**ME 405 Mechatronics**

To: Professor Charlie Refvem

From: Julia Fay

Date: January 28, 2024

Subject: Homework 0x01 – Finite State Machines and Python Basics

For the homework 0x01 assignment, we were tasked with recreating a version of the game Mastermind in which the player seeks to break a secret code through a series of guesses with feedback about correct and incorrect digits and digit placements. The player gets 12 guesses before the game is over. This game was coded in Python and utilized a finite state machine format. This coding format helps to create non-blocking code to maximize efficiency. This assignment only required one task with six states within this task. This can be seen in one of the attachments to this memo. The second attachment to this memo is the .py file containing the implementation of this finite state machine.