

Course: SEG 3103

Date: Thursday May 27, 2021

Link for deliverable

- https://github.com/CodingPatrick/seg3103_playground
- The pdf file of the screencapture is found in the submission folder in Brightspace

Exercise 1

To run the application, we entered the following command line

```
java -jar user-registration-app-0.1.0.jar
```

Then we visit the Local Host website.



After we fill out the table with Test Cases, Results and the Verdict

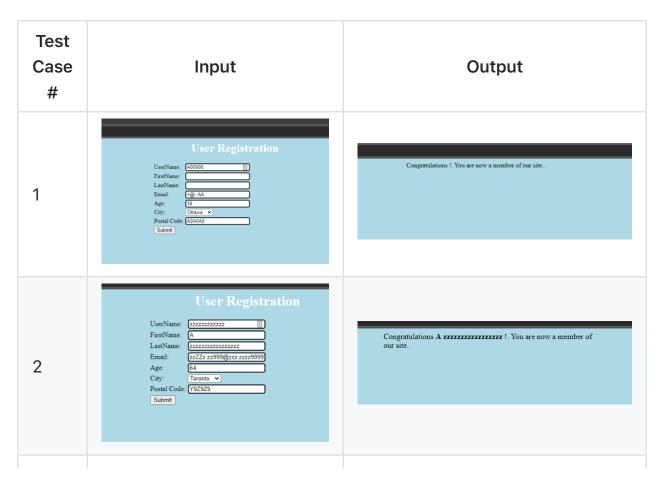
Test Case #	Test Case	Expected Result	
1	UserName: A00000 FirstName: "" LastName: "" Age: 18 Email:+@AA City: Halifax PostalCode: A0A0A0	registration request accepted	r r
	UserName: zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz		

2	LastName: zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz	registration request accepted	r r &
3	UserName: Aure723xxz FirstName: "A " LastName: "Bob The Great" Age: 35 Email:boByy4534@some.where.com City: Ottawa PostalCode: A9A 9A9	registration request accepted	r r
4	UserName: X56565z0 FirstName: Bond LastName: James Age: 60 Email:jb007@mi6.org City: Montreal PostalCode: Y0Z 0Z0	registration request accepted	r r
5	UserName: "" FirstName: "" LastName: "" Age: 18 Email: +@AA City: Halifax PostalCode: A0A0A0	Err1	E E
6	UserName: z FirstName: A LastName: zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz	Err3	E E

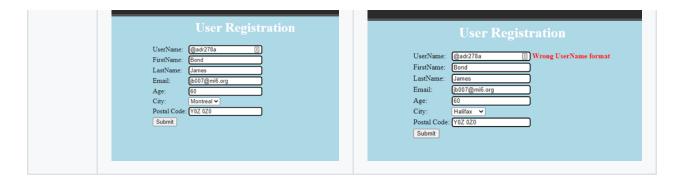
7	UserName: zzzzz FirstName: "A " LastName: "Bob The Great" Age: 35 Email: boByy4534@some.where.com City: Ottawa PostalCode: A9A 9A9	Err3	E
8	UserName: @adr278a FirstName: Bond LastName: James Age: 60 Email: jb007@mi6.org City: Montreal PostalCode: Y0Z 0Z0	Err1	E

Screenshots for Exercise 1

You can find screenshots under assets. Either Input_TCX.PNG or Output_TCX.PNG, where X is the Test Case Number.







Screenshot of Tests before Exercise 2

Here is a screenshot of the terminal after running the tests with the following command lines:

```
javac -encoding UTF-8 --source-path test -d dist -cp dist:lib/junit-
java -jar lib/junit-platform-console-standalone-1.7.1.jar --class-pa
```

Here is the text output of the screenshot above (for clarity purposes)

```
Thanks for using JUnit! Support its development at https://junit.org
 – JUnit Jupiter 🗸

→ DateTest 
✓
      — nextDate_sample() 
   └─ BitTest 🗸
      — constructor_int_ok() ✓
      ─ constructor_int_tooLarge() 
      constructor_int_tooSmall() 
      ─ constructor_Bit() ✓
      hashCode_values() 
      — getIntValue() ✓
      ─ equals() 

─ toString_values() ✓
      — or() ✓
      — and() ✓
      — not() ✓
      — xor() ✓
      — setValue() ✓
      └ constructor_default_0() ✓
└ JUnit Vintage ✓

    BitAndTest 
✓

      [0] ✓
         └ testAnd[0] ✓
      ├ [1] ✓
        └ testAnd[1] ✓
      [2] ✓
        └ testAnd[2] ✓

    [31 ✓
         └ testAnd[3] ✓
Test run finished after 79 ms
         9 containers found
                                  ]
         0 containers skipped
         9 containers started
          0 containers aborted
         9 containers successful ]
         0 containers failed
         19 tests found
                                  ]
         0 tests skipped
                                  ]
        19 tests started
                                  1
         0 tests aborted
        19 tests successful
                                  ]
         0 tests failed
```

Exercise 2

Test case suite in the lab PowerPoint

In Exercise 2, we were tasked with implementing some explicit test cases and some parameterized test cases based on the following screenshot:

TC	Input (y m d)	Expected Output (y m d)
1	1700 06 20	1700 06 21
2	2005 04 15	2005 04 16
3	1901 07 20	1901 07 21
4	3456 03 27	3456 03 28
5	1500 02 17	1500 02 18
6	1700 06 29	1700 06 30
7	1800 11 29	1800 11 30
8	3453 01 29	3453 01 30
9	444 02 29	444 03 01
10	2005 04 30	2005 05 01
11	3453 01 30	3453 01 31
12	3456 03 30	3456 03 31
13	1901 07 31	1901 08 01
14	3453 01 31	3453 02 01
15	3456 12 31	3457 01 01
16	1500 02 31	IllegalArgumentException
17	1500 02 29	IllegalArgumentException
18	-1 10 20	IllegalArgumentException
19	1458 15 12	IllegalArgumentException
20	1975 6 -50	IllegalArgumentException

These tests can be found under ecs/test. The file with the explicit tests is DateTest.java. The file with the parameterized tests that run OK is DateNextDateOKTest.java. The file with the parameterized test that result in an exception is DateNextDateExceptionTest.java.

Screenshot of the Tests after Exercise 2

Here is a screenshot of the terminal after running the tests with the following command lines:

```
javac -encoding UTF-8 --source-path test -d dist -cp dist:lib/junit-
```

```
java -jar lib/junit-platform-console-standalone-1.7.1.jar --class-pa
```

```
ecs — -zsh — 199×112
[Datrickloranger#Mot-Patricks-HacBook-Pro ecs & javac -encoding UTF-8 --source-path test -d dist -cp dist:lib/junit-platform-console-standalone-1.7.1.jar test/*.java
[Datrickloranger#Mot-Patricks-HacBook-Pro ecs & java -jar lib/junit-platform-console-standalone-1.7.1.jar --class-path dist --scan-class-path
            run finished after 34 ms
31 containers found
6 containers skipped
31 containers started
6 containers sharted
8 containers sharted
93 containers successful
6 containers successful
6 tests skipped
63 tests started
6 tests aborted
6 tests aborted
6 tests aborted
6 tests failed
```

Here is the text output of the screenshot above (for clarity purposes)

```
Thanks for using JUnit! Support its development at https://junit.org
```

```
- JUnit Jupiter 🗸
   ─ DateTest 
     ─ nextDate_sample() 
     hextDate_tc10_test() 
     — nextDate_tc11_test() 
     - nextDate_tc12_test() 
     — nextDate_tc13_test() 
     - nextDate_tc14_test() 
     - nextDate_tc15_test() 
     hextDate_tc16_test() 
     - nextDate_tc17_test() 
     hextDate_tc18_test() 
     — nextDate_tc19_test() 
     - nextDate_tc20_test() 
     — nextDate_tc1_test() ✓
     - nextDate_tc2_test() 
     — nextDate_tc3_test() 
     ─ nextDate_tc4_test() 
     — nextDate_tc5_test() 
     — nextDate_tc6_test() 
     — nextDate_tc7_test() 
     - nextDate_tc8_test() 
     └ nextDate_tc9_test() ✓
   └─ BitTest 🗸
     — constructor_int_ok() ✓
     — constructor_int_tooLarge() 
     constructor_int_tooSmall() 
     — constructor_Bit() 
     — hashCode_values() ✓
     — getIntValue() ✓
     — equals() ✓

─ toString_values() ✓
     — or() ✓
     — and() ✓
     — not() ✓
     ─ xor() 
     — setValue() ✓
     └ constructor_default_0() ✓
└─ JUnit Vintage ✓

→ BitAndTest 

✓
     [0] ✓
        └ testAnd[0] ✓
      ├ [1] ✓
        └ testAnd[1] ✓
     [2] ✓
```

```
└ testAnd[2] ✓
   - [3] 🗸
     └ testAnd[3] ✓
– DateNextDateOkTest ✓
  [0] ✓

    test[0] 
    ✓

  ├ [1] ✓

    test[1] 
    ✓

  [2] ✓
     └ test[2] ✓
  − [3] ✓

    test[3] 
    ✓

  [4] ✓

    test[4] 
    ✓

  ⊢ [5] ✓

    test[5] 
    ✓

  [6] ✓

    test[6] 
    ✓

  ├ [7] ✓
     └ test[7] ✓
  [8] ✓

    test[8] 
    ✓

  ⊢ [9] ✓
    └ test[9] /
  [10] ✓
    └ test[10] ✓

⊢ [11] ✓
    └ test[11] ✓
  [12] ✓
    └ test[12] ✓
  ⊢ [13] ✓
    └ test[13] ✓
  └ [14] ✓
     └ test[14] ✓
DateNextDateExceptionTest 
  [0] ✓

    test[0] 
    ✓

    [1] ✓
     └ test[1] ✓
  [2] ✓
     └ test[2] ✓
  [31 ✓
    └ test[3] ✓

    [4] ✓

    test[4] 
    ✓
```

```
Test run finished after 89 ms
        31 containers found
                                ]
        0 containers skipped
[
                               ]
       31 containers started
        0 containers aborted
       31 containers successful ]
        0 containers failed
       59 tests found
                                ]
        0 tests skipped
                                ]
       59 tests started
                                ]
        0 tests aborted
                                ]
       59 tests successful
                                ]
       0 tests failed
                                ]
```