Fundamentals of Computing
Alice – Lab 3

Name ______________________________________________________________

1. Create a scene such as that shown below where “Alice” is in a circle of chairs. When the world opens, nothing happens until the user puts the cursor over one of the stools and clicks on it. Alice then goes to the stool and waits. When the user presses <enter> Alice sits down on the stool. When the user presses the space bar, Alice gets up from the stool and goes back to the center of the image, turns to face the camera and waves.

Grading … Alice goes to the correct stool on mouse click … C
Alice “sits” on the stool on <enter> … B
Alice returns to the center of the world on <space> … A
+ and – will be attached to letters if a particular operation is done better or worse than basic functionality that looks reasonable (realistic earns a +, crude earns a -)

Grade for project _____________

Suggestions …
1. Think “top down” and modularize the problem. This scenario consists of a series of tasks each of which is a series of tasks. Do an overall design and then tackle each of the smaller problems.
2. Potential problem: If someone presses the return, before selecting a stool Alice will sit on “nothing” or if someone presses the space bar before Alice is sitting down the result will be weird! Solution: create a variable that knows the “state of Alice”. At the start of the animation it has value 0. After she is at the stool it is 1. After she sits down it is 2. At the end it is 3. If you use an “if else” statement for each event you can permit a “stand up” only if Alice is in state 2 etc.
3. To get back to the center, at the beginning of the program there should be a small, invisible object where Alice is. Alice can then return to that object. Alternatively, in the “add objects” view, if you open the button named “more controls” it offers the option to add dummy objects automatically.