Lesson 03: GenAI in Testing

Overview:
In this project, you will take on the role of a Test Manager at TechSpark Solutions, utilizing generative AI tools to develop the framework for a KYC and anti-money laundering banking development Platform. This initiative is designed not only to enhance your skills in project management using modern AI tools but also to provide practical experience in translating complex requirements into structured deliverables.
Engaging in this project will help you understand the real-world applications of Generative AI in streamlining project planning and execution. By crafting Test cases and synthetic data and along with reports with the aid of Generative AI, you will learn to leverage technology to reduce complexity, increase efficiency, and improve the precision of project outcomes.

Instructions:

- Review the learning materials in lesson 3
- Carefully read the situation, task, actions, and result sections to grasp the assignment fully
- Complete and submit your assignment via the Learning Management System (LMS)
- Carefully read the tasks outlined, focusing on leveraging generative AI tools to optimize the development of the customer support platform

Situation:
You are a Test Manager at TechSpark Solutions, focused on employing generative AI tools to meticulously craft Test cases and test cases execution for a forthcoming project. Your main objective is to harness the capabilities of generative AI to streamline and optimize the project planning process, ensuring that each component aligns seamlessly with the strategic goals of the project.

Task:

1. Getting functional requirements
2: KYC: customer data generate: synthetic data
3: Synthetic data generation for anti-money laundering
4: Test cases based on test scenarios generation
5. Test report mapping the RTM

Action:

1. Use prompts to create a comprehensive list of requirements covering chatbot functionality, NLP capabilities, integration with existing systems, scalability needs, and performance expectations
2. Generate synthetic data for KYC (Know your customer) use cases
3. Generate synthetic data for AML (Anti-money laundering) use cases
4. Utilize prompts to generate a test cases and scenarios generation
5. Develop detailed test report mapping with RTM on the above test cases

6. Execute the test cases using Pytest package

Result:
You will explain how the development process from the initial requirements gathering to the final sprint execution was enhanced using generative AI. Include detailed descriptions of the epics and user stories created, how story points were estimated and prioritized, and how the sprints were planned and adjusted in response to project dynamics using generative AI. Additionally, document any challenges encountered and how they were resolved, highlighting the integration of generative AI tools in enhancing the project's success and meeting its objectives. Ensure the report reflects a critical analysis of the project outcomes, demonstrating your understanding of applying generative AI tools in a practical software development environment.

Rubric:
Your submission will be evaluated based on the following key criteria, each representing a crucial aspect. These criteria are:

Criteria	Complete or Incomplete
Requirements Gathering: Requirement generation has been completed for the AI-driven customer support platform.	
Epic and User Story Creation: The requirements have been converted into epics and user stories.	
Story Point Estimation and Prioritization: The estimation and prioritization of story points have been completed.	
Sprint Planning: The division of user stories into sprints has been completed.	
Sprint Execution and Progress Monitoring: Planning for sprint execution and progress monitoring has been completed.	
Conflict Resolution: Conflict resolution arising from team members leaving the project has been completed.	
Sprint Plan Review and Adjustment: The adjustment of sprint planning and continuation of execution have been completed.	