

# Sprint plan 4

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
The user wants to visualize the input flight trajectory and the produced noise contours in a real-time 3D animation mapped on Google Earth	- Generate KML file within program and GUI	Hans	4 Hours
	- Extended visualization of noise contours in Google Earth with coloured polygons in KML	Hans & Elvan	8 Hours
	- Extended animation of flight trajectory in Google Earth (+ smoothening data) in KML	Hans & Elvan	5 Hours
	- Compose all animation components in one KML file (airplane, trajectory, contours)	Elvan	4 Hours
	- Real-time updates of the animated trajectory and noise contours (+ tweaking the refresh rate)	Hans	5 Hours
	- Calculation and tweaking of camera offset	Elvan	4 Hours
	- Implementation of an algorithm for the heading, tilt and roll of the airplane	Elvan	2 Hours
The user wants to calculate the optimal flight trajectory for minimum noise	- Basic implementation of the trajectory optimization model	Hans & Elvan	6 Hours
	- Implementation of point-mass calculation	Elvan	5 Hours
	- Implementation of enforcement points	Hans	5 Hours