Individual Activity: Individual FSM experimentation

Lynn Robert Carter, PhD

2019-02-10

Activity Kind

Individual Activity

Purpose

This activity is about building upon what you have been learning to ensure the basic concepts are solid and to start to broaden these concepts to more useful endeavors. The Even and Odd number recognizer is not very useful, while a recognizer that can distinguish value Error Terms from other very similar looking input values is very useful!

Pre-requisite

Before doing this exercise, you must have studied the following video and participated in the following exercise:

- Small Group Exercise - Finite State Machine Exercise
- Small Group Activity - Encoding a FSM Diagram for the simulator and testing the simulator

Tasking

Study the Error Term FSM diagram on the following sheet and be sure you understand what it does and how it works.

Do the following steps, capture evidence showing that you actually did the work, keep track in your ENB when you start each of the following, and take notes about how much of each deliverable you produce and any surprises along the way:

1. Following what you learned in the Small Group Exercise - Finite State Machine Exercise, follow the same process to produce a textual representation of the diagram and store it in a text file in the same folder and at the same level as you did for this morning's activity.
2. Run the FSM simulator and give it the name of the Error Term textual representation file you just created.
3. If it has error, work with others to get them fixed.
4. Once it is error free, test the recognizer to see if it works by examining the execution trace it produces and compare/contrast that trace with what **you** believe it should be by following the graphical version of the design.
5. Reflect on your experience and what you could have done that might have made this easier. Be sure to record that in your ENB.

Deliverable

The only deliverable you need to submit for this activity is your ENB as filled out as described above.

Submission

You are expected to submit your ENB with notes from this session by the specified deadline.

Error Term Finite State Machine Diagram