Initial Inputs											
Cruise conditions, Lift and drag coefficients, Fuel and weight fractions	Aspect Ratio, CL_max,	Number of passengers, floor configuration	Wing configuration	Wing configuration, Cruise flying conditions, Aspect ratio	Initial geometric parameters based on statistics	Cruise conditions, Initial airfoil, CD_0 estimation	Cruise conditions, Aspect ratio				
Class   Weight esteimation	TOW				Mass fractions		TOW, OEW, FW, Weight fractions		•	TOW, OEW, FW	
	T/W-W/S Diagrams		Thrust	Surface rea	Surface area		Surface area, Thrust			Design point, Surface Area, Thrust	:
		Fuselage Layout and Sizing			Fuselage dimensions	Fuselage dimensions	Fuselage dimensions			Fuselage dimensions, initial layout and configuration	:
Fuel consumption			Propulsion system selection				Engine weight	Engine fuel concumption		Propulsion system parameters,	Outpu
	Aspect ratio			Wing Sizing	Wing Geometry	Wing geometry	Wing dimensions			Wing geometry and location	Outputs for further analysis
				Wing location	Empenage Sizing	Empenage geometry, Tail arm	Empenage geometry			Empenage geometry and location	
Lift and Drag coefficients, L/D, Zero lift drag, Lift induced drag	CL_max					Aerodynamic Analysis (AVL)	CL_alpha	CD		Lift and drag estimation	
OEW, Weight fractions							Class II Weight Estimation	Weight fractions		Component weight estimation	
Cruise conditions				Cruise conditions		Cruise conditions	Cruise conditions	Cruise condition optimization		Fuel consumption, Cruise altitude, Cruise Speed	
						I	I		1		
Class I weight estimation is done, this gives simple weights (fractions) used in the itteration	Design point is chosen this gives a thrust and surface area	Fuselage design is selected, this stays fixed troughout the itteration,	Propulsion is selected based on requirend trust, the choise is fixed troughout the itteration	Gives the basic planform and 3D wing dimensions. Aspect ratio could be updated based operational constraints	Initial empenage sizing is made after which it is updated based on stability and control inputs	CD_0 is updated by a more precise method, AVL is used to calculate the needed aerodynamic coefficients and values	A class II weight estimation is done using the geometry from the previous blocks	An optimization is done to select cruise mach number and alitiude, the optimization is done for fuel concumption, sustainability and cost			
Comment/Clarification											