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.