2017 Regionals Roboarm MK2 Changes

High Priority

Hardware

* Fix epoxy on end effector cover - needs to securely close to avoid loss of pennies in flipping operation.

Software

* Finish revamp of raspberry pi system
* Calculate step differences every time encoders are read.
* Remove decrement code for the step differences because the encoders already manage that.
* In state machines, update code in going into state one and leaving state two so there is a dead band.
* Update modbus registers with three new variables for angle positions (degrees\*100)

Operational

* Update waypoints with lifting between each waypoint (make sure end effector will not spill pennies)
* Mitigate risk of motors getting stuck/loss of penny stack

Low Priority

Hardware

* Print penny harp with wider angle to make pennies more secure

Software

* Begin labelling waypoints

Operational