

CS 1713, Button Class, first file: Button.java

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// Button.java: a class representing a button object
public class Button {
    // the state of the button -- the only data in this class
    // myState == true means the button is pushed
    // myState == false means the button is cleared (not pushed)
    private boolean myState;

    // constructor -- called when new button created (starts cleared)
    public Button() {
        myState = false;
    }

    // accessor -- used to fetch the button's state
    public boolean getState() {
        return myState;
    }

    // used to print the button's state
    public void tellState() {
        System.out.println(" From tellState: I am in state " +
            myState);
    }

    // used to automatically print the button's state
    public String toString() {
        return " From toString: I am in state " + myState;
    }

    // modifier -- used to "push" the button
    public void pushButton() {
        myState = true;
    }

    // modifier -- used to "clear" the button
    public void clearButton() {
        myState = false;
    }
}
=====
```

CS 1713, ButtonDemo Class, second file: ButtonDemo.java

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// ButtonDemo.java: Class to test and demonstrate button objects
public class ButtonDemo {
    public static void main(String args[]) {
        boolean thisButtonState; // used below

        // create an instance of Button
        Button thisButton = new Button();

        // create another instance of Button
        Button anotherButton = new Button();

        // first work with thisButton
        System.out.println("After Constructing thisButton");
        thisButton.tellState();
        System.out.println("Push Button");
        thisButton.pushButton();
        thisButton.tellState();
        System.out.println("Clear Button");
        thisButton.clearButton();
        thisButton.tellState();
        System.out.println("Call to GetState");
        thisButtonState = thisButton.getState();
        System.out.println("Current State is: " + thisButtonState);
        thisButton.pushButton();
        System.out.println("Call to toString ");
        System.out.println( thisButton );

        // now try out the other button: anotherButton
        System.out.println("After constructing anotherButton");
        anotherButton.tellState();
        // continue as before
    }
}
=====
```

CS 1713, Output of run:

```
After Constructing thisButton
  From tellState: I am in state false
Push Button
  From tellState: I am in state true
Clear Button
  From tellState: I am in state false
Call to GetState
Current State is: false
Call to toString
  From toString: I am in state true
After constructing anotherButton
```