

# Sprint Retrospective Document

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Project acronym: PENIOT

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## Sprint 8 summary

Item ID (from the previous retrospect ive doc)	Workpackage ID (from the Kick-off doc)	Status	Group's comments
1	4	In progress	We configured one of the BLE sniffing devices (Adafruit BLE Sniffer) successfully. We are waiting for an IoT professional to give us a second and better device named Ubertooth.
2	4	Complete	We successfully sniffed the BLE communication using Adafruit. However, we need to integrate this functionality to GUI.
3	7	In progress	We have added input type checks and input value checks in most attacks. However, we need to extend these to all attacks and we need to create relevant error messages in our GUI whenever some faulty input values are assigned.
4	7	Complete	Implementing backend side of importing user defined attacks/protocols
5	7	Complete	Implementing backend side of

			exporting necessary files to user, creating templates for user
6	7	Complete	GUI design for import/export pages
7	7	In progress	We have incorporated attacks' outputs to the main GUI screen. However, we need slight improvements on these outputs to produce more intelligible reports.
8	7	Complete	We have already created View Captured Packets page in the previous sprint. Simply, we created .pcap files containing the captured packets in a separate directory and displayed those packets in View Captured Packets page. The user can see the protocol of packets and the time at which they are captured. This page also enables the users to download captured packets to a selected directory.
-	7	Was not on the initial plan	We created a Attack Suite Details page. Some similar attacks are grouped into a Attack Suite. However, in the previous version, we displayed those attacks as if they were separate attacks. Attack Suite Details page helps us to show these similar attacks.

## Sprint 9 plan

Item ID	Workpackage ID (from the Kick-off doc)	Description	Status
1	4	Integrate BLE sniffing functionality into GUI	New
2	4	Implementing BLE Replay Attack	New
3	3,4,5,6	Overall testing of implemented attacks	New
4	7	Integrating imported protocols/attacks into GUI	New
5	5	Create a complete MQTT system/application for Demo	New
6	7	Input validation via compulsory fields and type checking of inputs	Left over from Sprint 8
7	4	Learning how to configure and utilize the hardware that we will use to sniff BLE messages and conduct attacks on BLE devices.	Left over from Sprint 8
8	7	Integrate attacks' logs into Attack Reporting Page	Left over from Sprint 8
9	3,4,5,6	Adding more robust attack stopping functionalities. In some of the attacks, when we end the attack the underlying sockets, protocol clients are not closed neatly. We will check these and close them in a correct way when an attack is stopped so that our tool will work better.	New

## Overall progress

	Sprint 1	Sprint 2	Sprint 3	Sprint 4	Sprint 5	Sprint 6	Sprint 7	Sprint 8	Sprint 9
MF1	0	15	15	15	0	90	100	100	
MF2	0	0	0	0	0	60	100	100	

MF3	0	0	100	100	100	100	100	100	
MF4	0	5	100	100	100	100	100	100	
MF5	0	0	0	0	100	100	100	100	
MF6	0	0	0	0	100	100	100	100	
MF7	0	0	0	10	10	10	10	80	
MF8	0	5	5	8	8	8	8	20	
MF9	0	10	10	10	20	30	45	90	
MF10	0	0	0	0	0	0	15	40	
MF11	0	0	0	0	0	12	12	70	