# Small Group Exercise - Test cases for an enhanced toString

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# **Activity Kind**

Small group exercise

### Purpose

The purpose of this exercise is to begin the design of an enhanced toString to support the output required for the third deliverable and to set the stage for the final deliverable.

## Pre-requisite

Students are expected to have performed:

- Read UML Tutorial Finite State Machines (Parts 1 and 2)
- Group Discussion The flow from Class Diagram to Sequence Diagram to running code.
- Design a Finite State Machine for an enhanced toString

# **Tasking**

Students are partitioned into groups of two to four students. Building upon the work required to produce the Finite State Machine for the previous exercise, each group is expected to produce a set of test cases that will verify whether or not the implementation properly transforms the input to the output.

Each group is expected to test their Finite State Machine by hand for each test case. The test case, the expected output, and the actual output as well as any insights must be captured in each member's ENB.

In the case that test case produce results that differ from the expected result, an analysis must be performed to determine whether the expected result is wrong, the Finite State Machine is wrong, or the manual implementation Finite State Machine is in error. The results of this analysis must appear in the student's ENB.

### **Deliverable**

Students are responsible for producing and posting their notes in their ENB as evidence that they performed this task of testing their Finite State Machine and notes that specify how it works and whether or not there are defects and the nature of the defect.

# **Submission**

Each student must produce and submit the notes for the ENB before the start of the next activity.