

Week 7: Assignment 7: Using Animation + Tiles

Due Oct 12 at 12:59am**Points** 30**Questions** 3**Available** Oct 3 at 1am - Dec 15 at 12:59am 2 months**Time Limit** None

Instructions

Description

For this assignment, you may create an original game of your choosing, or extend examples found in the Phaser Examples at <http://phaser.io/examples> (<http://phaser.io/examples>). You will use the Phaser JavaScript library to explore some of the possibilities of working with spritesheets, animation, texture atlases and tile sprites. Many of the concepts are covered in the assigned reading from specific sections of Chapter 6 in *An Introduction to HTML5 Game Development with Phaser.js*. The assignment challenges you to integrate your own custom JavaScript code and external graphic asset files.

Requirements

Build a game that takes user input via keyboard or pointer (mouse). Your game must incorporate spritesheets, animation sequences, and tile sprites loaded from a texture atlas. Your game does not need to display a score, but should utilize the Phaser render state to display some debugging information.

1. Use your own bitmap images for sprite art, or assets that the author licenses as open source. A great online repository is OpenGameArt found at <https://opengameart.org/> (<https://opengameart.org/>).
2. Set the dimensions of your game world to any dimensions you wish. Use the *Phaser.CANVAS* mode for rendering the game.
3. Incorporate use of one or more spritesheet images and define one or more animation sequences using the *Phaser.Animation* class.
4. Display and manage multiple tile sprites using a texture atlas and *Phaser.Tilemap* class. Not all of your game's sprites need to be tile sprites, but some must be.
5. Include a block of code to run during the *render* state of your Phaser game that displays some debugging information about the current gameplay.
6. Validate the JavaScript in your work and provide a screenshot: <http://esprima.org/demo/validate.html> (<http://esprima.org/demo/validate.html>).

Purpose

Begin working with spritesheets for animation and texture atlases to define large game worlds via tile sprites.

Tools

- Cloud9 IDE code editor and file manager

- Chrome browser with Chrome developer tools
- Phaser JavaScript library found at <http://phaser.io/> (<http://phaser.io/>)
- JavaScript code validator found at <http://esprima.org/demo/validate.html> (<http://esprima.org/demo/validate.html>)
- Tiled or TexturePacker spritesheet/texture atlas editors found at <http://www.mapeditor.org/> (<http://www.mapeditor.org/>) or <https://www.codeandweb.com/texturepacker> (<https://www.codeandweb.com/texturepacker>)
- OpenGameArt asset repository found at <https://opengameart.org/> (<https://opengameart.org/>)

Submission Directions

1. If you have not already done so, share your Cloud9 workspace with the instructor's account, **srjcewilde**. For instructions on sharing a workspace, see <https://docs.c9.io/docs/share-a-workspace> (<https://docs.c9.io/docs/share-a-workspace>).
2. Create a folder inside of your Cloud9 workspace.
3. Name your folder "module07".
4. Upload a copy of the latest release of version 2/CE of the Phaser.js library file (phaser.min.js) to your "module07" folder, along with any image assets used for sprite display.
5. Complete all JavaScript coding needed to meet assignment requirements.
6. Make a screenshot of the validation confirmation screen. Upload the screenshot to question 7.1.
7. Preview your HTML file containing your JavaScript in Cloud9 using the running application, and copy the URL where your file can be viewed on the Internet. Enter the preview URL for your page for question 7.2.
8. Copy the contents of your custom JavaScript code and paste into your response to question 7.3.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	less than 1 minute	0 out of 30 *

* Some questions not yet graded

❗ Correct answers will be available on Dec 15 at 1am.

Score for this quiz: 0 out of 30 *

Submitted Oct 3 at 1:32pm

This attempt took less than 1 minute.

Question 1	Not yet graded / 10 pts

Upload the screenshot of the Esprima JavaScript Validator validation of your JavaScript code.

Ensure that no errors remain in the final validated code for full credit.

 [code_validation.PNG](#)

<https://canvas.santarosa.edu/files/1680903/download>

Question 2

Not yet graded / 10 pts

Enter the Preview URL for the HTML file containing your JavaScript for this assignment in your Cloud9 workspace.

For full credit:

1. *Make sure you have shared your Cloud9 workspace with the instructor account srjcewilde.*
2. *Ensure your code accomplishes the requirements of the assignment, without errors.*

Your Answer:

https://cs74-42-srjc-fall-2018-joshbarnard.c9users.io/module07/thirsty_cowboy.html

Question 3

Not yet graded / 10 pts

Copy the contents of your custom JavaScript code and paste into your response to this question.

Your Answer:

```
var game = new Phaser.Game(
800, 600, Phaser.CANVAS, 'phaser-example',
```

```
{ preload: preload, create: create, update: update, render: render }
);

function preload() {

game.load.tilemap('level1', 'assets/json/level1.json', null,
Phaser.Tilemap.TILED_JSON );
game.load.image('tiles-1', 'assets/images/tiles-1.png' );

game.load.spritesheet( 'cowboy', 'assets/images/Cowboy-sprite.png', 30, 42
);

game.load.image( 'beer', 'assets/images/beerBottle-verticle_sprite_small.png'
);
game.load.image( 'whiskey', 'assets/images/whiskey-sprite_small.png' );
game.load.image( 'background', 'assets/images/desert-background.png' );

game.load.audio( 'music', 'assets/audio/spagetti_western.ogg' );
game.load.audio( 'slurp', 'assets/audio/slurping.wav' );

}

var map;
var tileset;
var layer;
var cowboy;
var cursors;
var bg;

function create() {

game.physics.startSystem(Phaser.Physics.ARCADE);

game.stage.backgroundColor = '#000000';

bg = game.add.tileSprite(0, 0, 800, 600, 'background');
bg.fixedToCamera = true;

map = game.add.tilemap('level1');

map.addTilesetImage('tiles-1');

map.setCollisionByExclusion( [ 13, 14, 15, 16, 46, 47, 48, 49, 50, 51 ] );

layer = map.createLayer('Tile Layer 1');

// Un-comment this on to see the collision tiles
// layer.debug = true;

layer.resizeWorld();
```

```
game.physics.arcade.gravity.y = 250;

cowboy = game.add.sprite( 42, 30, 'cowboy' );
game.physics.enable( cowboy, Phaser.Physics.ARCADE );

cowboy.body.bounce.y = 0.2;
cowboy.body.collideWorldBounds = true;
//cowboy.body.setSize(20, 32, 5, 16);

cowboy.animations.add( 'standing', [ 4 ], 10, true );
cowboy.animations.add( 'walking_left', [ 0, 1, 2, 3 ], 10, true );
cowboy.animations.add( 'walking_right', [ 5, 6, 7, 8 ], 10, true );
cowboy.animations.add( 'jump', [ 9 ], 10, true );

game.camera.follow(cowboy);

cursors = game.input.keyboard.createCursorKeys();

// Game Music
music = game.add.audio( 'music' );
music.play();

beers = game.add.group();
beers.enableBody = true;
whiskeys = game.add.group();
whiskeys.enableBody = true;
slurp = game.add.audio( 'slurp' );

// Create collectables across the map with slight variance each time.
for( var i = 0; i < 10; i++ )
{
    // Create a coin inside of the 'coins' group
    var beer = beers.create( game.world.randomX, game.world.randomY, 'beer'
    );
    var whiskey = whiskeys.create( game.world.randomX, game.world.randomY,
    'whiskey' );
    // Sets coins gravity
    //beer.body.gravity.y = 0;
    //whiskey.body.gravity.y = 0;
}

}

function update() {

    game.physics.arcade.collide( cowboy, layer );
    game.physics.arcade.collide( beers, layer );
```

```
game.physics.arcade.collide( whiskeys, layer );

game.physics.arcade.overlap( cowboy, beers, collectBeer, null, this);
game.physics.arcade.overlap( cowboy, whiskeys, collectWhiskey, null, this);

//beer.body.collideWorldBounds = true;
//whiskey.body.collideWorldBounds = true;


cowboy.body.velocity.x = 0;

if (cursors.left.isDown)
{
    cowboy.body.velocity.x = -150;
    cowboy.animations.play( "walking_left" );
    //cowboy.scale.x = -1;
}
else if (cursors.right.isDown)
{
    cowboy.body.velocity.x = 150;
    cowboy.animations.play( "walking_right" );
    //cowboy.scale.x = 1;
}
else {
    cowboy.animations.play( "standing" );
}

if ( cursors.up.isDown && cowboy.body.onFloor() )
{
    cowboy.body.velocity.y = -250;
    cowboy.animations.play( "jump" );

    if( cowboy.body.onFloor() )
    {
        cowboy.animations.play( "jump" );
    }
}

function collectBeer( cowboy_Object, beer_Object )
{
    beer_Object.kill();
    slurp.play();
}

function collectWhiskey( cowboy_Object, whiskey_Object )
{

```

```
whiskey_Object.kill();
slurp.play();
}

}

function render () {

game.debug.body(cowboy);
game.debug.bodyInfo(cowboy, 16, 24);

}
```

Quiz Score: **0** out of 30