

CSCI 4250/5250 100 pts Project 3

In this project, we will complete the Halloween game by adding the following features:

- When the game starts, the landscape is drawn. The bow and arrow is also visible in the center lower screen. When one presses the 's' or 'S' key, a ghost appears at a random position in the upper half of the screen. Continue to press the 's' or 'S' key will allow the ghost to change to a different random position..
- Pressing the 'l' or 'L' key or the left arrow key rotates the bow to the left to aim for the ghost. Similarly, pressing the 'r' or 'R' key or the right arrow key rotates the bow to the right to aim for the ghost.
- Pressing the 'f' or 'F' key fires the arrow. When the arrow is fired, it moves forward in the **current direction**. After a fixed length of movement (that ensures the arrow exits the screen), the ghost disappears and the arrow re-appears on the bow (which remains at the center lower screen).

Bonus: You are encouraged to argument the basic version of the game with additional features for bonus points:

- At any point during the game, pressing 'b' or 'B' key leads back to the starting scene as described in the first bullet above (5 pts)
- Add another (Halloween themed) object as target. It also appears when the 's' or 'S' key is pressed. (5 pts)
- When the game starts, instead of letting the ghost simply appear at a random location, make the ghost fly into the scene before stopping at a final position. The flying track should hit 5 random locations. (10 pts)
- As soon as the ghost is hit, make the ghost and arrow disappear. For this feature, you can define a boundary box around the center of the ghost location. When the flying arrow enters this boundary box, the ghost is considered hit. (10 pts)

Please clearly list all the bonus features you have added in the main comment section at the beginning of the javascript program.

To turn in the program

Turn in source files using the Dropbox for "Project 3" on D2L.