**Details to Build and Deploy the HAL Sample Project**

* **pyproject.toml** – contains project details. This includes dependencies, authors, readme, and version information.

**[project]**

**dependencies = ['PyYAML >= 6.0.1', 'python-dotenv >= 1.0.1']**

**name = "sample\_project" #Needs to be the top level name of your project**

**version = "1.0.1"**

**authors = [**

**{ name="Matt Perry", email="MaPerry@HollandAmerica.com" }**

**]**

**description = "A Python project sample"**

**readme = "README.md"**

**requires-python = ">=3.12"**

**classifiers = [**

**"Programming Language :: Python :: 3",**

**"Operating System :: OS Independent"**

**]**

* It is recommended to develop in a virtual environment so packages from the base OS do not interfere with development and testing. To setup the virtual environment follow these steps
  + Navigate to the project folder root ‘sample-project-structure’ (or whatever you have renamed the project to.
  + Execute the command **python -m venv venv** (where the second venv is the name of the virtual environment). If using Visual Studio you will be prompted to add current project to the virtual environment, select Yes here.
  + Execute the command **.\venv\Scripts\activate** (this will start the virtual environment)
  + Execute **pip install -r .\src\sample\_project.egg-info\requires.txt** to install dependencies.
  + Load the build dependency by running **pip install build**
  + [Optional] – Install the HAL Utility Package **pip install git+https://halprdgit01.hq.halw.com:8443/scm/~mpe7213/hal\_python\_utils.git**
* When changes are ready for deployment, the build can be updated by running the following script in the project root directory. This will recreate the .whl and .zip files.
  + **py -m build**
* Running Tests
  + A tests folder has been created that contains test cases that can be run against the project codebase. To run these tests the project needs to be installed in the virtual environment. This can be done by running **python -m pip install -e .**