

## Week 3 (Method Implementation + Unit tests)

Below is a screenshot of our JaCoCo code coverage report after running all our tests. We only worked on the `com.data_management` and `com.alerts` packages, and tested them properly. These packages show about **74%** and **94%** coverage. Other parts of the project, like `com.cardio_generator`, show no test coverage at all, since we didn't work with those files. Overall, the parts we implemented and tested are well-covered, and the areas that are not covered were not part of our tasks.

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods	Missed	Classes
<code>com.cardio_generator.generators</code>	<div><div></div></div>	0%	<div><div></div></div>	0%	24	24	104	104	16	16	5	5
<code>com.cardio_generator</code>	<div><div></div></div>	0%	<div><div></div></div>	0%	26	26	83	83	13	13	1	1
<code>com.cardio_generator.outputs</code>	<div><div></div></div>	0%	<div><div></div></div>	0%	18	18	60	60	16	16	5	5
<code>com.data_management</code>	<div><div></div></div>	74%	<div><div></div></div>	66%	6	25	15	65	2	16	0	4
<code>com.alerts</code>	<div><div></div></div>	94%	<div><div></div></div>	72%	15	46	3	75	2	19	0	2
<code>com</code>	<div><div></div></div>	0%	<div><div></div></div>	0%	4	4	5	5	2	2	1	1
Total	1.245 of 1.835	32%	69 of 120	42%	93	143	270	392	51	82	12	18

**DataReaderTest (1): 2 total, 2 passed** 27 ms

<code>testReadDataStoresCorrectNumberOfRecords()</code>	passed	24 ms
<code>testReadDataParsesCorrectValues()</code>	passed	3 ms

**PatientTest: 3 total, 3 passed** 18 ms

<code>testGetRecordsInTimeRange()</code>	passed	16 ms
<code>testGetRecordsNoneMatching()</code>	passed	1 ms
<code>testGetRecordsAllMatching()</code>	passed	1 ms

**AlertGeneratorTest: 7 total, 7 passed** 27 ms

<code>testEvaluateData_BloodSaturationLowAlert()</code>	passed	24 ms
<code>testEvaluateData_ECGAbnormalDataAlert()</code>	passed	
<code>testEvaluateData_RapidSaturationDropAlert()</code>	passed	
<code>testEvaluateData_HypotensiveHypoxemiaAlert()</code>	passed	
<code>testEvaluateData_DecreasingBloodPressureTrendAlert()</code>	passed	
<code>testEvaluateData_BloodPressureCriticalThresholdAlert()</code>	passed	2 ms
<code>testEvaluateData_IncreasingBloodPressureTrendAlert()</code>	passed	1 ms