Sprint Reflection on Iteration 3

Bachelor Graduation Project: Model-based Optimization and Visualization of Aircraft Noise
Team: Elvan Kula and Hans Schouten

User Story	Task	Task Assigned To	Estimated Effort per Task	Actual Effort per Task	Done (yes / no)	Notes
The user wants the project team to keep the source code maintainable	- Set-up project structure following MVP model	Hans	3 Hours	3 Hours	Yes	
The user wants to visualize the input flight trajectory and the produced noise contours in a real-time 3D animation mapped on Google Earth	- Set-up Google Earth plugin in the GUI - Extended visualization of noise contours in Google Earth with animated colour map - Extended animation of flight trajectory in Google Earth (+ smoothening data) - Compose all components in animation together (airplane, trajectory, contours)	Hans Hans & Elvan Elvan Elvan	4 Hours 5 Hours 4 Hours 4 Hours	4 Hours - 15+ Hours (together with Hans) -	Yes No	Because of problems with the Google Earth API, we were forced to switch back to KML files for visualization (and to move the tasks for kml visualization to next week's sprint)

	- Real-time updates of the animated trajectory and noise contours (+ tweaking the refresh rate)	Hans & Elvan	6 Hours	6 Hours	Yes	We achieved the highest refresh rate possible
The user wants to visualize smooth noise contours produced along the input trajectory	- Implementation of spline interpolation algorithm to smoothen out the contour lines	Elvan	4 Hours	4 Hours	Yes	Because of unwanted Google Earth API results, we tried multiple interpolation algorithms (hermite, built-in from math.net, cubic spline)
The user wants to calculate noise contours for particular noise levels (dB)	- Implement option to output actual noise data - Implement option to turn on or off particular noise contours for calculation/ visualization	Hans Hans	2 Hours 4 Hours	2 Hours 4 Hours	Yes Yes	
The user wants the project team to keep their emergent	- Process feedback of project coach - Update architecture of visualization component	Elvan Elvan	1 Hour 2 Hours	1 Hour 1 Hour	Yes Yes	

architecture updated						
The user wants the project team to implement the trajectory optimization model in an efficient manner	- Read and analyse the documents on trajectory optimization (provided by client) • NoiseLAss documentation • AC Model • Optimization of Departure and Arrival Routing for Amsterdam Airport Schiphol	Hans & Elvan	2 Hours 2 Hours 3 Hours	2 Hours 2 Hours 3 Hours	Yes Yes Yes	+ 2 Hour meeting with the client about trajectory optimization