

Question

Create a 2-column multi-line table. In the left-hand column, include the software development stages of the Scrum agile life cycle approach to project management. In the right-hand column, describe the processes which you recommend are applied at each stage to ensure that secure software is produced at the end of the development. To support the preparation of your response, you can refer to the following literature:

Sharma, A. & Bawa, R. K. (2020) Identification and Integration of Security Activities for Secure Agile Development. *International Journal of Information Technology*.

Answer

Stage	Secure Process
Product Backlog creation	<ul style="list-style-type: none">• Identify sensitive data• Identify specific and generic vulnerabilities• Specify security goals• Ensure definition of Done for each backlog item incorporates security features
Sprint Planning	<ul style="list-style-type: none">• Further refine security goals if required
Sprint Backlog	<ul style="list-style-type: none">• Ensure security requirements identified in Scrum Backlog are present
Sprint Coding	<ul style="list-style-type: none">• Implement best practices regarding secure coding• Continuous testing according to best practices
Daily Scrum	<ul style="list-style-type: none">• Raise security concerns
Increment	<ul style="list-style-type: none">• Ensure Definition of done is met• Final testing on complete increment• Testing on entire software package if software increment is to be implemented
Sprint Review	<ul style="list-style-type: none">• Customer to incorporate 3rd party vulnerability testers
Sprint Retrospective	<ul style="list-style-type: none">• Discuss security challenges of completed sprint