

Lab 02 - Circle Class

Write the code and upload it to your GitHub account in a directory named “Lab02”.

For this lab, your objective is to create the header file “Circle.h”. Define the class **Circle** that has components

- ☐ Private double field named *radius*.
- ☐ Public static constant double field named *PI* which is initialized to 3.141592.
- ☐ Public default constructor. It assigns 1 to *radius*.
- ☐ Public overloaded constructor that takes a double parameter. If the parameter is positive, it assigns the parameter to *radius*; otherwise, it assigns 1 to *radius*.
- ☐ Public copy constructor.
- ☐ Public assignment operator.
- ☐ Public empty destructor.
- ☐ Public get method for *radius*.
- ☐ Public constant get method for *radius*.
- ☐ Public set method for *radius*.
- ☐ Public double constant method named `Diameter()` that takes no parameters. It returns the diameter of the circle.
- ☐ Public double constant method named `Circumference()` that takes no parameters. It returns the circumference of the circle.
- ☐ Public double constant method named `Area()` that takes no parameters. It returns the area of the circle.
- ☐ Public constant string method named `ToString()` that takes no parameters. It returns *radius* with one decimal point as a string.
- ☐ Overloaded ostream operator. It returns the same as `ToString()`.