Full Rocket Launch Project Code

The JavaScript code used to program the full rocket animation (picture shown below) follows on the next page.

**Final result:**



### Code starts after this line.

/\*\*VARIABLES\*\*/

var rocket = {

x: 200,

y: 220

};

var drawCloud = function(xPos, yPos){

noStroke();

ellipse(xPos, yPos, 75, 65);

ellipse(xPos + 40, yPos, 75, 65);

ellipse(xPos + 40, yPos - 25, 75, 65);

ellipse(xPos + 80, yPos, 75, 65);

};

var gasCloud = {

op: 0

op2: 0,

op3: 0,

op4: 0,

op5: 0

};

/\*\*DRAWING\*\*/

draw = function() {

/\*\*SETTING\*\*/

background(227, 248, 255);

//Clouds

noStroke();

fill(255, 255, 255, 200);

ellipse(65, 45, 273, 11);

ellipse(65, 40, 134, 11);

ellipse(154, 31, 210, 4);

ellipse(149, 54, 105, 5);

ellipse(349, 73, 349, 7);

/\*\*ROCKET\*\*/

//General Rocket Styles

stroke(0, 89, 255);

fill(0, 89, 255);

//Rocket Body

arc(rocket.x, rocket.y, 91, 353, 180, 360);

quad(rocket.x - 60, rocket.y + 65, rocket.x - 46, rocket.y, rocket.x + 46, rocket.y, rocket.x + 60, rocket.y + 65);

//Capsule Window

fill(255, 255, 255);

stroke(0, 0, 0);

strokeWeight(1);

ellipse(rocket.x, rocket.y - 95, 40, 40);

//Exhaust Thruster

stroke(135, 135, 135);

fill(135, 135, 135);

quad(rocket.x - 30, rocket.y + 80, rocket.x - 20, rocket.y + 65, rocket.x + 20, rocket.y + 65, rocket.x + 30, rocket.y + 80);

//Animating the Rocket

rocket.y -= 0.5;

/\*\*GAS CLOUDS\*\*/

//Gas Clouds – Layer 1

fill(0, 0, 0, gasCloud.op);

drawCloud(125, 360);

drawCloud(184, 360);

drawCloud(154, 382);

//Gas Clouds - Layer 2

fill(0, 0, 0, gasCloud.op2);

drawCloud(66, 382);

drawCloud(264, 382);

//Gas Clouds - Layer 3

fill(0, 0, 0, gasCloud.op3);

drawCloud(144, 317);

drawCloud(213, 327);

drawCloud(195, 291);

drawCloud(154, 276);

//Gas Clouds - Layer 4

fill(0, 0, 0, gasCloud.op4);

drawCloud(167, 219);

drawCloud(151, 176);

//Gas Clouds - Layer 5

fill(0, 0, 0, gasCloud.op5);

drawCloud(189, 128);

drawCloud(147, 98);

drawCloud(185, 73);

//Animating the Gas Clouds

gasCloud.op += 3;

if (gasCloud.op > 150){

gasCloud.op2 += 3;

}

if (gasCloud.op2 > 150){

gasCloud.op3 += 3;

}

if (gasCloud.op3 > 300){

gasCloud.op4 += 3;

}

if (gasCloud.op4 > 400){

gasCloud.op5 += 3;

}

if(rocket.y < -10){

gasCloud.op += -12;

gasCloud.op2 += -10;

gasCloud.op3 += -10;

gasCloud.op4 += -5;

gasCloud.op5 += -4;

}

};

### End of code.