

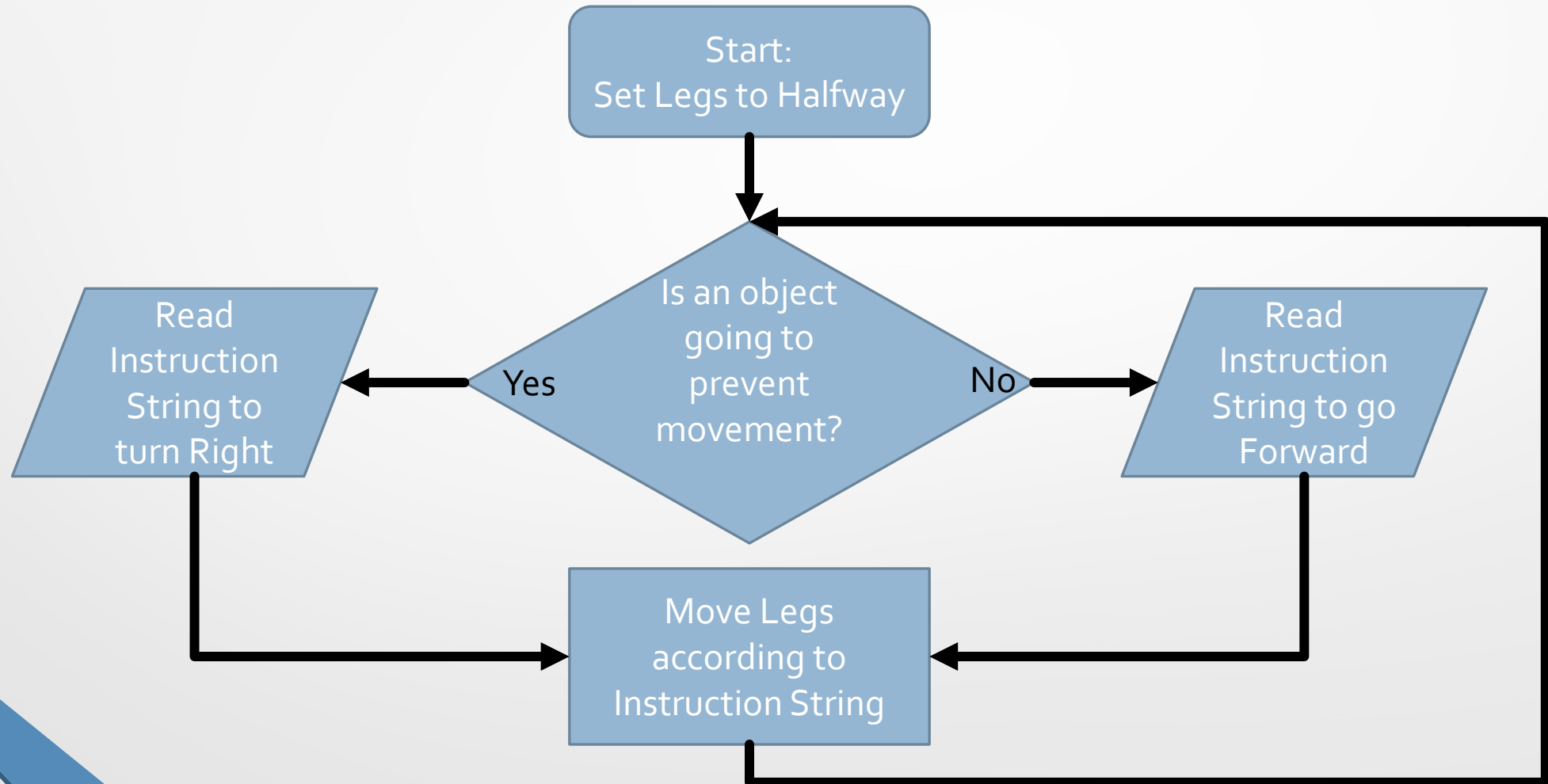


GEMMA

Gecko Electro-Mechanical Motion Attraction

Made by Noah Lobbe for Stage 1 Robotic and Electronic Systems (Mechatronics)

Operational Flowchart



The Instruction String

Each run through the flowchart, the Arduino reads 3 characters from a string in its code, which tells GEMMA what to do. The Instruction String for forward motion broken into 3-character chunks is: AGD LLU URU ULU AGD LRU ULU

...which can be deciphered with the table of codes below:

Direction Code Letters		Group Leg Codes		Individual Leg Codes	
U	Up	AGX	All Go X	LLX	LowerLeft go X
H	Halfway	FGX	Front Go X	LRX	LowerRight go X
D	Down	BGX	Back Go X	URX	UpperRight go X
		LGX	Left Go X	ULX	UpperLeft go X
		RGX	Right Go X		
		E.g., RGH = Right legs go Halfway		E.g., URD = Upper Right leg go Down	