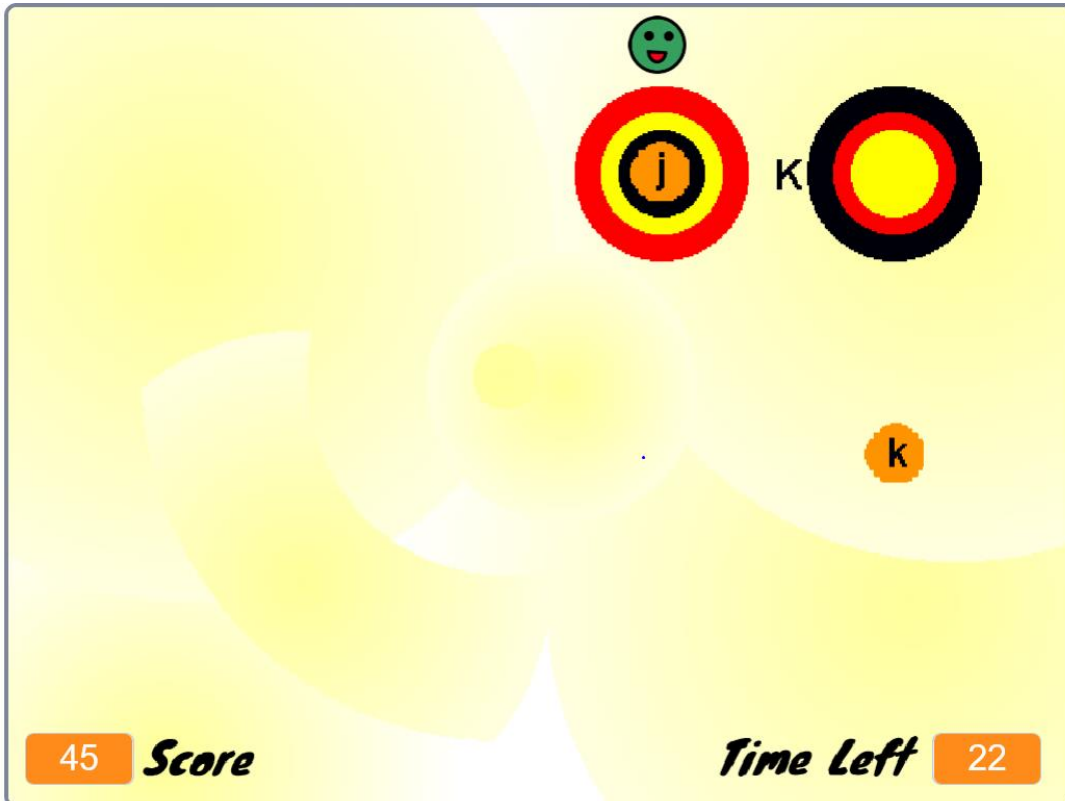# Intro to Programming
Scratch #16h – Timing Game

Objective: Create your own timing game in Scratch with 3 levels.

1. Login to the Scratch website. Create a new project. Change the name of this project to *first_last_scratch_16*. Click *File->Save now*

2. You are to create a timing game with 3 levels: Easy, Medium, and Hard.

    a. For the Easy level, you need 2 timed Sprites; for the Medium level, you need 3 timed Sprites; for the Hard Level, you need 4 timed Sprites.

    b. You need to create your own shapes. Using the arrows we used in class is not allowed. Circles or squares are fine! The non-moving Sprite must have 3 colors.

3. Follow the example that we completed in class for handling the timing.

    a. Different keys should be pressed to determine correct timing for each Sprite. It must be clear to the user which keys to press.

    b. The player must receive feedback indicating how well the game is being played. You should have different feedback for each Sprite. This means that **each** moving Sprite needs its **own** notification Sprite.

    c. The moving sprites should not go to the same position at the bottom of the screen when its key is pressed. Have the moving sprites go to random y positions towards the bottom of the instead of going to the same y position each time.

    d. For each timed Sprite the following must take place;

        ⇒ The fixed (non-moving) Sprite must flash when its associated key is pressed and the result is perfect, good, or poor.

        ⇒ The fixed (non-moving) Sprite should not flash when its associated key is pressed and the result is a miss.

        ⇒ The fixed (non-moving) Sprite should only flash when its associated key is pressed, and not when the key for a different Sprite is pressed.

    e. Your game must have a timer and a way to keep track of points.

    f. All variables on the Stage must be in large readout mode with a label.

    g. More points must be given for better button presses.

    h. The game must reset and start when the green flag is clicked.

    i. The game must stop when the timer reaches 0.

    j. The game must notify the user that the game is over.

    k. The player must know the score when the game is over.

    l. The game must get harder the longer it is played.

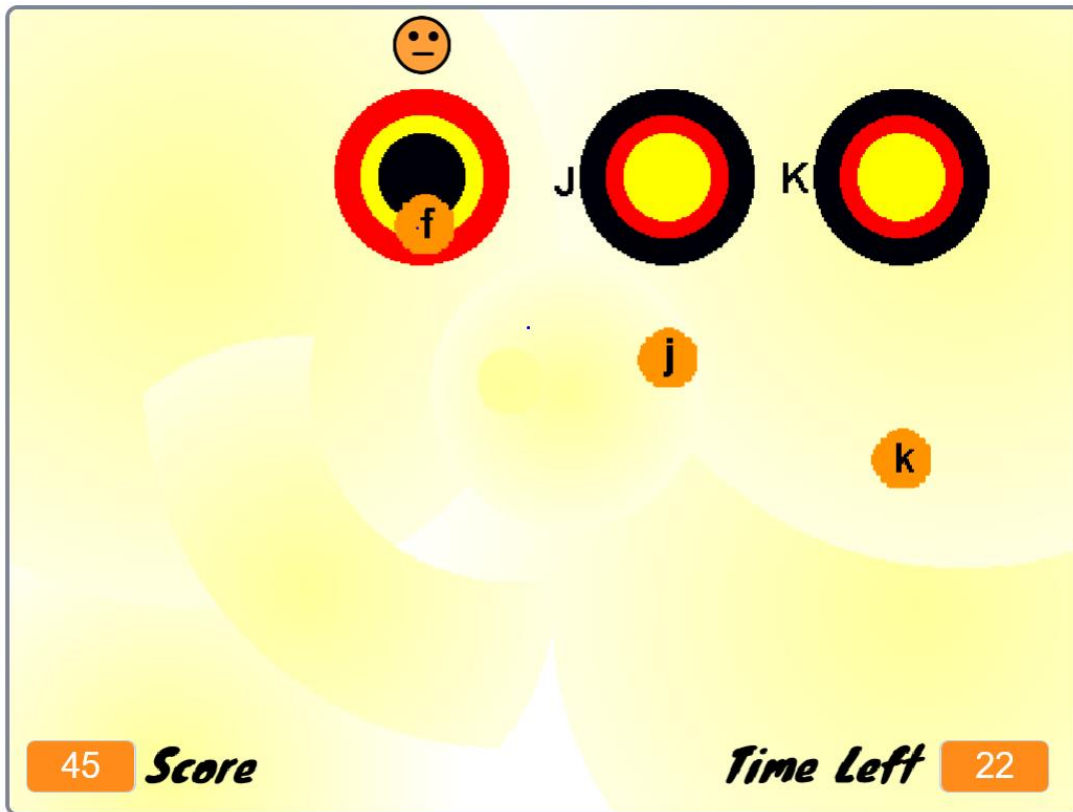   m. The stage must play background music while the game is being played.

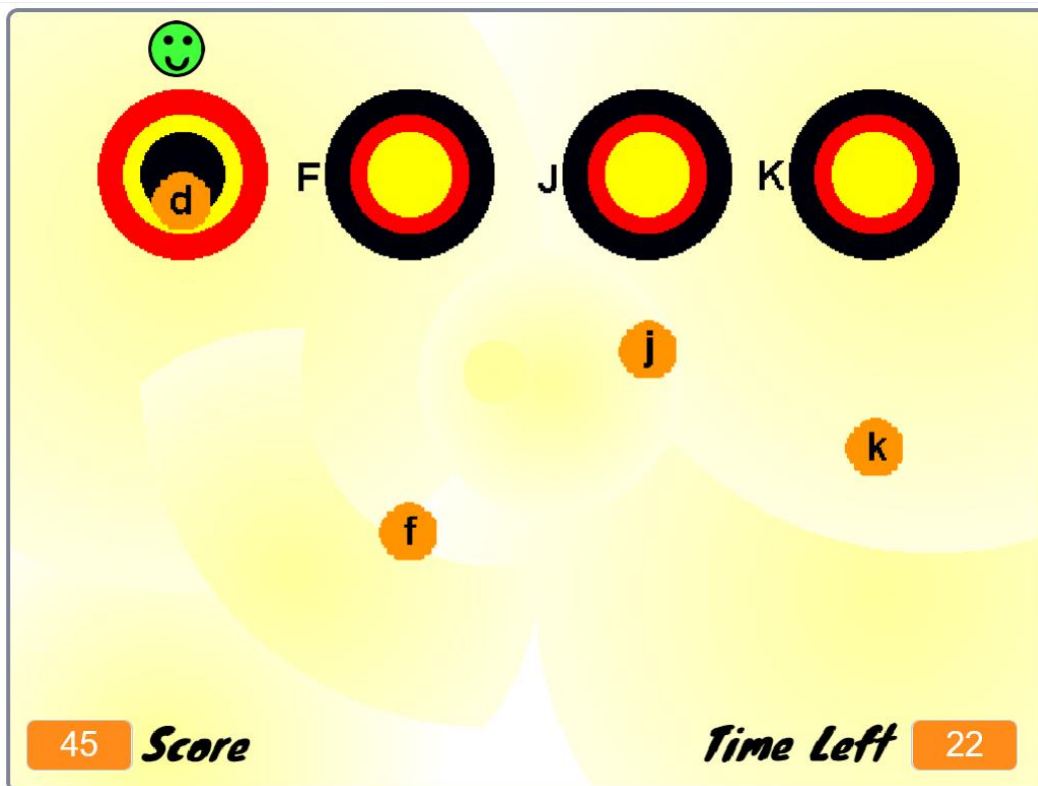## Sample SPLASH Screen

Sample EASY Screen

Sample MEDIUM Screen

Score 45

Time Left 22

Sample HARD Screen

Score 45

Time Left 22

You Win

45 Final Score