Small Group Activity - Help others get the enhanced error messages working

Lynn Robert Carter, PhD

2019-02-11

Activity Kind

Small group activity

Purpose

The purpose of this activity is for members of each small group to help the others in their group to resolve any problems with the use of the Finite State Machine FPR written in Java and its integration into the Calculator in order to produce better error messages.

Pre-requisite

Students are expected to have completed:

- the two FSM exercises.
- Group Activity - How to implement an FSM using Java
- Individual Activity - Implement an Error Term Recognizer (ETR) using Java
- Individual Activity - Enhance the Double Calculator's User Interface using the Java FPR

Tasking

This activity extends the work of the previous activity with a special focus on individuals helping their small groupmates to resolve issues in order to get the enhancement working **without** just giving away the solution.

Please follow the pattern that the mentors have used. When asked a question by a groupmate, rather than just giving the answer and thereby giving the solution, instead, try to figure out what the **problem is** that your groupmate is having. This is the **diagnosis phase** of problem solving, and it is critical. Do **not** assume that you know what your client's problem is. Ask questions until you know for sure what the problem is, then you can suggest how to deal with the problem properly. Remember that the client may think they know and understand, but they do not. This is why **you** must ask questions.

One of the best things you can do is to say: "Show me what you have done and explain what is not working." My experience has been that in trying to explain what they did and what result they were seeing, they will often figure it out for themselves. This is a key lesson in what we refer to as the "community IQ" when talking about the benefits of being a member of a good team.

As you listen to others talking about what they have done and how they think it is supposed to work, take the time to reflect. Even though they may be having a problem does not mean they don't have good ideas that might actually be better than what you had original created.

Deliverables

The primary deliverables of this activity are the interactions with others and how any problems were solved. Be sure those are captured in your ENB as the activity unfolds, or you will forget the details.

Submission

Each student must submit class notes in the form of an engineering notebook submission.