**JUnit in Android Studio**

**Helpful Link**

<https://developer.android.com/training/testing/unit-testing/local-unit-tests>

* To create a basic JUnit 4 test class, create a Java class that contains one or more test methods. A test method begins with the @Test annotation and contains the code to exercise and verify a single functionality in the component that you want to test.
* To test that components in your app return the expected results, ***use the junit.Assert methods to perform validation checks (or assertions) to compare the state of the component under test against some expected value***.
* To make tests more readable, you can use Hamcrest matchers (such as the is() and equalTo() methods) to match the returned result against the expected result.
* <http://junit.org/javadoc/latest/org/junit/Assert.html>
* <https://github.com/hamcrest>

**Recommended Tutorial on YouTube:** <https://www.youtube.com/watch?v=dlWjn4QrVK4>

1. To test a method, double click its name to highlight it and press CTRL-SHIFT-T
2. **-> Create New Test –** In the dialog box, check all of the functions you want to test.
3. Press OK -> Select the location to create your Test class.
4. Use methods from the **ConverterUtil** class to fill in the test() methods
5. Use the assert methods (ex: **assertEquals()**) to check if the expected output matches the actual output.
6. Run the test using the play button next to the method name or by right-clicking.

**More Recommended Tutorials on YouTube:**

**Part 1: Testing if the application is launched** <https://www.youtube.com/watch?v=_TR6QcRozAg>

**Part 2: Testing if a button launches an activity** <https://www.youtube.com/watch?v=vXRoVIGttO4>