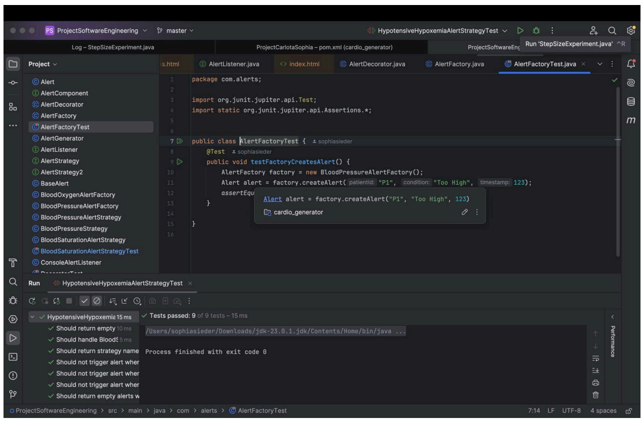
WEEK 3: Unit Test Verification



```java
package com.alerts;

import org.junit.jupiter.api.Test;
import static org.junit.jupiter.api.Assertions.*;


public class AlertFactoryTest {
    @Test
    public void testFactoryCreatesAlert() {
        AlertFactory factory = new BloodPressureAlertFactory();
        Alert alert = factory.createAlert("P1", "Too High", 123);
        assertEqu
    }

}
```

```
Alert alert = factory.createAlert("P1", "Too High", 123)
cardio_generator
```

```
HypotensiveHypoxemia 15 ms
  Should return empty 10 ms
  Should handle BloodS 5 ms
  Should return strategy name
  Should not trigger alert wher
  Should not trigger alert wher
  Should not trigger alert wher
  Should return empty alerts w

Tests passed: 9 of 9 tests – 15 ms
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```

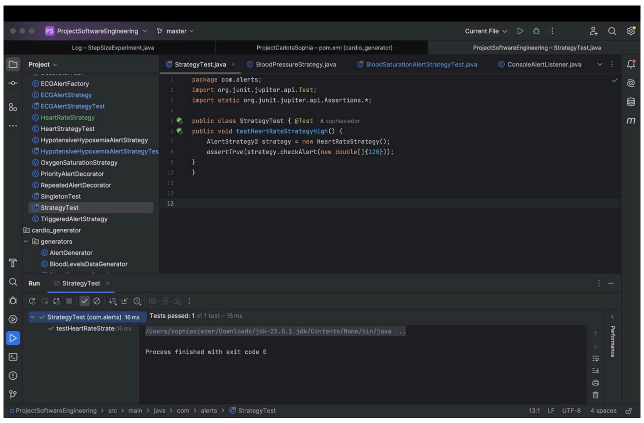

```java
package com.alerts;
import org.junit.jupiter.api.Test;
import static org.junit.jupiter.api.Assertions.*;

public class StrategyTest { @Test
public void testHeartRateStrategyHigh() {
    AlertStrategy2 strategy = new HeartRateStrategy();
    assertTrue(strategy.checkAlert(new double[]{120}));
}
}
```

```
StrategyTest (com.alerts) 16 ms
  testHeartRateStrate 16 ms

Tests passed: 1 of 1 test – 16 ms
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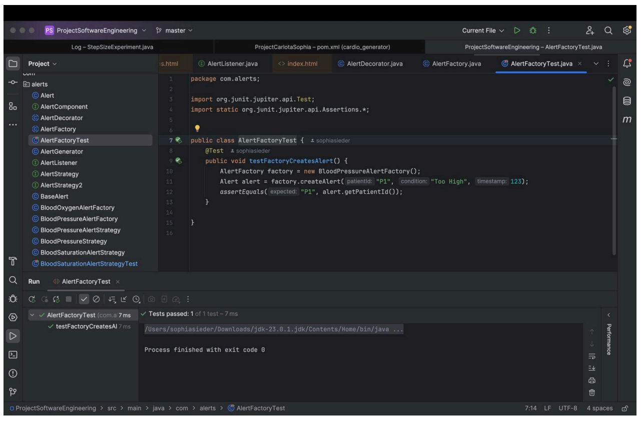

```java
package com.alerts;

import org.junit.jupiter.api.Test;
import static org.junit.jupiter.api.Assertions.*;


public class AlertFactoryTest {
    @Test
    public void testFactoryCreatesAlert() {
        AlertFactory factory = new BloodPressureAlertFactory();
        Alert alert = factory.createAlert("P1", "Too High", 123);
        assertEquals("P1", alert.getPatientId());
    }

}
```

```
AlertFactoryTest (com.a 7 ms
  testFactoryCreatesAl 7 ms

Tests passed: 1 of 1 test – 7 ms
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```

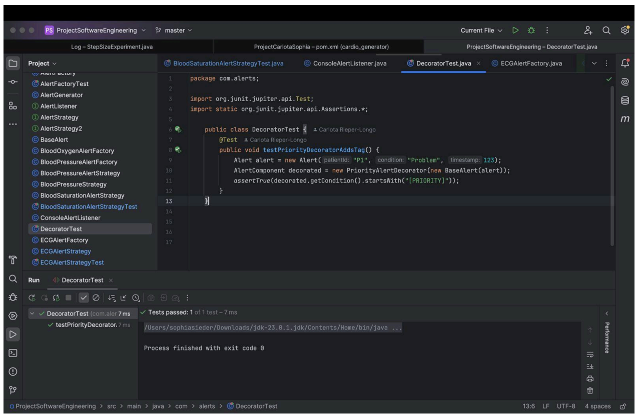

```java
package com.alerts;

import org.junit.jupiter.api.Test;
import static org.junit.jupiter.api.Assertions.*;

    public class DecoratorTest {
        @Test
        public void testPriorityDecoratorAddsTag() {
            Alert alert = new Alert("P1", "Problem", 123);
            AlertComponent decorated = new PriorityAlertDecorator(new BaseAlert(alert));
            assertTrue(decorated.getCondition().startsWith("[PRIORITY]"));
        }
    }
```

```
DecoratorTest (com.aler 7 ms
  testPriorityDecorator 7 ms

Tests passed: 1 of 1 test – 7 ms
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```

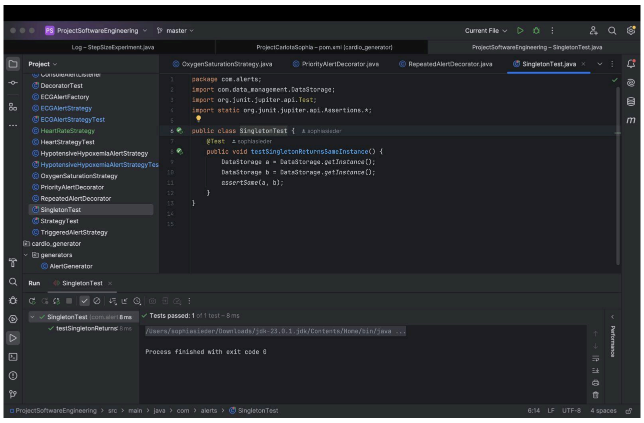

```java
package com.alerts;
import com.data_management.DataStorage;
import org.junit.jupiter.api.Test;
import static org.junit.jupiter.api.Assertions.*;

public class SingletonTest {
    @Test
    public void testSingletonReturnsSameInstance() {
        DataStorage a = DataStorage.getInstance();
        DataStorage b = DataStorage.getInstance();
        assertSame(a, b);
    }
}
```

Tests passed: 1 of 1 test – 8 ms

```
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```

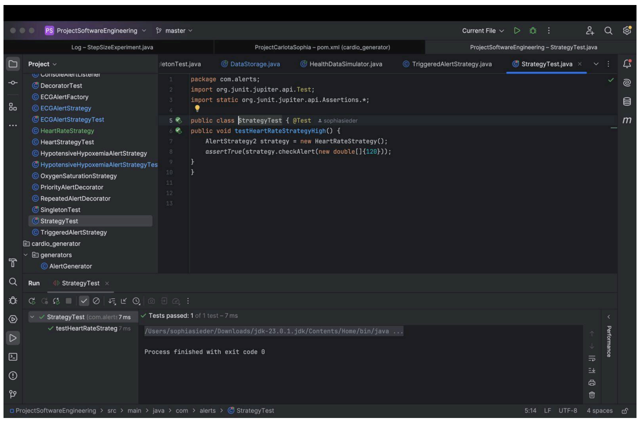

```java
package com.alerts;
import org.junit.jupiter.api.Test;
import static org.junit.jupiter.api.Assertions.*;

public class StrategyTest { @Test
public void testHeartRateStrategyHigh() {
    AlertStrategy2 strategy = new HeartRateStrategy();
    assertTrue(strategy.checkAlert(new double[]{120}));
}
}
```

Tests passed: 1 of 1 test – 7 ms

```
/Users/sophiasieder/Downloads/jdk-23.0.1.jdk/Contents/Home/bin/java ...

Process finished with exit code 0
```