CS 213 Software Methodology

Jared Montalbo, Noah Turbin

Prog2 Test Design Document.

**Instate.java**

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| **Method(s) being Checked** | **Test Case** | **Expected Result** |
| toString()  tuitionDue() | Instate instate1 = new Instate("Jared", "Montalbo", 16, 100);  System.out.println(instate1.toString() + " owes: " + instate1.tuitionDue()); | Jared Montalbo 16 Instate, with the funds: 100 owes: 7836 |
| toString()  tuitionDue() | Instate instate2 = new Instate("Noah", "Turbin", 10, 200);  System.out.println(instate2.toString() + " owes: " + instate2.tuitionDue()); | Noah Turbin 10 Instate, with the funds: 0 owes: 5176 |
| toString()  tuitionDue() | Instate instate3 = new Instate("Jared", "Montalbo", 12, 0);  System.out.println(instate3.toString() + " owes: " + instate3.tuitionDue()); | Jared Montalbo 12 Instate, with the funds: 0 owes: 6637 |
| toString()  tuitionDue() | Instate instate4 = new Instate("Noah", "Turbinator", 6, 0);  System.out.println(instate4.toString() + " owes: " + instate4.tuitionDue()); | Noah Turbinator 6 Instate, with the funds: 0 owes: 3444 |
| compareTo() | System.out.println("Comparing Jared Montalbo to Jared Montalbo, Value: " + instate1.compareTo(instate3));  // Since Jared Montalbo and Jared Montalbo is equal, value should be 0    System.out.println("Comparing Jared Montalbo to Noah Turbin, Value: " + instate1.compareTo(instate2));  // Since Jared comes earlier Noah, value should be -1    System.out.println("Comparing Noah Turbin to Jared Montalbo, Value: " + instate2.compareTo(instate1));  // Since Noah comes later then Jared, value should be 1    System.out.println("Comparing Noah Turbin to Noah Turbinator, Value: " + instate2.compareTo(instate4));  // Since Turbin has a shorter last name then Turbinator, value should be -1    System.out.println("Comparing Noah Turbinator to Noah Turbin, Value: " + instate4.compareTo(instate2));  // Since Turbinator has a longer last name then Turbin, value should be 1 | Comparing Jared Montalbo to Jared Montalbo, Value: 0  Comparing Jared Montalbo to Noah Turbin, Value: -1  Comparing Noah Turbin to Jared Montalbo, Value: 1  Comparing Noah Turbin to Noah Turbinator, Value: -1  Comparing Noah Turbinator to Noah Turbin, Value: 1 |
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**International.java**

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| **Method(s) being Checked** | **Test Case** | **Expected Result** |
| toString()  tuitionDue() | International inter1 = new International("Jared", "Montalbo", 16, true);  System.out.println(inter1.toString() + " owes: " + inter1.tuitionDue());  // Tuition Amount: 1441 + 350 = 1791  // Jared Montalbo 16 owes: 1791 | Jared Montalbo 16 International, an exchange student: true owes: 1791 |
| toString()  tuitionDue() | International inter2 = new International("Noah", "Turbin", 14, false);  System.out.println(inter2.toString() + " owes: " + inter2.tuitionDue());  // Tuition Amount: (14 \* 945) + 350 + 1441 = 15021  // Noah Turbin 14 owes: 15021 | Noah Turbin 14 International, an exchange student: false owes: 15021 |
| toString()  tuitionDue() | International inter3 = new International("Jared", "Montalbo", 20, false);  System.out.println(inter3.toString() + " owes: " + inter3.tuitionDue()); | Jared Montalbo 20 International, an exchange student: false owes: 15966 |
| toString()  tuitionDue() | International inter4 = new International("Noah", "Turbinator", 10, false);  System.out.println(inter4.toString() + " owes: " + inter4.tuitionDue()); | Noah Turbinator 10 International, an exchange student: false owes: 10646 |

**Outstate.java**

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| **Method(s) being Checked** | **Test Case** | **Expected Result** |
| toString()  tuitionDue() | Outstate out1 = new Outstate("Jared", "Montalbo", 16, true);  System.out.println(out1.toString() + " owes: " + out1.tuitionDue()); | Jared Montalbo 16 Outstate, from tristate: true owes: 9781 |
| toString()  tuitionDue() | Outstate out2 = new Outstate("Noah", "Turbin", 15, false);  System.out.println(out2.toString() + " owes: " + out2.tuitionDue()); | Noah Turbin 15 Outstate, from tristate: false owes: 12781 |
| toString()  tuitionDue() | Outstate out3 = new Outstate("Jared", "Montalbo", 20, false);  System.out.println(out3.toString() + " owes: " + out3.tuitionDue()); | Jared Montalbo 20 Outstate, from tristate: false owes: 12781 |
| toString()  tuitionDue() | Outstate out4 = new Outstate("Noah", "Turbinator", 10, false);  System.out.println(out4.toString() + " owes: " + out4.tuitionDue()); | Noah Turbinator 10 Outstate, from tristate: false owes: 8406 |
| toString()  tuitionDue() | Outstate out5 = new Outstate("Jeremy", "Lin", 1, true);  System.out.println(out5.toString() + " owes: " + out5.tuitionDue()); | Jeremy Lin 1 Outstate, from tristate: true owes: 1402 |