Functions Encyclopedia

Movement

forward(**int** speed);	Moves forwards at a speed
reverse(**int** speed);	Moves backwards at a speed
forwardT(**int** speed, **float** seconds);	Moves forwards at a speed for x seconds
reverseT(**int** speed, **float** seconds);	Moves backwards at a speed for x seconds
claw_up();	Moves claw all the up
claw_mid();	Moves claw to middle
claw_down();	Moves claw down
stop();	Freezes all wheels

Rotation

spinCW(**int** speed);	Spins clockwise at a speed
onlyLeft(**int** speed);	Only moves left wheels at a speed
spinCW_time(**int** speed, **float** time);	Spins clockwise at a speed for a time
spinCW_degrees(**int** speed, **float** degrees);	Spins CW at a speed for x degrees (Try to use 1000 speed)
spinCCW(**int** speed);	Spins counter-clockwise at a speed
onlyRight(**int** speed);	Only moves right wheels at a speed
spinCCW_time(**int** speed, **float** time);	Spins counter-clockwise at a speed for a time
spinCCW_degrees(**int** speed, **float** degrees);	Spins CCW at a speed for x degrees (Try to use 1000 speed)

Advanced Movement

toTape(**int** speed);	Goes at a speed until both IR sensors touch tape
offTape(**int** speed);	Goes forward until IR sensors are NOT on tape
bothToTape(**int** speed);	Goes forward until ONE IR sensor touches tape
bothOffTape(**int** speed);	Goes forward until one IR sensor is NOT on tape
straightTape(**int** speed, **int** tspeed)	Goes to tape, then straightens itself perpendicular to tape. tspeed is turning speed.
toTouch(**int** speed);	Goes at a speed until touch sensor is hit
dropAirplane();	Drops paper airplane

To use, open **lib.Strategies.h**, and put functions in strategy_1 – 4(); to make the Crackling be your slave and do what you want. Make sure to change the text in the prints in **lib.Strategy selection.h** to describe what your strategy does. If you need to change any digital, analog, motor, or servo port numbers, change it in **lib.Assignments.h**.