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clc
clear
close all

fprintf('*****\n')
fprintf('          Paint Ball\n')
fprintf('*****\n')

paintball_scene = simpleGameEngine('retro_pack.png',16,16,8); %paint ball
sprites
sprite_sheet_contents =
[1:32;33:64;65:96;97:128;129:160;161:192;193:224;225:256;257:288;289:320;321:
352;353:384;385:416;417:448;449:480;481:512;513:544;545:576;577:608;609:640;6
41:672;673:704;705:736;737:768;769:800;801:832;833:864;865:896;897:928;929:96
0;961:992;993:1024];

bl = 1; %blank sprite
m = 769; %man sprite
f = 68; %fence sprite
g = 161; %grass sprite
x = 590; %X sprite

drawScene(paintball_scene,sprite_sheet_contents([bl, bl, bl; f, f, f; g, g,
g; f, f, f; bl, bl, bl])) % 1layer base scene

title('Welcome to Paintball!', 'FontSize', 16)
xlabel('Press ''space'' bar to continue!')

key = getKeyboardInput(paintball_scene); %to get the keyboard input of the
space bar to start the game
pause(0.1);

for n = 1:1000

xlabel(' ')

array1 = [bl, bl, bl; f, f, f; g, g, g; f, f, f]; %array to add to the
players location selection

array2 = [f, f, f; g, g, g; f, f, f]; %array to add to the players enemy
selection

array3 = [bl, bl, bl; bl, bl, bl; bl, bl, bl];

store_values_player = zeros(5,3); %place to store picked locations
store_values_enemy = zeros(5,3); % place to store picked locations

[r1,c1,b1] = getMouseInput(paintball_scene); %setup the locations of the
graphics to pick from
pause(0.1);

if b1 == 1

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drawScene(paintball_scene, sprite_sheet_contents([array1; click_location(c1)]))
% first scene to edit the graphics
    store_values_player(5,c1) = 1; % stored all the locations picked by both
in their own matrix of zeros
end

[r2,c2,b2] = getMouseInput(paintball_scene); %second input of the guess to
be stored in a matrix to later compare for game logic
pause(0.1);

if b2 == 1
    store_values_player(1,c2) = 1;
end

enemy_pick1 = randi(3); % top enemy pick

enemy_pick2 = randi(3); % bottom enemy pick

if enemy_pick1 == 1 % hard coded the random enemy pick for the top
    en_pick_local1 = [769,1,1];
    store_values_enemy(1,enemy_pick1) = 1;
elseif enemy_pick1 == 2
    en_pick_local1 = [1,769,1];
    store_values_enemy(1,enemy_pick1) = 1;
elseif enemy_pick1 == 3
    en_pick_local1 = [1,1,769];
    store_values_enemy(1,enemy_pick1) = 1;
end

if enemy_pick2 == 1 % hard coded the random enemy pick for the bottom
    en_pick_local2 = [769,1,1];
    store_values_enemy(5,enemy_pick2) = 1;
elseif enemy_pick2 == 2
    en_pick_local2 = [1,769,1];
    store_values_enemy(5,enemy_pick2) = 1;
elseif enemy_pick2 == 3
    en_pick_local2 = [1,1,769];
    store_values_enemy(5,enemy_pick2) = 1;
end

test_enemy_top = store_values_enemy(1,:);
test_enemy_bottom = store_values_enemy(5,:);
test_player_top = store_values_player(1,:);
test_player_bottom = store_values_player(5,:);

playerx_choice_value = 0;

if store_values_player(1,1) == 1 % game logic to take an array and turn it
into the second layer scene with jus the Xs
    playerx_choice_value = playerx_choice_value + 1;
elseif store_values_player (1,1) == 0 && store_values_player(1,2) == 1
    playerx_choice_value = playerx_choice_value + 2;
elseif store_values_player (1,1) == 0 && store_values_player(1,2) == 0 &&

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store_values_player(1,3) == 1
    playerx_choice_value = playerx_choice_value + 3;

end

secondlayer_sprite = [click_location2(playerx_choice_value); array3;
click_location2(enemy_pick2)]; % built the second layer scene

drawScene(paintball_scene,sprite_sheet_contents([en_pick_locall;array2;click_
location(c1)]),secondlayer_sprite) % implemented the second layer scene

title('', 16)

test = 0; % win, lose, draw game logic
if test_player_top == test_enemy_top % 2=win 1=draw 0=lose
    test = test + 1;
else
    test = test + 0;
end

if test_enemy_bottom == test_player_bottom
    test = test + 0;
else
    test = test + 1;
end

if test == 2 % display win, lose, or draw
    annotation('textbox', [0.4, 0.4, 0.1, 0.1], 'String', "You
Win!","Color','k','EdgeColor','k','BackgroundColor','w')
    pause(1)
    delete(findall(gcf,'type','annotation'))
elseif test == 1
    annotation('textbox', [0.43, 0.4, 0.1, 0.1], 'String',
"Draw.", 'Color','k','EdgeColor','k','BackgroundColor','w')
    pause(1)
    delete(findall(gcf,'type','annotation'))
elseif test == 0
    annotation('textbox', [0.4, 0.4, 0.1, 0.1], 'String', "You
Lose.", 'Color','k','EdgeColor','k','BackgroundColor','w')
    pause(1)
    delete(findall(gcf,'type','annotation'))
end

title('Pick Again', 'FontSize', 16)

drawScene(paintball_scene,sprite_sheet_contents([bl, bl, bl; f, f, f; g, g,
g; f, f, f; bl, bl, bl])) % reset scene

end

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