



Independently program a skater game.

For the student who has completed Frogger, this activity tasks him/her with creating a pre-designed game requiring basic programming skills.

Created by: Susan Miller, University of Colorado, School of Education

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Student Instructions: Scalable Game Design Assessment using AgentSheets – Independently program a game:

- A. Using AgentSheets, create a new project and select 32x32 pixels for the agent size.
- B. Save the project in a folder designated by your teacher.
- C. Create the following agents:
 - A person (don't spend too much time on this; 3 minutes is enough time!) Mask the color "white" so it is see-through.
 - Also create a duplicate depiction that is rotated 90 degrees. Call it "FallenPerson".
 - A garage (again, 3 minutes is enough time – this is not art class!) Mask the color "white" so it is see-through.
 - A skateboard (again, 3 minutes!) Mask the color "white" so it is see-through.
 - A wall (this is simply a black square that we will use as a border for the worksheet)
- D. Create a new worksheet, save it and call it "skater worksheet".
 - Keep it small, no need to resize the worksheet.
 - With the wall agent, create a whole border for the worksheet (all 4 sides of the worksheet).
 - Add the person in the bottom of the worksheet in the white space (just above the wall).
 - Add the garage on the middle left side of the worksheet by the left wall.
 - Save your worksheet!
- E. Create the following behaviors:

This game will have the garage generate skateboards that the person can hop onto. If the person runs into the wall while on the skateboard, the game is over. Read below for the details of the behavior.

 - Make the garage generate skateboards every 1 second.
 - Make the skateboard move to the right across the worksheet every 0.5 seconds.
 - Make the wall absorb the skateboards once they collide.
 - Make the person be able to hop in all 4 directions using the arrow keys.
 - If the person hops and lands on a skateboard, then he should be able to ride on it as it moves across the worksheet.
 - If the person collides with the wall while riding the skateboard, make him appear like he fell (use the FallenPerson depiction), show a message that says "CRASH!" then reset simulation.
- F. Extra Credit! Can you make the game NOT allow the person to go on the wall, so he is stuck inside the wall frame?