

## **Period 3 Lessons Learned**

**0059**

### **Millwood Arts Academy Robotics**

#### **Experience Gained**

- Shamia- I have learned how to share my ideas with more detail without getting frustrated. I have learned how to build in a team environment, and that sometimes more ideas are better than one. I also learned to use many of the building tools. I also got the chance to figure out how motor and servo positions work with the robot.
- Kendall- What I have learned is that working in a team is hard work because we all have different personality styles. I have also learned that there are a lot of tools need in order for us to be able to build a successful robot. I also found that the servos will not work correctly when the wires are turned the wrong way or not matched correctly with the extender.
- Brandie- I have learned which materials are appropriate for certain tasks, for instance, certain screws are meant to work with certain robotic parts. Working with the iCreate instead of the Wallaby was a new experience because we had to do a lot of communicating with our coding team to convey what we needed them to do.
- InDayvionia- I have learned the difference between servos and motors and how to use them. I have also learned that there are many different working pieces and part for different types of robots. As a new team member, I feel like I have learned a lot from this experience.
- Akoben- One of the struggles that our team faced was trying to stabilize the arm. We tried using a triangular mount, but that was unsuccessful. So, my team came up with the decision to use a triangular base and attach it to a metal box base that would support the weight of the arm.
- Jai- It is difficult coding this type of robot because the motor positions ran in reverse and It took me a while to figure that out.
- Isyss- I had to change the way I thought about coding for the arm because i had to code for a motor instead of a servo.

#### **Documentation Process**

- Shamia- Having notes made the brainstorming process easier because we were able to look back and make changes. Documenting allows everything to have a place and have order.
- Kendall- Documenting helps make the process of building a robot smoother, but it takes longer because we take a while to process, plan, try, and repeat.
- Brandie- Documentation helped us to remember the numbers for servo positions and motor positions.
- InDayvionia- I feel like documentation helps you remember and stay organized.
- Akoben- I think documentation helps because you know where the tools are, where nuts and screws should go, etc.

- Jai- Documentation helps in finding a specific line of code and I knew that what I coded was what I meant to put there.
- Isyss- It made it easier because instead of just jumping right in, I had a plan for what to do.

### **Surprises**

- Shamia- Something that surprised me is that servos can just stop working and that it can be something as simple as mixed wires that stop it from working.
- Kendall- I was surprised at the brainstorming process and how we would run out of ideas, but it only takes one person to get our thoughts flowing again.
- Brandie- One thing that surprised me was that the robot was a Rumba because that was a different type of robot that we weren't used to using. Also, the course was really different.
- Akoben- I was surprised at how hard it was to build with these parts, like mounting the arm on the triangular base.