Team member responsibilities

Total time: 6-7 months

Phase	We ek	Goal	IT Technician [Luke]	Elektriker [Darko]	Chemiker [Christoph]	Mechani cal engineer [Ramo]
Phase 1: Project planning and conception	2	Define requirem ents, create drafts, distribut e tasks	Selection of Arduino and sensors, Planning a control system	Create circuit diagram, select compone nts	Calculatio n of fuel quantity, safety concept	Create CAD model, select material s,;
Result: Project plan, bill of materials, safety concepts, CAD model						
Phase 2: Material procurement and preparation	4	Procure ment of all materials and compone nts	Ordering Arduino, GPS, IMU, Sensors	Ordering of cables, motors, batteries	Procurem ent of ethanol, N ₂ O, tanks, safety equipmen t	Order of carbon fiber, aluminu m, tools
Result: All materials and tools ready						
Phase 3: Construction of the rocket design	8	Manufact uring and assembl y of the	Integration of Arduino component s,	Wiring and installatio n of electronic		Laminati ng the carbon fiber, assembli

		rocket structure	preparation of wiring	compone		ng aluminu m parts, integrati ng gimbalin g system
Phase 4: Setup of the propulsion system and fuel tests	6			Fuel system integratio n, carry out tests	Integration and testing of the gimbaling and propulsion system	
Result: Functional and tested drive system						
Phase 5: Electronics and Software Development	10	Develop ment and integratio n of software and electroni cs	Developme nt of the software, integration of the sensors, calibration	Setting up the power supply, integrating the cabling		
Result: Fully developed and tested Arduino controller						
Phase 6: Soil testing and adjustment	5	Testing of all systems under realistic	Software Testing, Calibration, Telemetry Testing	Load tests, checking the cabling	Fuel Safety Tests, Adjustmen ts	Static tests of the gimbal system Final

		condition s			accepta nce
Result: Ready-to-go, tested prototype					
Phase 7: Launch preparation and test flight	3	Executio n of the test flight Evaluatio n of the data	Verification and calibration Monitoring of the start	Control of electrical systems, parachute deployme nt	Fuel Refueling & Monitori ng Final structura l review, preparati on for launch
Result: Successful test flight, data evaluation					