

ICS 201 Game

In plain English:

First I have to get all my images I'm using and upload them to the same folder. I also have to decide what size my game will be and the background. I have to import all of the sounds I'm using. I have to make my character I'm using which in this case is a bag full of carrots. I have to set the speed and make sure it's able to move left and right and shoot bullets out. I also have to add a health bar and then make the actual bullets. When I add the bullets I have to have it come out from a certain area and when it hits the bunnies, it disappears. I also have to make the bunnies and make them move left and right at the same time, while also being in rows and columns as well as having them shoot bullets out randomly. Then I can add explosion effects and bg music also a winning screen and losing screen.

Pseudocode:

First I size the game window and initialize pygame. I also have to make a bunch of variables including FPS, the screen, the music, rows, columns, and game over. I also have to add the background file and draw that.

I add spaceship class and have it include the image im using, the health and health remaining.

Then I set the movement speed and add the keys to press so it moves, I also have to make sure it doesn't go off the screen when I move it left and right.

When I press the spacebar I want it to shoot out bullets and play the sound I chose

Then I want it to display a health bar under the character and have it change from green to red when I lose health.

I also Have to make the bullets for my character as well as the bunnies so I want them to be a different image for both. And when my bullets hit the bunnies, the sound of them getting hit will play and the bullet will disappear. The same thing will happen when I get hit and I lose health -> so the health bar goes to red

For the bunnies I chose certain images and have them move side to side. When hitting the bunnies will have an animation using a couple different images of explosions or crumbs so like an eating animation.

Then I make a bunch of different groups for the characters and bullets so they all can run. And I have one main terminal where the game loop is. In the game loop, the background is drawn and the fps is there. I also make the alien bullets randomized and making sure when I get hit a certain amount of times, the game ends. If its game over, text on the screen appears and says game over. But if I win, it will say I won.

I add the countdown in the main terminal so it shows up at the beginning before the game starts using a timer and having it subtract a number each time.

Lastly I have to draw all the groups I made so they all work and I add the event handler which closes the game if I exit it