Question1:

1. The flights are not moving because there is a problem in code that it is taking the co-ordinate values to NAN(not a number) so to rectify that problem I used parse Int so that it is converting that number to integer. Finally the flights are moving.

Example:

function Plane(posX = "", posY = "", destinationX = "", destinationY = "",departureTime=""){

this.src = "img/plane.jpg";

this.imgWidth = 40;

this.imgHeight = 40;

// here i did modifications to convert the not a number to integer so Problem will solve to move the flights.

this.posX = parseInt(posX);

this.posY = parseInt(posY);

this.destX = destinationX;

this.destY = destinationY;

this.currentStep = 0;

this.departureTime = parseInt(departureTime);

this.draw = function(){

var plane = document.createElement("img");

plane.setAttribute("src", this.src);

console.log("image moving"+" "+plane.getAttribute("src")+" "+this.posX+" "+this.posY);

ctx.drawImage(plane, this.posX, this.posY, this.imgWidth, this.imgHeight);

}

this.updateLocation = function(){

var distX = this.destX - this.posX;

var stepsLeft = nbSteps - this.currentStep;

var distY = this.destY - this.posY;

this.posX += distX / stepsLeft;

this.posY += distY / stepsLeft;

this.currentStep++;

}

}

1. The background image is not displaying because there the path for the image is given wrong so here is the code we need to change to display the background image. In the drawmap function there is a problem with the path.

Example:

function drawMap(){

var map = document.createElement("img");

//Here the path is missing so that i change the path to display the background

map.setAttribute("src", "img/Canada-1280-1107.png");

map.setAttribute("width", canvas.width);

map.setAttribute("height", canvas.height);

ctx.drawImage(map, 0, 0, canvas.width, canvas.height);

}

1. Here we need to set the time and the duration when to reach, if we set the time and the duration then all the three flights will move to the destination on the particular time.

$(document).ready(function(){

canvas = document.getElementById('myCanvas');

ctx = canvas.getContext('2d');

drawMap();

var flightJson = '{"flights":[{"departure":"Quebec","departureX":"734","departureY":"427","departureTime":"11","arrival":"Fredericton","arrivalX":"800","arrivalY":"422","duration":"6"},{"departure":"Quebec","departureX":"734","departureY":"427","departureTime":"109","arrival":"Yellowknife","arrivalX":"285","arrivalY":"271","duration":"6"},{"departure":"Quebec","departureX":"734","departureY":"427","departureTime":"62","arrival":"Regina","arrivalX":"336","arrivalY":"417","duration":"6"}]}';

console.log(flightJson);

var JSONObject = JSON.parse(flightJson);

var flights = JSONObject.flights;

console.log(flights);

console.log(flights[0].departure);

$("#myCanvas").click(function(){

var myPlane;

// Here we changed the for the loop actually in for each loop the data is not displaying so i change the loop to for each loop

for (i=0;i<flights.length;i++)

{

console.log(flights[i].departureX+" "+flights[i].departureY+" "+ flights[i].arrivalX+" "+ flights[i].arrivalY+" "+flights[i].departureTime);

myPlane = new Plane(flights[i].departureX, flights[i].departureY, flights[i].arrivalX, flights[i].arrivalY,flights[i].departureTime);

arrflights.push(myPlane);

}

console.log(arrflights);

setInterval(drawMovement, interval);

});

});

output Screens



