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 W3/4	W5/6 W7/8	W9/10 FW
			Fall Term				Winter 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		a									
 Create initial designs of the system and the internal APIs. Draw an overview diagram, write pseudocode, and design interfaces for each component. 	Task 1			Casey/all								Engr
 Identify languages and testing frameworks for each component of the project. 	Task 3			Carter								
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					Alex						
(Player Info and Scoreboard) Write Python script as wrapper for CTFd and write tests accordingly.	Task 3					Arian						
8. (Env Architect) Write Python script to receive instructions and send disk images or configuration scripts as appropriate. Write tests accordingly.	Task 3					Casey						Engr
 (Player Client) Write SSH shell for sending heartbeats and receiving Wireguard configs. Write tests as component is developed. 	Task 4					Carter						
Iteration 1												
 (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
 (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		
(Hypervisor) Write virtual network card and appropriate tests.	Task 10									Alex		
 (Player Info and Scoreboard) Write website backend (including database) that links interfaces together. Write tests. 	Task 14							Arian		Arian		Engr
15. (Player Info and Scoreboard) Write the scoreboard that polls services and accepts flags. Write tests.	Task 14									Carter		
17. (Env Architect) Program also generates and sends config scripts to Hypervisor upon receiving instructions. Write tests.	Task 16							Casey		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	Expo
Prepare materials for live demo at expo. Project Completion	End of Iteration 2										Alex / Arian	lan
Project Completion												