

Home Assignment <1>: Demonstrating Inheritance in Java

Learning Objective:

The objective of this assignment is to gain a clear understanding of **Inheritance** in Java by implementing single, multilevel, and hybrid inheritance hierarchies in the context of WebElement classes.

Expected Completion Time:

Best Case: 20 minutes

Average Case: 30 minutes

Assignment Details:

Create classes for WebElement, Button, TextField, CustomButton, and RadioButton to demonstrate various types of inheritance.

Assignment Requirements:

Base Class: WebElement

- Create a base class named WebElement with common methods such as click() and setText(String text).

Subclasses: Button and TextField

- Implement two subclasses, Button and TextField, both inheriting from the WebElement base class.
- In the Button subclass, include a submit() method.
- In the TextField subclass, include a getText() method.

Additional Subclass: CheckBoxButton

- Develop a new class named CheckBoxButton that inherits from the Button subclass.
- In the CheckBoxButton class, introduce a method named clickCheckBoxButton().

Another Subclass: RadioButton

- Create another subclass named RadioButton, also inheriting from the Button subclass.
- In the RadioButton class, add a method called selectRadioButton().

Execution Class: Elements

- Create execution class named , also inheriting from the Button subclass.

Hints to Solve:

- Use appropriate keyword for inheritance.
- Finally, in a separate class Elements create objects for sub classes and call their respective methods..

Reference Links:

Inheritance in Java - [Oracle Docs](#)

Expected Outcome:

Upon completion, you should be able to:

- Grasp the fundamentals of inheritance in Java.
- Create subclasses that inherits attributes and methods from a superclass.