Scrum Agile Life Cycle Stage	Recommended Security Processes
Product Backlog Creation	• Incorporate security requirements into user stories (e.g., threat modeling, OWASP guidelines). • Identify potential security risks for each feature during initial backlog discussions. • Include acceptance criteria for secure coding practices and compliance with industry standards (e.g., ISO/IEC 27000).
Sprint Planning	• Assign dedicated security tasks to developers during sprint planning. • Review and prioritize security-related stories, tasks, and technical debt. • Engage security experts in planning sessions to address identified vulnerabilities.
Sprint Execution/Development	• Implement secure coding practices based on secure design patterns and frameworks. • Conduct regular static and dynamic code analysis during development. • Perform peer reviews with a focus on identifying potential vulnerabilities.
Daily Stand-ups	• Include updates on security-related tasks and risks as part of daily discussions. • Foster team awareness of ongoing security concerns and evolving threats.
Sprint Review	• Demonstrate and validate security implementations in deliverables during reviews. • Gather feedback on implemented security controls and refine for the next sprint. • Test user stories against pre-defined security acceptance criteria.
Sprint Retrospective	• Review and analyze the effectiveness of security

	practices applied during the sprint. • Identify areas for improvement in secure development processes. • Update security checklists and team training based on lessons learned.
Release Planning	• Perform end-to-end penetration testing, vulnerability scanning, and compliance validation before each release. • Conduct risk assessments to determine the impact of residual vulnerabilities. • Include incident response and rollback strategies in the release plan.
Post-Release Maintenance	• Monitor the application for vulnerabilities and performance issues using security tools. • Continuously update the product based on security patches and updates. • Regularly conduct threat modeling and update risk assessments for evolving threats.

(Sharma & Bawa, 2020)

References

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