#### Dev Shah

#### WEEK 9:

**Date:** 3/11/22  
**Total hours:** 5  
**Description of design efforts:**  
My focus this week was on how to program the accelerometer to output data from the X, Y, and Z axes. This task became challenging for me because I have to relearn how to program I2C devices to work the way we want. I currently have code to configure the I2C ports on the microcontroller, but I am working on configuring the accelerometer to provide the data. The code snippet below (Image 9.1) shows how the microcontroller is being configured to be the master device.

Text

Description automatically generated

Image 9.1

The accelerometer we are using, LSM6DSL, has previously created files that contain all the functions and constants that we need to use. These functions include writing to registers, reading from registers, and getting data from the accelerometer. I am in the process of looking through the functions that we can use and seeing what each function needs as parameters. Previously, I believed that changing the code from the old accelerometer to the new one would be easy. But due to the differences in functions and constants provided, this task became more challenging.