

Lap 1

Part 1

Starting with index.html create class structure

Shape: properties "X,Y"

Rectangle: properties "X,Y,Width,Height"

Square: properties "X,Y,Width,Height,Length"

Oval: properties "X,Y,A,B "

Circle: properties "X,Y,A,B,R"

With all of them have methods "Log, GetCircumference, GetArea"

And Class DrawArea which has propertis "Shapes" and methods "Add,Log" to add shape or many shapes and to execute Log method in all shapes.

Then create object of each of shape (Rectangle,Square,Oval,Circle) with

X=0, Y=0, Width = 10 , Height = 5, Length = 5, A = 10, B = 5, R =5

And add these shapes to DrawArea object and execute log method

Expected output in chrome console is:

Circumference:30, Area:50, Type:Rectangle

Circumference:20, Area:25, Type:Squire

Circumference:47.1, Area:157, Type:Oval

Circumference:31.400000000000002, Area:78.5, Type:Circle

Hints

To get class type name use this this.constructor.name

For best structure you should use two level of inheritance

Rectangle Area = Width * Height , Circumference = (Width + Height) * 2

Square Area = Length * Length, Circumference = (Length + Length) * 2

Oval Area = A * B * PI(3.14) , Circumference = (A + B) * PI(3.14)

Circle Area = R * R * PI(3.14) , Circumference = (R + R) * PI(3.14)

Bonus

Create constructor for each shape which accepts all the properties as argument or another shape from same type to clone the properties values from it

Part 2

Add new feature to the old classes as following

Each class will have new function called displayEditor which will create html elements (inputs,buttons,divs) to edit the values of the shape when the values of these html elements changes that will change the properties in the class and two buttons when first button pressed it will call GetArea method and display the result in div and second will call GetCircumference and display the result in div for showing Circumference