Design Phase

- Conceptualize strucuture and design philosphy of robot
    - paralelel link arms
    - (base over on a frame)
    - intention of being protable in the future
- “Make sure we can have it so that the arms can move in the correct dimensions and fit”
- CAD and 3D printing

Electronics Integration

- component slection
    - 2 small micro servos per arm
    - arduino
    - motor driver
    - power supply
    - wiring components
- Assemble the wiring and routing to arduino correctly and well
- Power supply lines
    - need to be designed to enable maintenance

Programming, Kinematics, and Calibration

- Arduino to interface with motors, encoder, and PWM signals
- Inverse kinematics and control algorithms
    - understand the kinematic theory to be used
    - develop the control algorithms based on the kinematic theory
- Drawing interface code
    - develop interface to draw the code
        - convert images to cooridinate matrix using matplotlib
        - submit coordiante matrix ouput into arduino
        - use a best next point (closest) algorithm to make the drawing
        - possibly add AI integration
- Calibrate and test

Documentation

- Functional and technical documentation
- Theory and understanding behind the project