**Test Strategy for matlab code test:**

**Scope and overview:**

This project outlines the testing of the functionality of the matlab code that simulates a DC motor that is with or without PID control and the optimum design focus of that DC motor.

The testing activities that will take place:

* Script-based unit testing on motorA1 and motorA2 – 01/05/2020
* Function-based unit testing on motorA3 – 01/05/2020

These testing activities are highlighted in the test plan.

**Test Approach:**

In this section these will be defined:

* Test levels
* Test types

**Test level:** Unit testing

**Test types: Functional testing:** Script-based unit testing & Function-based unit testing

* Script-based testing will be conducted on motors A1 and A2 as that is the appropriate method to check the outputs expected on the scripts.
* Function-based testing will be conducted on motorA3 as that is the appropriate method to check the outputs expected on the scripts.

**Test Environment:**

The required software and hardware for the test environment.

Software required: MATLAB R2020a

## Operating Systems for Mac:

* macOS Catalina (10.15)
* macOS Mojave (10.14)
* macOS High Sierra (10.13.6)

Hardware required:

Processors

**Minimum**: Any Intel x86-64 processor

**Recommended**: Any Intel x86-64 processor with four logical cores and AVX2 instruction set support

**Disk: Minimum:**3 GB of HDD space for MATLAB only, 5-8 GB for a typical installation

RAM: **Minimum**: 4 GB **Recommended**: 8 GB

**Testing tools:**

The testing tools that will be used will be Matlab testing framework