

Assignment: Bacteria and Instances

Welcome to this assignment.

You have been hired to develop educational software for a small school district. The goal is to teach microbiology through interactive games.



For this assignment, you will define a Bacterium class to represent the enemies in the game.

♦ The class must have:

- Five custom instance attributes. You may need to research online to determine these instance attributes based on the characteristics of bacteria (you can find helpful resources below).
- The instance attributes x and y to represent the coordinates of the instance on the computer screen. Their values must be passed as arguments to `__init__()` and assigned as instance attributes.

♦ After defining the class:

- Create three instances. You can customize the arguments that will be used to create them.

♦ Tips:

- To help you choose the instance attributes, think about the most useful attributes for an enemy in a microbiology game. For example, you could add a `life_counter` attribute as a generic attribute that is not specific to bacteria. This can be helpful for the game. You could also add attributes that are specific to bacteria, such as their classification or shape.
- You are in complete control of this assignment, so you can customize it to your liking. There is a Python file included with this assignment (below) that you can download to start writing your class.

♦ **These are some great resources where you can find information:**

- Bacteria Characteristics - <https://www.ck12.org/biology/bacteria-characteristics/lesson/Bacteria-Characteristics-MS-LS/>
- Bacteria - <https://microbiologyonline.org/about-microbiology/introducing-microbes/bacteria>
- What Are Bacteria? - <https://www.livescience.com/51641-bacteria.html>
- Bacteria - <https://wikipedia.org/wiki/Bacteria>