Documentation Tool:

Documentation in Software Engineering is a broad term that encompasses all written documentation and materials necessary for the creation and use of software product's development. This is usually achieved by extracting details and special comments from source code files. It either explains how the software operates or how to use it.

For our documentation purposes, we shall use the Sphinx documentation generator.

Sphinx:

Sphinx is a tool that makes it easy for generating professional documentation for software projects while creating intelligent and beautiful documentation in HTML, PDF, epub and many other output formats. It was originally created for the Python documentation, containing excellent facilities for the documentation of software projects in a range of languages.

Using Sphinx for Python Documentation:
- Step 1: Use sphinx- quickstart to create an initial Sphinx source directory structure with conf.py and index.rst files.
- Step 2: Configure the conf.py file by changing the version number, setting the project name, author name, project version, default style, etc.
- Step 3: Create HTML page involving the default directory structure.
- Step 4: Add the project's path in conf.py file.
- Step 5: Use sphinx- apidoc command to create reStructured Text (reST) files from source code.
- Step 6: Edit index.rst to add the content of modules.rst.
- Step 7: Create the documentation using sphinx-build.

For our documentation, we will follow the attached video for installing and using Sphinx to document python scripts on Windows 10.

Python Documentation using Sphinx tutorial :
https://www.youtube.com/watch?v=niHXysWpkIQ&t=428s

Source Code Documentation Example:

Source Code:

```python
"""
This is a test code
to check python documentation
"""

class Multiply:
    def product(one, two):
        """
        :param one: integer number
        :param two: integer number
        :return: product of two integer numbers

        """
        return (one*two)
```

HTML Documentation:

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Enter search terms or a module, class or function name.

Welcome to TestProject's documentation!

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Multiply module

This is a test code to check python documentation

class `Multiply.`**`Multiply`**

    Bases: `object`

    `product`(*one*, *two*)

Parameters:	• **one** – integer number • **two** – integer number
Returns:	product of two integer numbers