## **Exploring Complex Scratch Games**

For this exercise, you will be referring to and modifying the Scratch platform game available on the website. The goal is for you to gain a better understanding of how more complex games and programs are put together. This will hopefully give you ideas for your final project.

You may work in groups of two for this exercise but must each turn in your own answer sheet.
1. Look carefully at the Fade sprite. Describe how it is used to make a fading effect. What shape, size and color does the sprite have? How does that get modified? When are the scripts called?
2. Which sprite had the majority of the game logic? What are the advantages of centralizing game logic?
3. This program contains a lot of comments (yellow boxes that provide information about the script). What is the purpose of these comments? Do you think commercial software has comments? Why?

4. Describe two examples of using broadcast. What effect do those broadcasts have?

5. What does the Xvelocity variable do? Where does it get used and changed?
6. Try different values for the Velocity Multiplier variable. What happens? What does the Velocity Multiplier do?
Make the following modifications (you may work with a partner) and get them checked off:  1) Add another level. Don't worry about making it complex or beautiful, just make sure that it works!
2) Change the end screen to give a different message.