Sprint Retrospective, Iteration # 5

User story	Task #	Assigned to	Estimated effort (hours)	Actual effort (hours)	Done (Y/N)	Pull request	Notes
As a cameraman, I don't want to spend all my time loading presets.	When a camera is finished with its shot, it should load the next preset.	Thomas	6	4	Y	#50	
As a user, I would like the software to communicate with the cameras in order to set and retrieve settings of the camera.	Integrate camera connections with GUI	**Bart**, Tabe	8 p.p	8	N	-	This is still to be done with help from Thomas for the GUI .
	Continue work on the camera connection classes	**Bart**, Tabe	7 p.p.	7 p.p.	Y	#56	It works and most of the features have been implemented though it is open for extension.
	Fix the tests for the camera connection classes	**Tabe**, Bart	8 p.p.	20	Y	#56	Took a lot more time than expected due to misunderstandings in the way the camera handles our commands, which led to problems in the tests most of the time.
As a user, I want to be able to edit my digital script, in case I made	Implement row editing of the script.	Steven	10	12	Y	#55	

a mistake or something has to be changed.							
As a user, I don't want to have two consecutive shots with different presets on the same camera.	Create a method to check if this condition isn't violated.	**Thomas**, Steven	4 p.p.	6	Y	#53	
	Give an error when editing the script and a violation is inserted.	**Steven**, Thomas	5 p.p.	7	Y	#55	
	Give an error when a faulty script is loaded.	**Steven**, Thomas	4 p.p.	6	Y	#55	
As a user, I do not want to encounter the problem where more users can try to edit the same script or control the same camera at the same time. (concurrency)	Give an error when two or more people try to edit the same script at the same time.	Tim	10	5	N	-	See note below.
	Give an error when two or more people try to control the same camera at the same time.	Tim	10	5	N	-	The two concurrency tasks are delayed because it was still unsure on how to enforce it. Alerts have been worked on and a general idea to enforce concurrency has been conceived.
As a developer, I want to have a clear overview of the architecture of the product.	Extend emergent architecture design.	**Tabe**, Tim, Thomas, Steven, Bart	1 p.p.	2	Y	Commit #918582	Not enough changes to make any significant impact on the architecture design, thus not much to add.

As a developer, I want to have a high code quality to improve readability and maintainability	Improve code quality of the classes within the gui package.	Thomas	4	0	N	-	Decided to spend more time on actual features.
	Code review	**Steven**, Tim, Thomas, Tabe, Bart	4 p.p.	12	Y	All PR's	
As a user, I want to have a graphical user interface which interacts with the back-end	Extend and integrate the preview menu with the back-end.	**Tim**	-	8	Y	#54	This wasn't included in the original sprint plan, but it turned out this was necessary after this wasn't finished last sprint.

Main Problems Encountered

Problem 1

Description: Travis cannot test the connection methods because it does not have access to the VPN. The VPN itself only allows one connection at a time, which made testing difficult and erratic.

Reaction: We will try to mock some of the camera connection methods, so we don't need the VPN. Tests that do require the camera connection will be worked on whenever the connection is stable, e.g. during the night.

Problem 2

Description: Tim has laptop issues and spent quite some time to try to fix them, to no avail.

Reaction: Worked around the issue, but commits to Github are now by an unknown account.

Problem 3

Description: Because SIG is still in beta, it is very buggy. Furthermore, it is not very useful to us at the moment since most functions either do not work, or are not a problem to us.

Reaction: We hold off on using SIG until it is more stable and gives us relevant errors.

Problem 4

Description: When trying to implement the live view from the camera, we noticed that JavaFX only supports HTTP streams using h264 compression. The only stream link we had was an RTSP h264 stream.

Reaction: We sent a message to Karel Bruggeman from PolyCast, who didn't know about this, but suggested to analyse the source code of the camera's live web interface. We found a HTTP MJPEG stream, but this did not work. We have contacted Panasonic to ask about the availability of an HTTP h264 stream.

Adjustments for the next Sprint

Refactor the code and fix bugs, especially the gui package is really ugly right now.