Reflection 1 (Kartal Tóth):

I gained an understanding of the fundamentals of Arduino and its coding, including techniques for mapping sensor readings and grasping how a flex sensor functions. The project brought its own set of challenges, especially when dealing with the flex sensor's limited precision and working out how to capture data from Arduino with Python. However, I was able to overcome these issues with persistence and creativity. This experience has provided a solid base for future projects involving Arduino and sensor applications.

Reflection 2 (Benedek Vass):

This project allowed me to learn the essentials of Arduino programming, value calibration, and the core principles behind a flex sensor. Along the way, I encountered a few obstacles, such as the flex sensor’s reduced accuracy and the difficulty of retrieving data via Python. Nevertheless, I managed to persevere, applying problem-solving skills to address these challenges. Completing this project has equipped me with useful knowledge and boosted my confidence for similar endeavors.

Reflection 3 (Vince Németh):

In this project, I developed a strong grasp of the basics of working with Arduino, interpreting sensor data, and understanding how a flex sensor operates. Although there were a few difficulties—like the sensor’s variability and the complexity of reading outputs through Python—I was able to work through these roadblocks successfully. This hands-on experience has enriched my skills in Arduino and sensor-based projects, preparing me with essential tools for future challenges.

What to improve:

1. If we wanted to measure angles precisely, we would need a different sensor (e.g.: potentiometer),
2. Ultimately, we would need a joint to prop the flex sensor on so it gives us the same measurements and they are proportional to the bend radius,
3. Improve the algorithm we use to convert resistance to the values we used in our final project, instead of using a linear conversion, we should use a logarithmic one.