



Homework 16: Scratch Lesson Plan

Goal: The purpose of this assignment is to apply your knowledge of programming in Processing to the programming language and environment of Scratch.

Part 1: Teach Yourself Scratch

Spend at least **3 hours** exploring and learning about Scratch. You do not need to learn how to do everything in Scratch; you may choose to focus on a certain feature. You should explore whether or not you can do everything in Scratch that you can do in Processing. **Some general information about Scratch is provided on the last page of this document.**

Part 2: Scratch vs. Processing

Construct a document (at least 1 page) that details the similarities and differences between Scratch and Processing. You may do this in any format you choose (e.g., chart, diagram, essay), but it must be detailed!

Part 3: Lesson Plan

Develop a lesson plan to teach someone about Scratch. You may choose any audience: a child, a teenager, a college student, or other adult. Make sure that your lesson plan is interesting to the audience you choose. It can be a .ppt presentation, an assignment, a video, a song, or any other creative format. The lesson plan should have an introduction, a hands-on activity, and a closing assessment.

Part 4: Teach Scratch

Teach the lesson you developed to a friend or family member. The lesson must contain 30 minutes of instruction. All 30 minutes do not need to be direct instruction, you may choose to set aside some time for them to explore in Scratch while you are on-hand to answer question or provide feedback.

Part 5: Reflection

Write a reflection on the effectiveness of your lesson plan and your experience teaching. The reflection should be at least one page long.

To Turn-In

Turn-in 3 documents: Scratch vs. Processing analysis, lesson plan, and the reflection. All items should be submitted to the class drop box. *Note: if your lesson plan format cannot be turned in via the drop-box please contact Professor Snyder.*

Homework 16 Resource: Scratch

Download/Install: <http://scratch.mit.edu/download>

Want to see some example Scratch projects? <http://scratch.mit.edu/>

Need help learning Scratch? <http://learnscratch.org/>

Some example lesson plans created by Susan: <http://www.susanrevans.com/scratch/>
Note: these are much more detailed than required in this assignment but are a great resource if you are having trouble getting started.

Want to learn from other educators? <http://scratched.media.mit.edu/>

Some Quick Tips:

- To run your program click the green flag
- Right-click on any block and choose help to understand how it works
- Is your sprite flipping upside down? Play around with these buttons:



- Don't know where to start? Try recreating your Processing game in Scratch. Here is version of pong in Scratch: <http://scratch.mit.edu/projects/bpmw2010-11/1595753>
- To see the code for projects found online, download them or try the experimental viewer

Download this project!



Download the 3 sprites and 3 scripts of "pong" and open it in Scratch

Play with the code

Try out this project in the [Experimental Viewer](#)