

## **Programming with Scratch**

### **Assignment 5: Final Project—Design Your Own Program**

In this exercise, you will use utilize your creativity and knowledge of Scratch to create a program of your own design. You may choose to create a game, animation, or something else, but it must contain the following elements:

1. Your project must have at least two sprites, neither of which may be a cat.
2. Your project must contain at least three scripts in total (i.e., not necessarily per sprite).
3. Your project must use at least one condition and one variable.
4. Your project must use at least one sound.
5. Your project should be more complex than the simple, short examples that we have discussed in class.

Feel free to look through the projects that come with Scratch for inspiration, but your own project should not be terribly similar to any of them. Try to think of an idea on your own, and then set out to implement it. If, along the way, you find it too difficult to implement some feature, try not to fret: alter your design or work around the problem. If you set out to implement an idea you find fun, you should not find it hard to satisfy this assignment's requirements.

Your completed project must be submitted via Interact by the due date and will be graded using the rubric on the following page. Save your final program as `username_finalproject` and include "finalproject" in the assignment description.

Good luck and have fun!

## Grading Rubric

CATEGORY	4	3	2	1
<b>Required Elements</b>	All required elements present in project; 2 sprites, 3 scripts, 1 condition, 1 variable, 1 sound	One required element missing	Two required elements missing	Three or more required elements missing
<b>Clarity of Scripts</b>	Scripts are highly logical and efficient; very easy to follow progression of logic through the program	Scripts are generally logical and efficient; fairly easy to follow progression of logic through the program	Scripts are generally logical but not efficient; somewhat difficult to follow progression of logic through the program	Scripts are neither logical nor efficient; very difficult to follow progression of logic through the program
<b>Creativity</b>	Considerable thought went into making the program interesting and fun to play or watch as shown by creative sprite(s), sound effect(s), and backgrounds.	Thought went into making the program interesting and fun, but some of the elements lacked creativity.	Tried to make the program interesting and fun, but several of the elements made it harder to understand/enjoy the program.	Program showed a severe lack of creativity; was neither fun nor interesting.
<b>Visual Appeal</b>	Color choices and graphics made the program visually appealing and showed evidence of thoughtful design.	Color choices and graphics were slightly distracting but showed evidence of attempting a thoughtful design.	Color choices and graphics were distracting/disjointed and showed little evidence of thoughtful design.	Color choices and graphics appeared completely random and severely detracted from the program.
<b>Knowledge of Scratch</b>	The project demonstrated a sophisticated understanding of Scratch as evidenced by the scripts, sprites, and backgrounds.	The project demonstrated a functional understanding of Scratch as evidenced by the scripts, sprites, and backgrounds.	The project demonstrated very limited understanding of Scratch as evidenced by the scripts, sprites, and backgrounds.	The project demonstrated little to know understanding of Scratch as evidenced by the scripts, sprites, and backgrounds.