

# **Python OOP: Docstrings**



### **Docstrings**



### **Key Takeaways**

#### Docstrings

- Docstrings = Documentation Strings
- Used to document functions, class, modules, and methods.
- They are "linked" to the element that they describe by the
   \_\_doc\_\_ attribute. This attribute contains the docstring and you
   can access it in the interactive shell and with the help() function.
- They can be:
  - One-line Docstrings
    - Only for very simple descriptions.
  - Multi-line Docstrings
    - For more thorough descriptions.
- They are the first statement after the header.
- They start and end with triple quotes (""").
- You should include:
  - A one-line summary in the first line ending in a period.
  - A more detailed description below.



# **Docstrings**



# **Key Takeaways**

- Docstrings
  - Content:
    - Classes:
      - Purpose
      - Public methods
      - Public instance variables
      - Effects of inheritance
    - Functions and Methods:
      - Arguments
      - Optional Arguments
      - Return value
      - Side effects
      - Exceptions raised
      - Relevant information and examples



#### **Docstrings**



## **Key Takeaways**

• One-line Docstrings: Example

```
"""Add two integers and return the resulting integer."""

Description
```

#### Multi-line Docstrings: Example

```
"""Return the area of a triangle.

Find the area of a triangle using the base and the height provided. These values must be positive or zero.

Args:

base: A positive integer that represents the length of the base of the triangle. This value can be zero. height: A positive integer that represents the length of the height of the triangle. This value can be zero.

Returns:

A float that represents the area of the triangle.

Raises:

ValueError: the base or the height or both are not valid.

"""
```