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.

\rightarrow Solution :

Team Size: 7 <u>Team Members</u>

Project Name: New Payment Gateway Integration

<u>Project Objective:</u> Integrate a new payment gateway into our e-commerce platform to provide users with more payment options and improve transaction security.

Backlog Items:

(i). User Story: As a user, I want to be able to select the new payment gateway during checkout.

- Acceptance Criteria: Users should see the option to choose the new payment gateway alongside existing options.
- Estimated Story Points: 5

(ii). User Story: As a user, I want to securely enter my payment information using the new gateway.

- Acceptance Criteria: The payment form should be encrypted and meet industry standards for security.
- Estimated Story Points: 8

(iii). User Story: As a user, I want to receive confirmation of successful payment processing.

- Acceptance Criteria: Users should receive a confirmation message and email upon successful payment.
- Estimated Story Points: 3

(iv). User Story: As an admin, I want to configure the new payment gateway settings from the admin panel.

- Acceptance Criteria: Admins should be able to enter API keys and other necessary settings.
- Estimated Story Points: 5

(v). User Story: As a developer, I want to test the integration thoroughly before deploying to production.

- Acceptance Criteria: Integration tests should cover all aspects of payment processing.
- Estimated Story Points: 5

Prioritized List of User Stories:

- 1.Implement payment gateway selection during checkout (5 story points)
- 2.Implement secure payment form (8 story points)
- 3.Implement payment confirmation message (3 story points)
- 4.Implement admin panel configuration (5 story points)
- 5.Implement integration testing (5 story points)

Timeline:

Sprint 1 (2 weeks):

• Complete user stories 1 and 2.

Sprint 2 (1 week):

• Complete user story 3.

Sprint 3 (1 week):

• Complete user story 4.

Sprint 4 (1 week):

Complete user story 5.

Sprint Review and Retrospective (1 week):

Review completed features and gather feedback for improvements.

Team:

Product Owner: Jay Prakash Kumar

Scrum Master: Ravindra Yadav

Development Team: (i)Deepak Kumar -Frontend Developer

(ii)Raja Kumar Singh -Backend Developer

(iii)Bikash Mondal- Full-stack Developer

(iv)Kuldeep Kumar -DevOps Engineer

(v)RanVijay Tiwari -QA Engineer

Notes:

Daily stand-up meetings will be held to track progress and address any issues.

Continuous integration and automated testing will be utilized to ensure the quality of code.

A sandbox environment will be used for testing payment transactions before deploying to production.

Regular demos will be conducted to gather feedback from stakeholders and ensure the integration meets requirements.

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.

\rightarrow Solution :

Daily Standup Meeting Script:

Team gathers around in a designated area or virtual meeting room.

<u>Facilitator:</u> Good morning, everyone. Let's start our daily standup meeting. Today, I want to focus on addressing a common challenge we've been facing with the integration of the new payment gateway. As we go around for updates, let's also brainstorm potential solutions to overcome this challenge.

<u>Developer 1:</u> Yesterday, I worked on implementing the frontend components for selecting the payment gateway during checkout. Today, I plan to finalize the UI and start testing its functionality. No blockers from my end.

<u>Developer 2:</u> Yesterday, I was troubleshooting an issue with the communication between our backend server and the payment gateway API. I made some progress in identifying the root cause, and today, I'll continue debugging and testing. One blocker is that I need access to the payment gateway's documentation to better understand their API endpoints.

<u>Developer 3:</u> Yesterday, I conducted some initial testing of the payment gateway integration on our staging environment. I encountered a few discrepancies between the expected and actual responses from the gateway. Today, I'll be documenting these issues and reaching out to their support team for clarification. No other blockers.

<u>Developer 4:</u> Yesterday, I focused on optimizing our database schema to handle the increased transaction volume expected with the new payment gateway. Today, I'll continue with performance tuning and monitoring. No blockers.

<u>Developer 5:</u> Yesterday, I was working on implementing error handling mechanisms for the payment processing flow. Today, I'll be conducting stress testing to ensure our system can handle various error scenarios gracefully. No blockers.

<u>Developer 6:</u> Yesterday, I began drafting user documentation for the new payment gateway features. Today, I'll continue writing and refining the documentation based on the latest developments. No blockers from my side.

<u>Developer 7:</u> Yesterday, I started working on automating the deployment process for our application to streamline future updates and releases. Today, I'll be configuring CI/CD pipelines for smoother integration and deployment. No blockers.

<u>Facilitator:</u> Thank you, team, for the updates. It's clear that we're making good progress despite the challenges we're facing with the payment gateway integration. Now, let's address the blockers mentioned:

- Developer 2 needs access to the payment gateway's documentation. I'll follow up with our point of contact at the gateway provider to expedite access to the documentation.
- Developer 3 will reach out to the support team for clarification on the discrepancies encountered during testing.

Additionally, let's schedule a brief sync-up meeting after this standup to discuss potential solutions to the communication issue between our backend server and the payment gateway API. Does that sound good to everyone?

Team nods in agreement.

<u>Facilitator:</u> Great. Let's wrap up the standup for now and reconvene shortly for the sync-up meeting. Keep up the excellent work, everyone, and let's continue collaborating to overcome challenges and deliver a successful payment gateway integration.

Team members disperse to continue their work, and the facilitator follows up on the action items mentioned during the meeting.

In this script, the daily standup meeting addresses a common challenge faced by the team regarding the integration of the new payment gateway. Solutions are incorporated into the communication flow, and action items are assigned to resolve the blockers effectively.