**A03 - JUnit Back-end Testing**

**Team-1**

1. **Test Links Section:**

* Java source code <JavaSource.zip>
* Test Case Tables (xls) format <TestCasesExcelxls.zip>
* JaCoCo results <jacocoTestResults.zip>
* PIT Results <pitTestResults.zip>
* Excel test files <TestCasesExcelFiles.zip>
* Junit test files <JUnitTestCases.zip>

1. **Junit Report Section:**

# Section 1 – EventModelTest:

## Section 1.1 – TestCaseTable:

[TestCasesExcelxls\EventModelTests1.xlsx](TestCasesExcelxls/EventModelTests1.xlsx)

Section 1.2 – JaCoCo Coverage Summary:

We have achieved 100% JaCoCo coverage (Both in EventModel, EventErrorMsgs).

Section 1.3 – Pit Test Results:

We have passed Pit Test with 100% line coverage (Both in EventModel, EventErrorMsgs).

We have passed Pit Test with 99% mutators killed.

There were allowed exceptions

1. Decremented (a--) byte array field
2. Equal to less or equal
3. Removed call to

# Section 2 – UserModelTest:

## Section 2.1 – TestCaseTable:

[TestCasesExcelxls\UserModelTests.xlsx](TestCasesExcelxls/UserModelTests.xlsx)

Section 2.2 – JaCoCo Coverage Summary:

We have achieved 100% JaCoCo coverage (Both in EventModel, EventErrorMsgs).

Section 2.3 – Pit Test Results:

We have passed Pit Test with 100% line coverage (Both in UserModel, UserErrorMsgs).

We have passed Pit Test with 90% mutators killed.

There were allowed exceptions

1. Removed call to
2. Less or equal to equal
3. Less than to not equal
4. Not equal to greater than
5. Incremented (a++) byte array field
6. Decremented (a--) byte array field
7. Incremented (++a) byte array field
8. Equal to less or equal
9. Decremented (--a) byte array field

# Section 3 – PaymentModelTest:

## Section 3.1 – TestCaseTable:

[TestCasesExcelxls\Payment.xlsx](TestCasesExcelxls/Payment.xlsx)

Section 3.2 – JaCoCo Coverage Summary:

We have achieved 100% JaCoCo coverage.

Section 3.3 – Pit Test Results:

We have passed Pit Test with 100% line coverage (Both in PaymentModel, PaymentErrorMsgs).

We have passed Pit Test with 100% mutators killed in PaymentErrorMsgs.

We have passed Pit Test with 90% mutation coverage in PaymentModel, killed all mutations except for the ones under Allowed Exceptions.

Allowed Exceptions found were,

1. Equal to less or equal
2. Removed call to,
3. Not equal to greater than,
4. Substituted 1 with -1,
5. Negated integer local variable,
6. Incremented (a++) byte array field,
7. Decremented (a--) byte array field