Unit 3: JavaScript: Lab 8 – Rooms

Assigned: N/A

Due: N/A

Completed: TBD

**LMS:** <https://lms.grandcircus.co/mod/assign/view.php?id=22732>

**Google Doc:**

<https://docs.google.com/document/d/1OyBfdfnSJhdBmCHLiZEr1a5KBO-wAhhhlmRjz27ICbc/preview>

**GitHub:** <https://github.com/clintmsmith/GrandCircusLabs/tree/main/Rooms>

**Skills:** JavaScript classes

**Overview:** Complete using JavaScript ES6 classes.

Note that there are three general scenarios for properties.

1. properties set from constructor parameters
2. properties not set from constructor parameters. These start with a specific value.
3. properties set from optional constructor parameters. These start with a specific default value if not passed to the constructor.

**Phase 1:**

1. Create a class named Room.
2. Give it three properties set by three corresponding constructor parameters. (scenario #1)
   1. name (string)
   2. length (number)
   3. width (number)
3. Add two methods:
   1. getArea: no parameters. returns a number, the calculated rectangle area based on length and width.
   2. getPerimeter: no parameters. returns a number, the calculated rectangle perimeter based on length and width.
4. Below the class definition, create two instances of the Room object:
   1. room1 - name: Sun, length: 30, width: 20
   2. room2 - name: Green, length: 15, width: 20
5. Then console log the following for each of the two new objects: name, length, width, area, and perimeter.

**Phase 2:**

1. Add an available (Boolean) property to Room that is not set from a constructor parameter. It always starts out as true. (scenario #2)
2. After creating room2, set available to false.
3. Add a console.log for the available property of both rooms.

**Phase 3:**

1. Add a capacity (number) property to Room that is an optional constructor parameter. If not specified, default to 15.
2. Modify the new call for room2 to set capacity to 18 using a constructor parameter.
3. Add a console.log for the capacity property of both rooms.