Debug Session Guide. You can follow along as the examples are demonstrated and use the margins to annotate your solutions. For each problem please try to answer: What happens, why, and what is a solution? Most of these examples have demonstration projects are at: http://scalablegamedesign.cs.colorado.edu/sgda/sample/

1.0) Reset worksheet issues:

Suppose the student hits play and moves the frog in the worksheet.

A) The Frog dies, and the worksheet becomes blank.
B) The Student stops the game and hits save at the point below after running the simulation. Describe the result and the consequences.

2.0) Blank rule:
3.0) Overshooting trucks:

A) You see the following:

B) Similarly, you see the following (not the same problem as A).

C) Related problem: Simulation starts and it’s going SLLLOOOOWWWW. Sometimes a “memory overflow” or “stack overflow” java message appears. What might the problem be?

4.0) Sound in Loop, Message In Loop:

Example end states in a loop. In each case, the Frog has moved on top of the flag.
How is the third problem above different from the other two? What are the implications in schools for with PCs with the Task Manager locked down?

5.0) Layered frogs (or layered agents):

A) The Game Starts-- you move the Frog. When you move the Frog, another Frog appears, or sometimes the Frog will die and the game will look like it reset for no reason.

B) You start the game and huge numbers of trucks start appearing on the road, the game runs sllloooowww-- this could also eventually lead be followed by a “stack” or “memory” overflow message mentioned above. . . what is a possible cause?
6.0) Once Every and % chance combinations:

We want the island agent to make a new Turtle 50% of the time once every 0.6 seconds, which means an average of about every 1.2 seconds, but with some randomness. Which one of these accomplishes the task correctly and why? How would you explain it to a student?

7.0) Clock problem -- two rules with the same clock interval:

Will this agent’s color change back and forth between red and green? If not, why not, and can you fix it?
Which way will this agent move?

An example from Frogger:
8.0) **Change in depiction of different class:**

Supose we have two Frog agents a “Frog” and “Super Frog”, and a pellet agent:

When the frog eats (sees to its right) a pellet we want the Frog to become a SuperFrog. The Superfrog can swim in water and can’t be killed by trucks etc. We write the rule shown below in the Frog Behavior. When the simulation runs, the Frog seems to change into a SuperFrog, but when the frog moves in front of a truck or jumps on the water, it dies? The SuperFrog behavior are 100% correct; that is, if we use the pencil tool to place a SuperFrog in front of a truck or on the water, it does not die. What is happening and why? How can this be corrected?

9.0) **Unmatched method name:**

Examine the behavior snapshot below. When the simulation runs, AgentSheets reports: “I’m just a SuperFrog, I don’t know how to react to the v0 method.” Why? What other similar problems can occur?
10.0) Agent Attributes and Simulation Properties

- What is the difference between an Agent Attribute and a Simulation Property and how would you explain it to a student?
- How do you declare an Agent Attribute or a Simulation Property?
- How do you set the initial value of an Agent Attribute or a?
- Under what conditions must you use a Simulation Property? An Agent Attribute?
- Under what conditions does it not matter?