create a one-page project plan for a new software feature using Agile planning techniques.

Include backlog items with estimated plan a story points and a prioritized list of user stories.

Answer→

Project Name: **Enhanced Search Functionality**

Objective: To develop an advanced search feature that allows users to perform keyword searches across multiple content types (e.g., articles, videos, and images) with filters and sorting options.

Sprint 1: Basic Search Implementation

Sprint Duration: 2 Weeks
Sprint Goal: Implement the basic search functionality, allowing users to search for content by keyword and view results.

Product Backlog

User Story ID	User Story	Priority	Story Points	Acceptance Criteria
US-01	As a user, I want to search for content by keyword so that I can find relevant articles, videos, or images.	High	8	User can enter a keyword in the search bar and see a list of matching content from different categories.
US-02	As a user, I want to filter search results by content type (e.g., articles, videos, images) so that I can narrow my search.	High	5	User can select filters to narrow down search results by content type, with the results updating dynamically.
US-03	As a user, I want to sort search results by relevance or date so that I can find the most important or recent content first.	Medium	3	Search results can be sorted by relevance or date, with clear options for sorting presented to the user.
US-04	As a user, I want to see a preview of the search results so that I can quickly decide which content is most relevant.	Medium	5	Search results include a brief preview (e.g., snippet or thumbnail) of the content to help users evaluate relevance.
US-05	As a user, I want search suggestions as I type so that I can find what I'm looking for faster.	Low	8	The search bar provides real-time suggestions based on partial keywords or past searches as the user types.
US-06	As a user, I want my recent searches to be saved so that I can quickly repeat or refine previous searches.	Low	3	Recent searches are saved and can be accessed from the search bar, with options to clear or modify saved searches.

Sprint Backlog for Sprint 1

1. **US-01**: Keyword Search - 8 Story Points
2. **US-02**: Filter by Content Type - 5 Story Points
3. **US-03**: Sort Search Results - 3 Story Points

Total Story Points for Sprint 1: **16** (Capacity: 14-18 Story Points)

Prioritized List of User Stories

1. **US-01**: Keyword Search (High Priority)
2. **US-02**: Filter by Content Type (High Priority)
3. **US-03**: Sort Search Results (Medium Priority)
4. **US-04**: Preview Search Results (Medium Priority)
5. **US-05**: Search Suggestions (Low Priority)
6. **US-06**: Save Recent Searches (Low Priority)

Notes

- **Dependencies**: US-01 (Keyword Search) must be implemented before US-02 (Filter by Content Type) and US-03 (Sort Search Results), as filtering and sorting depend on search functionality.
- **Risks**: The complexity of implementing filters and sorting options could extend the development time if the search algorithm needs significant adjustments.
- **Next Steps**: After Sprint 1, review the implementation of the search functionality, gather user feedback, and plan the next sprint to include more advanced features like previews and search suggestions.

This one-page Agile project plan outlines the key features and tasks for developing an enhanced search functionality, focusing on delivering core features in the first sprint with a clear path for further enhancements.

Assignment 2 :

Que. 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.

Answer →

Project Name: Real-Time Chat Feature

Team Members:

- **Scrum Master**: Shubham
- **Frontend Developer**: Rohan
- **Backend Developer**: Aditi
- **QA Engineer**: Sameer
- **Product Owner**: Neha

[Scene: The team gathers virtually for their daily standup. The Scrum Master kicks off the meeting.]

Shubham (Scrum Master):
Good morning, team! Let's get started with our daily standup. Remember to keep it brief—what you did yesterday, what you're doing today, and any blockers. Neha, as the Product Owner, is here too if we need any clarifications. Let's begin with you, Rohan.

Rohan (Frontend Developer):
Yesterday, I finished implementing the UI for sending and receiving messages. The chat window is now fully functional and reflects real-time updates when messages are sent. Today, I'll work on integrating the emoji picker into the chat input.

[Addresses a challenge] However, I ran into an issue yesterday where the real-time updates were lagging slightly when multiple messages were sent in quick succession. It's not a huge delay, but it's noticeable and could affect the user experience.

Aditi (Backend Developer):
Thanks, Rohan. That lag might be due to the way we're handling the WebSocket connections on the server. Yesterday, I finished setting up the basic WebSocket infrastructure for message delivery. Today, I plan to optimize the message broadcast system to reduce latency and ensure smoother real-time communication.

[Offers a solution]
To address the lag issue, I'll prioritize optimizing the backend today. We can implement a message queue system that handles multiple simultaneous messages more efficiently. Once I've made those changes, we can test it together.

Sameer (QA Engineer):
Yesterday, I wrote test cases for the message sending and receiving functionality. Today, I'll start executing those tests. I'll also keep an eye on the real-time performance, especially the lag issue you mentioned, Rohan. If I find any performance drops during testing, I'll document them so we can pinpoint exactly where the problem lies.

[Seeks clarification]
Aditi, once you optimize the backend, could you give me a heads-up? I'd like to run a specific set of tests to ensure the issue is resolved.

Aditi (Backend Developer):
Of course, Sameer. I'll ping you as soon as the optimizations are done. We'll tackle this together.

Neha (Product Owner):
Thanks, everyone. I'm glad to see the team collaborating on this. Just a reminder, the real-time functionality is a key feature for our users, so getting it right is crucial. Let me know if you need any additional resources or if there are any changes in the priorities.

Shubham (Scrum Master):
Great teamwork, everyone. It sounds like we have a solid plan to address the lag issue. If anyone needs help or runs into any other blockers, feel free to reach out. Otherwise, let's keep pushing forward. Does anyone have anything else to add?

[The team members shake their heads or respond negatively.]

Shubham (Scrum Master):
Alright, let's get to work. Thanks, everyone!

[The meeting concludes, and the team goes back to work with a clear plan to address the challenge.]

This script uses common Indian names to simulate a daily standup meeting where the team identifies and collaboratively addresses a common challenge in the project, ensuring alignment and readiness to tackle the day's tasks.
