Game Design Document

*Idea:*

I will create a game that has a stick figure, controlled by the user using the mouse and keyboard, carrying a camera. The game is 2d. You will be able to move horizontally, left and right, and vertically, up and down. There will be enemies, randomly spawned in. 10 enemies will be spawned in at the beginning, and another enemy will spawn in every time an enemy is killed. So, there will not be less than 10 enemies at a time. Every 30 seconds more enemies will join the game, increasing the number of total enemies, and the difficulty. The enemies will have swords (dragon scimitars), and they will try to kill your character. You can kill the enemies by taking a picture with your camera, by pressing the left mouse button while aimed at the enemy. After being shot by the camera, the enemies will no longer be able to harm the player, and will shrink in size and move towards the camera, finally being captured inside of your camera. The camera can only hold 10 pictures on the sd card at a time. So the data of the enemies stored on the card will have to be erased in order to kill more enemies, by pressing *r. When enemies are killed, they will drop eggs. There is a 1/10 probability of an enemy dropping an egg after being killed. There are 4 different types of eggs. There is a ¼ probability of one of the eggs being dropped, if the game decides to drop an egg. Each egg will give some health to the user. The amount of health depends on the egg (3, 7, 12, or 15 health points).*

*The enemies will do 0.03 damage to the player if they touch the player.*

*The player can instantly kill the enemies.*

*Objective:* The objective of the game is to survive as long as possible.

*Design Document:*

Most of the code is placed in the “main” timeline, in frame 1, in order to control the flow of the program. Other code is placed on the movie clips, so that they act individually, to control themselves, and know when they’ve hit something. Everything is controlled dynamically.

*~~~~~~~~~~~~Main timeline: frame 1 - algorithm~~~~~~~~~~~~*

*Algorithm:*

Attach the player.

Attach the player’s camera.

Attach the field of view, outlines of the camera.

Initialize variables:

Player’s health.

Time game has been running for.

Number of egg’s captured.

Camera’s memory used.

Total enemies currently in game.

Total enemies allowed in game.

Has the game started.

Depth value.

Radiance number.

Camera rotation.

Should more enemies be added.

Initialize textformat:

Normal textbox format.

Game over text box format.

Set movie clip starting locations.

Initialize drawing.

Check if player’s health is greater than 0.

Event handler: move player.

If player moves, start game.

Spawn enemies.

Display player stats.

Using event handler’s:

Rotate camera.

Check for mouse down, or shoot.

If mouse down.

Attach shutter sound.

Attach hit line (hit test’s with objects).

Update time running.

Every 30 seconds add players.

Else

Tell player to move to start game.

If player’s health is not greater than 0.

Create text boxes.

Game over.

Drawing instructions.

Using event handler’s:

Paint.

*~~~~~~~~~~~~~End of Main algorithm~~~~~~~~~~~~~*

*~~~~~~~~~~~~~onMouseDown function~~~~~~~~~~~~*

*Algorithm:*

If memory isn’t full and the game has started and health is greater than 0.

Call shoot function.

Increase memory by 1.

Else if health is less than or equal to 0.

Call paint function.

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~rotateCamera function~~~~~~~~~~~~*

*Algorithm:*

Create temp movie clips.

For Camera and fov clips.

Find the rotation direction of the camera to the mouse.

Rotate movieclips.

Camera.

FOV.

HitLine.

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~shoot function~~~~~~~~~~~~*

*Algorithm:*

Initialize variables.

hyp.

x.

y.

Play shutter sound.

Attach hitLine movie clip.

Set hitLine position.

Set hitLine rotation.

Find the x and y component for the path of hitLine to travel.

If hitLine distance moved is less than 50.

Move hitLine.

Else.

Remove this movie clip.

memFlag = true.

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~movePlayer function~~~~~~~~~~~~*

*Algorithm:*

Check if key is down.

If w is pressed.

Move player up.

Call moveObjects function.

If s is pressed.

Move player down.

Call moveObjects function.

If a is pressed.

Move player left.

Call moveObjects function.

If d is pressed.

Move player right.

Call moveObjects function.

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~moveObjects function~~~~~~~~~~~~*

*Algorithm:*

Move camera with the player.

Move fov with the player.

Set startGame = true.

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~spawnEnemies function~~~~~~~~~~~~*

*Algorithm:*

Attach enemy move clip.

Set enemy position.

Increase enemies by 1.

Increase depth by 1.

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~paint function~~~~~~~~~~~~*

*Algorithm:*

Check if key is down.

If w is pressed.

Draw line up.

If s is pressed.

Draw line down.

If a is pressed.

Draw line left.

If d is pressed.

Draw line right.

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~dropEgg function~~~~~~~~~~~~*

*Algorithm:*

Get random number and set it to eggNum.

Attach egg movie clip using eggNum.

Set egg position to the position of the dead enemy.

Increase depth by 1.

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~eraseMemory function~~~~~~~~~~~~*

*Algorithm:*

If the r key is pressed.

Set memory to 0.

Remove the erase texfield.

If memFlag is true.

Call displayMem function.

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~stats function~~~~~~~~~~~~*

*Algorithm:*

Create Health textfield.

Set health text.

Set health text format.

Create memory textfield.

Set memory text.

Set memory text format.

Create time textfield.

Set time text.

Set time text format.

Create egg textfield.

Set egg text.

Set egg text format.

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~randomRange function~~~~~~~~~~~~*

*Algorithm:*

Accepts two values.

Returns a random number within the range.

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~wait function~~~~~~~~~~~~*

*Algorithm:*

This function does nothing but be called by setInterval, in order to create a delay.

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~~~~Stick\_Man(Player) design~~~~~~~~~~~~~~~*

*Design:*

Create a stick figure that appears to be holding an invisible camera.

Link it for Exporting.

*~~~~~~~~~~~~~End of Stick\_Man(Player) clip~~~~~~~~~~~~*

*~~~~~~~~~~~~~~~~Camera design~~~~~~~~~~~~~~~~*

*Design:*

Obtain a transparent photo of a camera. Sideview.

Attach photo to a movie clip.

Link it for Exporting.

*~~~~~~~~~~~~~~~~End of Camera clip~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~~~~FOV design~~~~~~~~~~~~~~~~*

*Design:*

Create a single horizontal line.

Link it for Exporting.

*~~~~~~~~~~~~~~~~End of FOV clip~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~~~~HitLine design~~~~~~~~~~~~~~~~*

*Design:*

*Create a horizontal line.*

*Link it for Exporting.*

*~~~~~~~~~~~~~~~~End of HitLine clip~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~~~Enemy design + algorithm~~~~~~~~~~~~~~~~*

*Design:*

*Create a stick figure like the player, but with a angry face.*

*Attach sword to the enemy, manually.*

*Link it for Exporting.*

*Algorithm:*

Initialize variables.

Move speed.

Drop loot.

Find distance of THIS enemy to the PLAYER.

If close to the player.

Move towards the player.

Else.

Use setInterval to move randomly.

Hit Test.

With the hitLine clip.

If true, this enemy is now dead.

With the player.

If true, lower player’s health.

If dead.

Shrink and move towards the camera, as if the enemy is being captured by the camera.

Check if enemy should drop an egg.

If player is dead.

Remove myself from this world.

*~~~~~~~~~~~~~~~~End of Enemy clip~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~moveAround function~~~~~~~~~~~~*

*Algorithm:*

*Get random number.*

*If number = 1.*

*Move left a random distance.*

*Else.*

*Move right a random distance.*

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~moveToPlayer function~~~~~~~~~~~~*

*Algorithm:*

*If distance to player(x component) is greater than 0.*

*Move this enemy toward the player, horizontally.*

*If distance to player(y component) is greater than 0.*

*Move this enemy toward the player, vertically.*

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~enemyDead function~~~~~~~~~~~~*

*Algorithm:*

Initialize variable:

Vector: This enemy to player.

Make this enemy smaller, using secret formula with the vector.

Move this enemy towards the player.

If this enemy is close to the player.

Call die function.

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~die function~~~~~~~~~~~~*

*Algorithm:*

Lower the enemies variable on the main timeline.

Remove this enemy movie clip.

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~range function~~~~~~~~~~~~*

*Algorithm:*

Accepts two values.

Returns a random number within the range.

*~~~~~~~~~~~~~~~~End of function~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~~~~Egg1 design + algorithm~~~~~~~~~~~~~~~~*

*Design:*

Create a new movie clip, and attach a photo of an egg, with a transparent background.

Link it for Exporting.

*Algorithm:*

Using hit test.

If true.

Increase eggCount.

Increase player health by 3.

Remove myself from this world.

*~~~~~~~~~~~~~~~~End of Egg1 clip~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~~~~Egg2 design + algorithm~~~~~~~~~~~~~~~~*

*Design:*

Create a new movie clip, and attach a photo of an egg, with a transparent background.

Link it for Exporting.

*Algorithm:*

Using hit test.

If true.

Increase eggCount.

Increase player health by 7.

Remove myself from this world.

*~~~~~~~~~~~~~~~~End of Egg2 clip~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~~~~Egg3 design + algorithm~~~~~~~~~~~~~~~~*

*Design:*

Create a new movie clip, and attach a photo of an egg, with a transparent background.

Link it for Exporting.

*Algorithm:*

Using hit test.

If true.

Increase eggCount.

Increase player health by 12.

Remove myself from this world.

*~~~~~~~~~~~~~~~~End of Egg3 clip~~~~~~~~~~~~~~~~*

*~~~~~~~~~~~~~~~~Egg4 design + algorithm~~~~~~~~~~~~~~~~*

*Design:*

Create a new movie clip, and attach a photo of an egg, with a transparent background.

Link it for Exporting.

*Algorithm:*

Using hit test.

If true.

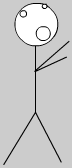
Increase eggCount.

Increase player health by 15.

Remove myself from this world.

*~~~~~~~~~~~~~~~~End of Egg4 clip~~~~~~~~~~~~~~~~*

*Obtain Art:*



*The main player.*



*The main characters camera, used by the user..*



*Object used to hit test with the enemies when the player shoots. Fires from the camera at the enemies, like the flash of a camera.*

*Outline of the Camera field of view.*



*Enemy.*

**

*Weapon of the enemies.*

Level 1 Egg



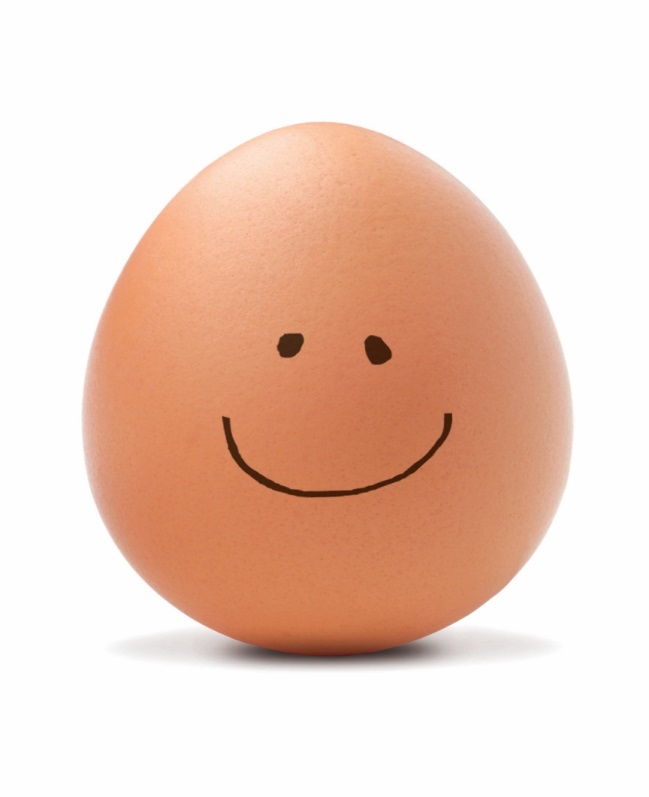
*An egg dropped by the enemies. Gives 3 health to the player.*

Level 2 Egg



*An egg dropped by the enemies. Gives 7 health to the player.*

Level 3 Egg



*An egg dropped by the enemies. Gives 12 health to the player.*

*Level 4 Egg*



*An egg dropped by the enemies. Gives 15 health to the player.*

*Implement:*

*~~~~~~~~~~~~~Main code for frame 1~~~~~~~~~~~~~*

*attachMovie ("fov1", "fov1", 2);*

*attachMovie ("fov1", "fov2", 3);*

*attachMovie ("player", "player", 4);*

*attachMovie ("camera", "camera", 5);*

*// Stats.*

*health = 100;*

*time = 0;*

*eggCount = 0;*

*memory = 0;*

*enemies = 0;*

*totalEnemiesAllowed = 10;*

*startGame = false;*

*depth = 12;*

*var radiance:Number = 180/Math.PI;*

*cameraRotation = 0;*

*addEnemies = false;*

*x = 100;*

*y = 100;*

*// Textbox settings.*

*var fmt = new TextFormat();*

*fmt.font = "Arial";*

*fmt.size = 30;*

*var over = new TextFormat();*

*over.font = "Arial";*

*over.size = 70;*

*// Set location.*

*player.\_x = 200;*

*player.\_y = 50;*

*camera.\_x = player.\_x + 31;*

*camera.\_y = player.\_y - 15;*

*fov1.\_x = camera.\_x;*

*fov1.\_y = camera.\_y + 7;*

*fov2.\_x = camera.\_x + 2;*

*fov2.\_y = camera.\_y + 2;*

*player.moveTo(x, y);*

*player.lineStyle(1);*

*\_root.onEnterFrame = function()*

*{*

*// Play is player is not dead.*

*if (health > 0)*

*{*

*// Move player.*

*movePlayer();*

*//enemies();*

*// Start game after player moves.*

*if (startGame)*

*{*

*// Spawn enemies.*

*for (i = enemies; i < totalEnemiesAllowed; i++)*

*{*

*spawnEnemies();*

*trace("Spawn!" + depth);*

*}*

*//Mouse.hide();*

*// HUD.*

*stats();*

*// Rotate camera..*

*rotateCamera();*

*// Display instructions to erase memory.*

*if(memory >= 10)*

*eraseMemory();*

*time = Math.round(getTimer()/1000);*

*if ((time%30) == 0 && addEnemies == true)*

*{*

*totalEnemiesAllowed += (totalEnemiesAllowed%30);*

*addEnemies = false;*

*trace("depth:IJJJJJJJJJJJJJJJJJJJJJ"+totalEnemiesAllowed);*

*}*

*else if ((time%30) != 0)*

*{*

*addEnemies = true;*

*}*

*trace("depth:"+depth);*

*trace("Number of enemies: " + enemies);*

*trace("Number of enemies allowed: " + (totalEnemiesAllowed%30));*

*}*

*}*

*else*

*{*

*// Game over.*

*createTextField("goField", 11, 100, 300, 450, 200);*

*goField.text = "GAME OVER";*

*goField.setTextFormat(over);*

*// Draw instructions.*

*createTextField("drawInst", 12, -150, 0, 850, 200);*

*drawInst.text = "Draw! W = up, A = left, S = down, D = right";*

*drawInst.setTextFormat(fmt);*

*paint();*

*}*

*}*

*// Shoot.*

*this.onMouseDown = function()*

*{*

*if (memory < 10 && startGame == true && health > 0)*

*{*

*shoot();*

*memory++;*

*}*

*else if(health <= 0)*

*{*

*paint();*

*}*

*}*

*// Rotate Camera.*

*function rotateCamera()*

*{*

*//rotation of player.*

*//Player rotation. Used src from file"rotate-movieclips-toward-mouse"*

*//from site: http://www.freeactionscript.com/2009/02/math-rotate-movieclips-toward-mouse/*

*//set temp movieclip*

*var tempClip:MovieClip = eval(camera);*

*var tempClip1:MovieClip = eval(fov1);*

*var tempClip2:MovieClip = eval(fov2);*

*//var tempClip3:MovieClip = eval(hitLine);*

*//calculate rotation*

*walkdirection = -(Math.atan2(\_xmouse-tempClip.\_x, \_ymouse-tempClip.\_y))\*radiance;*

*//set rotation*

*if (true)*

*{*

*tempClip.\_rotation = walkdirection;*

*tempClip1.\_rotation = walkdirection-20;*

*tempClip2.\_rotation = walkdirection+20;*

*//tempClip3.\_rotation = walkdirection+20;*

*hitLine.\_rotation = walkdirection;*

*hitLine.moveTo(camera.\_x + 16, camera.\_y);*

*}*

*}*

*// Shoot.*

*function shoot()*

*{*

*hyp = 50;*

*x = 0;*

*y = 0;*

*// Play shutter sound.*

*s1 = new Sound();*

*s1.attachSound("shutter");*

*s1.start();*

*//\_root.createEmptyMovieClip("hitLine",50);*

*//hitLine.lineStyle(1,0,100);*

*attachMovie("hitLine", "hitLine", 6);*

*startX = camera.\_x + 17;*

*startY = camera.\_y;*

*hitLine.\_x = startX;*

*hitLine.\_y = startY;*

*hitLine.\_rotation = camera.\_rotation;*

*x = hyp\*Math.cos((camera.\_rotation-90)\*Math.PI/180);*

*y = hyp\*Math.sin((camera.\_rotation-90)\*Math.PI/180);*

*hitLine.onEnterFrame = function()*

*{*

*if (Math.abs(startX - hitLine.\_x) < 50 && Math.abs(startY - hitLine.\_y) < 50)*

*{*

*hitLine.\_x -= x;*

*hitLine.\_y -= y;*

*hitLine.\_yscale +=Math.abs(startX - hitLine.\_x)\*250;*

*hitLine.\_xscale +=1;*

*myTimer = setInterval(wait, 0.25); // calls the function after 1 second*

*}*

*else*

*{*

*removeMovieClip("hitLine");*

*}*

*}*

*memFlag = true;*

*}*

*// Move.*

*function movePlayer()*

*{*

*// W move up.*

*if (Key.isDown(87) && player.\_y > -150)*

*{*

*player.\_y -= 10;*

*moveObjects();*

*}*

*// S move down.*

*if (Key.isDown(83) && player.\_y < 530)*

*{*

*player.\_y += 10;*

*moveObjects();*

*}*

*// A move Left.*

*if (Key.isDown(65) && player.\_x > -420)*

*{*

*player.\_x -= 10;*

*moveObjects();*

*}*

*// D move right.*

*if (Key.isDown(68) && player.\_x < 910)*

*{*

*player.\_x += 10;*

*moveObjects();*

*}*

*}*

*function moveObjects()*

*{*

*// Move camera.*

*camera.\_x = player.\_x + 31;*

*camera.\_y = player.\_y - 15;*

*// Move field of view.*

*fov1.\_x = camera.\_x;*

*fov1.\_y = camera.\_y + 7;*

*fov2.\_x = camera.\_x + 2;*

*fov2.\_y = camera.\_y + 2;*

*startGame = true;*

*}*

*// Spawn enemies.*

*function spawnEnemies()*

*{*

*attachMovie ("enemy", "enemy"+depth, depth);*

*do*

*{*

*tooClose = false;*

*\_root["enemy"+depth].\_x = randomRange(-200, 800);*

*\_root["enemy"+depth].\_y = randomRange(-50, 600);*

*if (Math.abs((\_root["enemy"+depth].\_x)-(player.\_x)) < 120 &&*

*Math.abs((\_root["enemy"+depth].\_y)-(player.\_y)) < 150)*

*tooClose = true;*

*}while(tooClose)*

*createSword();*

*enemies++;*

*depth++;*

*}*

*// Paint.*

*function paint()*

*{*

*trace("paint");*

*// Up = W.*

*if (Key.isDown(87))*

*{*

*player.lineTo(x \* 5, (--y \* 5));*

*}*

*// Down = S.*

*if (Key.isDown(83))*

*{*

*player.lineTo(x \* 5, (++y \* 5));*

*}*

*// Left = A.*

*if (Key.isDown(65))*

*{*

*player.lineTo((--x \* 5), y \* 5);*

*}*

*// Right = D.*

*if (Key.isDown(68))*

*{*

*player.lineTo((++x \* 5), y \* 5);*

*}*

*}*

*function dropEgg(x, y)*

*{*

*eggNum = randomRange(1, 4);*

*attachMovie("egg"+eggNum, "egg"+depth, depth);*

*\_root["egg"+depth].\_x = x;*

*\_root["egg"+depth].\_y = y;*

*depth++;*

*}*

*function eraseMemory()*

*{*

*// Press R to erase memory.*

*if (Key.isDown(82))*

*{*

*memory = 0;*

*erase.removeTextField();*

*}*

*if (memFlag)*

*displayMem();*

*}*

*// Display textbox.*

*function displayMem()*

*{*

*createTextField("erase", 32, 600, 550, 350, 40);*

*erase.text = "Press R to erase memory!";*

*erase.setTextFormat(fmt);*

*memFlag = false;*

*}*

*function stats()*

*{*

*// Health.*

*createTextField("healthField", 7, 600, -90, 350, 40);*

*healthField.text = "Health: " + Math.round(health);*

*healthField.setTextFormat(fmt);*

*// Memory.*

*createTextField("memoryField", 8, 600, -50, 350, 40);*

*memoryField.text = "Memory: " + memory;*

*memoryField.setTextFormat(fmt);*

*// Time.*

*createTextField("timeField", 9, 600, -10, 350, 40);*

*timeField.text = "Time: " + Math.round(time);*

*timeField.setTextFormat(fmt);*

*// Eggs.*

*createTextField("eggField", 10, 600, 30, 350, 40);*

*eggField.text = "Eggs: " + Math.round(eggCount);*

*eggField.setTextFormat(fmt);*

*}*

*// Get a random number within a range.*

*function randomRange(minNum:Number, maxNum:Number):Number*

*{*

*return (Math.floor(Math.random() \* (maxNum - minNum + 1)) + minNum);*

*}*

*function wait() { // a function called 'wait'*

*// trace("I am waiting!!"); // the action you want, in this case a trace.*

*}*

*// End of Main code.*

*~~~~~~~~~~~~~Enemy code~~~~~~~~~~~~~*

*speed = 5;*

*drop = true;*

*this.onEnterFrame = function()*

*{*

*// Where to move.*

*xDis = this.\_x - \_root.player.\_x;*

*yDis = this.\_y - \_root.player.\_y;*

*// Move to player if in range.*

*if (Math.abs(xDis) < 310 || Math.abs(yDis) < 150)*

*{*

*moveToPlayer();*

*clearInterval(move1);*

*}*

*else*

*{*

*move1 = setInterval(moveAround(), 1000);*

*}*

*// Do a hit test with hitLine.*

*if (this.hitTest(\_root.hitLine))*

*{*

*dead = true;*

*}*

*// Do a hit test with hitLine.*

*if (this.hitTest(\_root.player) && !dead)*

*{*

*\_root.health -= 0.03;*

*}*

*if (dead)*

*{*

*// Drop loot :).*

*if (drop)*

*{*

*if (range(1, 50) == 7)*

*\_root.dropEgg(this.\_x, this.\_y);*

*drop = false;*

*}*

*trace("r: "+Math.round(Math.floor(Math.random() \* (10 - 1 + 1)) + 1));*

*speed = 10;*

*enemyDead();*

*}*

*if (\_root.health <= 0)*

*die();*

*}*

*function moveAround()*

*{*

*if (Math.round(range(0,1)) == 1)*

*{*

*for (i = 0; i < Math.random()\*10; i++)*

*{*

*this.\_x--;*

*}*

*}*

*else*

*{*

*for (i = 0; i < Math.random()\*10; i++)*

*{*

*this.\_x++;*

*}*

*}*

*}*

*function moveToPlayer()*

*{*

*if (Math.abs(xDis) >= 1)*

*this.\_x -= speed \*(xDis/Math.abs(xDis));*

*if (Math.abs(yDis) >= 1)*

*this.\_y -= speed \*(yDis/Math.abs(yDis));*

*}*

*function enemyDead()*

*{*

*c = Math.sqrt(xDis\*xDis + yDis\*yDis);*

*if (this.\_yscale > 0)*

*this.\_yscale -= (speed/c) \* c/speed + 1;*

*if (Math.abs(xDis) >= 1)*

*{*

*this.\_x -= 5 \*(xDis/Math.abs(xDis));*

*}*

*if (Math.abs(yDis) >= 1)*

*{*

*this.\_y -= 5\*(yDis/Math.abs(yDis));*

*}*

*if(Math.abs(xDis) < 30 && Math.abs(yDis) < 30)*

*{*

*die();*

*}*

*}*

*function die()*

*{*

*trace("Die!");*

*\_root.enemies--;*

*this.removeMovieClip();*

*}*

*function range(high, low)*

*{*

*return (Math.round(Math.floor(Math.random() \* (high - low + 1)) + low));*

*}*

*// End of Enemy code.*

*~~~~~~~~~~~~~Egg1 code~~~~~~~~~~~~~*

*this.onEnterFrame = function()*

*{*

*// Do a hit test with hitLine.*

*if (this.hitTest(\_root.player))*

*{*

*\_root.eggCount++;*

*\_root.health += 3;*

*this.removeMovieClip();*

*}*

*}*

*// End of Egg1 code.*

*~~~~~~~~~~~~~Egg2 code~~~~~~~~~~~~~*

*this.onEnterFrame = function()*

*{*

*// Do a hit test with hitLine.*

*if (this.hitTest(\_root.player))*

*{*

*\_root.eggCount++;*

*\_root.health += 7;*

*this.removeMovieClip();*

*}*

*}*

*// End of Egg2 code.*

*~~~~~~~~~~~~~Egg3 code~~~~~~~~~~~~~*

*this.onEnterFrame = function()*

*{*

*// Do a hit test with hitLine.*

*if (this.hitTest(\_root.player))*

*{*

*\_root.eggCount++;*

*\_root.health += 12;*

*this.removeMovieClip();*

*}*

*}*

*// End of Egg3 code.*

*~~~~~~~~~~~~~Egg4 code~~~~~~~~~~~~~*

*this.onEnterFrame = function()*

*{*

*// Do a hit test with hitLine.*

*if (this.hitTest(\_root.player))*

*{*

*\_root.eggCount++;*

*\_root.health += 15;*

*this.removeMovieClip();*

*}*

*}*

*// End of Egg4 code.*

*Test and Debug:*

The program has been tested and debugged. There are currently no bugs. The program is ready to be used by people.

*Finished Product:*

The game is now complete. The game is called *Scrambled Eggs.* All files for the game are in my mini-project folder. The files are called mini-project.fla and mini-project.swf.

*Maintenance:*

*The game is now complete. There are no bugs. However if some bugs are reported, then the game will be updated, and fixed.*