Solution Review: Implement and Override Method

This review provides a detailed analysis to solve the 'Implement and Override the Method in the Derived Class' challenge.

WE'LL COVER THE FOLLOWING ^

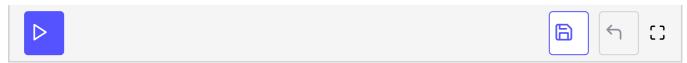
- Solution
 - Explanation

Solution

```
// Base Class
class Shape {
  // Private Data Members
  private double area;
  public Shape() { // Default Constructor
        area = 0;
  // Getter Function
  public double getArea() {
    return area;
}
// Derived Class
class Circle extends Shape {
  private double radius;
  public Circle(double radius) { // Constructor
    this.radius = radius;
  }
  // Overridden Method the getArea() which returns the area of Rectangle
  public double getArea() {
    return (radius*radius) * 3.14;
}
```

```
class Demo {

public static void main(String args[]) {
   Shape circle = new Circle(2);
   System.out.println(circle.getArea());
  }
}
```



Explanation

The solution is very simple.

- Line 29 31: The getArea() method is overridden in the Circle class to calculate the area of the circle.
- The area is calculated using the conventional formula:

$$pi*radius^2$$