

Scrum Phases (with processes)		Security Measures (Secure Scrum)	
Initiate			Secure Scrum consists of four components: Identification, Implementation, Verification & Definition of Done
	1. Create Project Vision. 2. Identify Scrum Master and Stakeholder(s). 3. Form Scrum Team. 4. Develop Epic(s). 5. Create Prioritized Product Backlog. 6. Conduct Release Planning.	The Identification component is used to identify security issues which are marked in the product backlog so that all team members have a common understanding of the security risks at this stage. Security concerns are documented using S-Tags	
Plan and Estimate			
	7. Create User Stories 8. Approve, Estimate, and Commit User Stories. 9. Create Tasks 10. Estimate Tasks 11. Create Sprint Backlog	The Implementation component is used here to ensure that security risks are discussed in daily activities and documented in sprint backlogs. When user stories are broken down into tasks during sprints, S-Marks are used to note security concerns but also tied to the corresponding S-tag in the product backlog	
Implement			
	12. Create Deliverables 13. Conduct Daily Standup 14. Groom Prioritized Product Backlog	Identification component is also used here where product backlogs are refined . Verification and Definition of Done is used here to verify that tasks are completed with security in view and effectively marked as Done. S-Marks should correspond to S-Tags all through the project. Use of external resources can also be helpful at the implementation stage . Examples include security trainings and involving a security specialist.	
Review and Retrospect			

	15. Convene Scrum of Scrums 16. Demonstrate and Validate Sprint 17. Retrospect Sprint	Implementation is used at sprints . Verification and Definition of Done could be used here
Release		
	18. Ship Deliverables 19. Retrospect Project	Document and share security learnings

References

Pohl, C. and Hof, H.J. (2015) Secure scrum: Development of secure software with scrum. arXiv preprint arXiv:1507.02992.

ScrumStudy (2021) Scrum Phases and Processes Available from: <https://www.scrumstudy.com/whyscrum/scrump-phases-and-processes> [Accessed 21 August 2021]