**Implementing the Builder Pattern**

**Computer.java**

package BuilderPatternExample.builder;

public class Computer {

private String cpu;

private String ram;

// Optional parameters

private String storage;

private String graphicsCard;

private boolean bluetooth;

// Private constructor

private Computer(Builder builder) {

this.cpu = builder.cpu;

this.ram = builder.ram;

this.storage = builder.storage;

this.graphicsCard = builder.graphicsCard;

this.bluetooth = builder.bluetooth;

}

// Static Nested Builder Class

public static class Builder {

private String cpu;

private String ram;

private String storage;

private String graphicsCard;

private boolean bluetooth;

public Builder(String cpu, String ram) {

this.cpu = cpu;

this.ram = ram;

}

public Builder setStorage(String storage) {

this.storage = storage;

return this;

}

public Builder setGraphicsCard(String graphicsCard) {

this.graphicsCard = graphicsCard;

return this;

}

public Builder setBluetooth(boolean bluetooth) {

this.bluetooth = bluetooth;

return this;

}

public Computer build() {

return new Computer(this);

}

}

// Display configuration

public void showConfig() {

System.out.println("Computer Configuration:");

System.out.println("CPU: " + cpu);

System.out.println("RAM: " + ram);

System.out.println("Storage: " + (storage != null ? storage : "None"));

System.out.println("Graphics Card: " + (graphicsCard != null ? graphicsCard : "None"));

System.out.println("Bluetooth: " + (bluetooth ? "Yes" : "No"));

}

**Main.java**

package BuilderPatternExample.builder;

public class Main {

public static void main(String [] args) {

Computer basicComputer = new

Computer.Builder("Intel", "8GB").build();

// Custom build

Computer gamingRig = new Computer.Builder("AMD Ryzen 9", "32GB")

.setStorage("1TB SSD")

.setGraphicsCard("NVIDIA RTX 4090")

.setBluetooth(true)

.build();

System.out.println("Basic Computer:");

basicComputer.showConfig();

System.out.println("\nGaming Rig:");

gamingRig.showConfig();

}

**OUTPUT**

