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.

Agile Project Planning

Project Plan for New Software Feature: User Authentication System

<u>Objective</u>: Develop a secure and robust user authentication system that includes user registration, login, password recovery, and multi-factor authentication.

Sprint Duration: 2 weeks

Backlog Items and Estimated Story Points:

- 1. User Registration
 - Create registration form (3 story points)
 - Validate user input (3 story points)
 - Store user data in the database (3 story points)
 - Send confirmation email (2 story points)
- 2. User Login
 - Create login form (2 story points)
 - Implement authentication logic (3 story points)
 - Session management (2 story points)
- 3. Password Recovery
 - Create password recovery form (2 story points)
 - Validate user email (2 story points)
 - Send password reset link (2 story points)
 - Implement password reset logic (3 story points)
- 4. Multi-Factor Authentication (MFA)
 - Research and select MFA method (2 story points)

- Integrate MFA in login process (5 story points)
- User setup for MFA (3 story points)
- Backup codes for MFA (3 story points)
- 5. Testing and Documentation
 - Write unit tests for backend logic (5 story points)
 - End-to-end testing (5 story points)
 - Create user documentation (3 story points)

Prioritized List of User Stories:

- 1. As a user, I want to register an account so that I can access the system.
- 2. As a user, I want to confirm my email address after registration.
- 3. As a user, I want to log in to the system securely.
- 4. As a user, I want to recover my password if I forget it.
- 5. As a user, I want to set up multi-factor authentication to enhance my account security.
- 6. As a user, I want to receive backup codes for MFA in case I lose access to my primary MFA method.

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 has context menu

Daily Standup Meeting Script

Participants:

- Sunitha (Scrum Master)
- Peter (Backend Developer)
- Ravi (Frontend Developer)

- Rajni (QA Engineer)
- Punit (Product Owner)

Start of Standup

Sunitha (Scrum Master):

Good morning, team! Let's get started with our daily standup. As usual, we'll go through what we did yesterday, what we're planning for today, and any blockers or challenges. Let's kick off with Peter. Peter, go ahead.

Peter (Backend Developer):

Thanks, Sunitha. Yesterday, I finished the API endpoint for user registration and started on the email confirmation feature.

Today, I'll continue with the email confirmation feature and begin working on the user login authentication logic.

A challenge I'm facing is ensuring that the email confirmation integrates seamlessly with the frontend.

Sunitha (Scrum Master):

Thanks, Peter. Ravi, can you assist Peter with the integration?

Ravi (Frontend Developer):

Sure, Sunitha. Yesterday, I completed the registration form UI and started working on the login form.

Today, I'll finish the login form and start on the integration of the registration form with the backend.

I'll sync up with Peter after this meeting to ensure the email confirmation works smoothly.

Sunitha (Scrum Master):

Great, thanks Ravi. Rajni, you're next.

Rajni (QA Engineer):

Good morning, everyone. Yesterday, I wrote test cases for the user registration feature and set up the test environment.

Today, I'll start running the test cases and document any issues or bugs.

No blockers from my end right now.

Sunitha (Scrum Master):

Thanks, Rajni. Punit, over to you.

Punit (Product Owner):

Hi, team. Yesterday, I reviewed the user stories and provided feedback on the registration and login features.

Today, I'll focus on refining the backlog and prioritizing the next set of features we need to develop, including password recovery and MFA.

One challenge we might face is ensuring the features align with the overall product strategy. I suggest we have a quick sync with the stakeholders to confirm our priorities.

Sunitha (Scrum Master):

Good idea, Punith. I'll set up a meeting with the stakeholders to discuss the priorities.

To address the common challenge of seamless integration between frontend and backend, I propose we have a short daily sync between the frontend and backend developers right after the standup. How does everyone feel about that?

Peter (Backend Developer):

I think that's a great idea. It'll help us catch issues early.

Ravi (Frontend Developer):

Agreed. It'll make the integration process smoother.

Rajni (QA Engineer):

Sounds good to me. It'll help in planning our tests better.

Punit (Product Owner):

I'm on board as well. It'll ensure we're aligned on the implementation.

Sunitha (Scrum Master):

Perfect. We'll start this new practice today. Ravi and Peter, don't forget to sync up right after this.

Alright, that's all for today's standup. Let's have a productive day, everyone!

End of Standup

This script addresses the challenge of integration between frontend and backend and incorporates a solution of a short daily sync meeting between the respective developers to ensure smooth workflow.