**WEEKLY REPORT and MEETING AGENDA**

Report #: 7 Project Name: SPICE

Date: 4/18/2023 Prepared by: Carlos Zapata III

**Agenda for the meeting**

1. Base build ready for electrical component integration
2. Changes to the design for recipe side of UI
3. Serial port communication with Java and Arduino
4. Direct connection from motor to Arduino

**Overall accomplishments since last meeting**

1. Fabricated base and other components
2. Successfully deployed and ran UI on Pi
3. Completed stepper motor function on Arduino

**Tasks completed by each team member since last meeting**

| Task description | Assigned to | Completed? |
| --- | --- | --- |
| Fabricated the base, housings, gears | Carlos/Caleb | Yes |
| UI working on Raspberry Pi | JP/Kile | Yes |
| Stepper Motor running on Arduino | Kile | Yes |
| Recipes available on interface | JP | Yes |

**Plans for next period**

1. Resolve serial communication issues between Java and Arduino
2. Integrate UI with serial ports
3. Print more parts

**Task assignment per team member (to be completed before the next meeting)**

| Task description | Assigned to |
| --- | --- |
| Connect motors to housings | Carlos/Caleb |
| Connect Stepper Motor to Arduino | Kile |
| Connect Arduino and UI with serial port | JP/Kile |
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|  |  |
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**Project management status**



**Minutes from previous meeting**

Meeting Minutes:

* 3D Print Progress:
  + Dr.M: Print progress \*Looking at prints\*
    - Looks good
  + Calculation for gear, bring up in slide
* UI Issues:
  + Carlos: Ran across issue with UI, running on Windows but not Raspberry Pi,
  + Caleb: Got touch screen connected to PI, came across issues with JavaFX on the Raspberry Pi, JavaFX not included by default.
  + Dr.M: That’s good as long as your confident that you can resolve it
* Simplified Connection:
  + Caleb: Originally closer to a hammer system
    - Originally had the mechanical system
    - Then Karl’s pin pad system
    - Moved to hammer system
    - Moving to a swinging system
  + Dr.M: Need to
    - Stepper motor will be accurate and can track where
    - More concerned about good connection to DC motor
  + Caleb: Can think of a way
  + Dr.M: Should be concerned about the gab
    - Potentially have a pin that goes into the
  + Karl: Potentially use a spring loaded system, could make things more accurate
  + Dr.M: On plastic tip, use spring
  + Karl: Protruding spring instead of pin
    - Keep in mind a maximum tolerance
    - Could be failure point
  + Dr.M: Suspecting that arm will be the trickiest point of the project,
    - Potentially ground all the points
    - Meetings on Monday