WORK BLOCKS / TASKS	DEPENDENCIES	W1/2	W3/4	W5/6	W7/8	W9/10	FW	Winter Break	W1/2	W3/4	W5/6	W7/8	W9/10	FW	Spring Break	W1/2 V	V3/4	W5/6	W7/8 V	V9/10	FW
				Fall	Fall Term						Winte	er Term						Spring	Term		
Project Planning & Design																					
Meet with project partner and faculty advisor, establish initial vision for project and estimated effort for completion.	-	all																			
Write Vision and Scope document (requirements document)	Task 1			;	all																
Create initial designs of the system and the internal APIs. Draw an overview diagram, write pseudocode, and design interfaces for each component.	Task 1					Cas	ey/all														Engr
Identify languages and testing frameworks for each component of the project.	Task 3						Carter														
5. Identify project resource needs and submit capital requests for these needs.	Task 3						Arian														
Iteration 0																					
(Hypervisor) Write Python script as wrapper for QEMU and write tests accordingly.	Task 3								Ale	ex											
7. (Player Info and Scoreboard) Write Python script as wrapper for CTFd and write tests accordingly.	Task 3								Ari	ian											
(Env Architect) Write Python script to receive instructions and send disk images or configuration scripts as appropriate. Write tests accordingly.	Task 3								Cas	sey											Engr Expo
(Player Client) Write SSH shell for sending heartbeats and receiving Wireguard configs. Write tests as component is developed.	Task 4								Ca	rter											
Iteration 1																					
10. (Hypervisor) Write parent process that will receive instructions and create child processes for virtual environments accordingly. Write tests.	Task 6											Alex			_						
14. (Player Info and Scoreboard) Write interfaces with Env Architect and Hypervisor. Write tests.	Task 7											Arian									
16. (Env Architect) Write program that receives instructions and sends lists of flags to the Scoreboard. It also sends disk images and lists of flags to the Hypervisor upon receiving instructions. Write tests.	Task 8										Casey									Engr Expo	
13. (Player Client) Write program that sends heartbeats and receives Wireguard configs. Upon recieving a config, puts config in appropriate file and instantiates it. Write tests.	Task 9										Carter										
Iteration 2																					
11. (Hypervisor) Write virtual serial console and appropriate tests.	Task 10													Alex		Alex					
12. (Hypervisor) Write virtual network card and appropriate tests.	Task 10															Alex	•				
22. (Player Info and Scoreboard) Write website backend (including database) that links interfaces together. Write tests.	Task 14												Arian		Arian					Eng Exp	
15. (Player Info and Scoreboard) Write the scoreboard that polls services and accepts flags. Write tests.	Task 14														Carte	er					
17. (Env Architect) Program also generates and sends config scripts to Hypervisor upon receiving instructions. Write tests.	Task 16												Casey		Case	Casey					
Preparation for Project Expo																					
19. Record a video demo.	End of Iteration 2																		Casey		
20. Design and write poster.	End of Iteration 2																	Carter		Eng	
21. Prepare materials for live demo at expo.	End of Iteration 2																	А	lex / Arian		Exp
Project Completion																					_