Experiment 3

Aim: Code Documentation Practice: Write and document Python functions and classes using docstrings and generate HTML documentation using tools like Sphinx or MkDocs.

1. Sphinx Documentation: Created structured, dynamic documentation with Sphinx, generating HTML from re-Structured Text for enhanced project documentation.

```
C:\Users\rawat\Documents\7 SEMESTER\Software Engineering\Lab\Experiment 3>make html
Running Sphinx v8.0.2
loading translations [en]... done
loading pickled environment... done
building [mo]: targets for 0 po files that are out of date
writing output...
building [html]: targets for 1 source files that are out of date
updating environment: 0 added, 1 changed, 0 removed
reading sources... [100%] index
looking for now-outdated files... none found
pickling environment... done
checking consistency... done
preparing documents... done
copying assets...
copying static files... done
copying extra files... done
copying assets: done
writing output... [100%] index
generating indices... genindex done
writing additional pages... search done
dumping search index in English (code: en)... done
dumping object inventory... done
build succeeded.

The HTML pages are in build\html.
```

Fig 1: Running Sphinx Commands

Calculator

Search [   ] Go

Navigation

Contents:

src
- my_module module

my_module module

class my_module.**Calculator**

    Bases: **object**

    A simple calculator class to perform basic operations.

Methods

add(a, b)
    Adds two numbers.

subtract(a, b)
    Subtracts second number from first number.

multiply(a, b)
    Multiplies two numbers.

divide(a, b)
    Divides first number by second number. Raises ZeroDivisionError for division by zero.
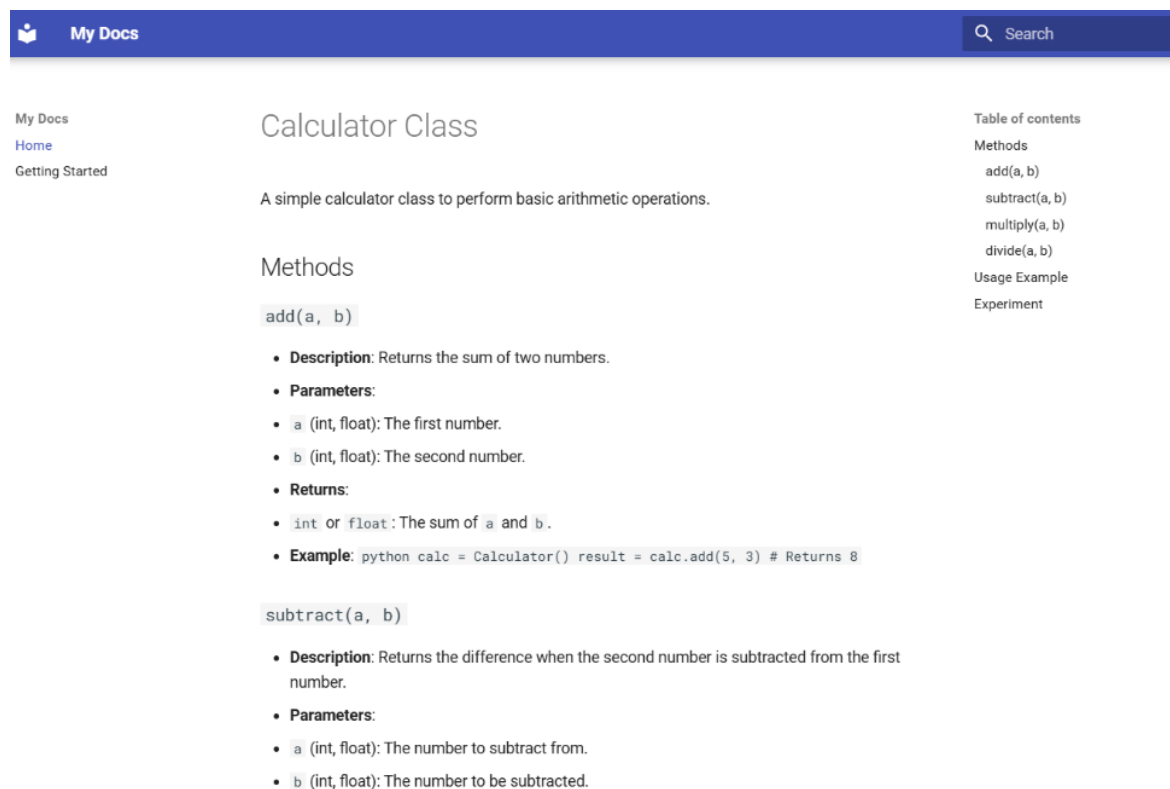
add(*a, b*)
    Returns the sum of a and b.

Fig 2: Output Sphinx Documentation

Madhurima Rawat DS 42

2. Mkdocs Documentation: Set up a simple documentation site with Markdown using MkDocs, utilizing the Material theme for a streamlined and responsive design.

```
C:\Users\rawat\Documents\7 SEMESTER\Software Engineering\Lab\Experiment 3\MakeDocs\my-docs>mkdocs serve
INFO    -  Building documentation...
INFO    -  Cleaning site directory
WARNING -  A reference to 'getting-started.md' is included in the 'nav' configuration, which is not found in the
           documentation files.
INFO    -  Documentation built in 2.59 seconds
INFO    -  [15:10:20] Watching paths for changes: 'docs', 'mkdocs.yml'
INFO    -  [15:10:20] Serving on http://127.0.0.1:8000/
INFO    -  [15:13:20] Browser connected: http://127.0.0.1:8000/
INFO    -  [15:13:59] Browser connected: http://127.0.0.1:8000/
INFO    -  [15:15:11] Browser connected: http://127.0.0.1:8000/
INFO    -  [15:15:43] Browser connected: http://127.0.0.1:8000/
INFO    -  [15:17:55] Detected file changes
INFO    -  Building documentation...
WARNING -  A reference to 'getting-started.md' is included in the 'nav' configuration, which is not found in the
           documentation files.
INFO    -  Documentation built in 4.53 seconds
INFO    -  [15:18:00] Reloading browsers
INFO    -  Shutting down...

C:\Users\rawat\Documents\7 SEMESTER\Software Engineering\Lab\Experiment 3\MakeDocs\my-docs>mkdocs serve
INFO    -  Building documentation...
INFO    -  Cleaning site directory
WARNING -  A reference to 'getting-started.md' is included in the 'nav' configuration, which is not found in the
           documentation files.
INFO    -  Documentation built in 0.50 seconds
INFO    -  [15:18:13] Watching paths for changes: 'docs', 'mkdocs.yml'
INFO    -  [15:18:13] Serving on http://127.0.0.1:8000/
INFO    -  [15:18:16] Browser connected: http://127.0.0.1:8000/
```

Fig 1: Running Mkdocs Commands

Fig 2: Output MkDocs Documentation

Madhurima Rawat DS 42