var svgContainer = d3.select("body").append("svg")

.attr("width", 200)

.attr("height", 200);

//Draw the Circle

var circle = svgContainer.append("circle")

.attr("cx", 90)

.attr("cy", 90)

.attr("r", 80);

document.getElementById("next").onclick = function() {reduceSlow(circle)};

function reduceSlow(circle){

circle.transition().duration(duration\*2)

.attr("r", 20);

}

Html

<!DOCTYPE html>

<meta charset="utf-8">

<head>

<title>D3 Starter Fun Time!</title>

<meta http-equiv="content-type" content="text/html;charset=utf-8" />

<link rel="stylesheet" href="./styles/simple-style.css">

<link rel="icon" href="./favicon/favicon.ico">

</head>

<body>

<clipPath id ="myClip">

<div id="chartDiv"></div>

</clipPath>

<div id="otherDiv"></div>

<button id="next">Next</button>

<script src="./libraries/d3.v5.min.js"></script>

<script>

var svgContainer = d3.select("body").append("svg")

.attr("width", 200)

.attr("height", 200);

//Draw the Circle

var circle = svgContainer.append("circle")

.attr("cx", 90)

.attr("cy", 90)

.attr("r", 80);

document.getElementById("next").onclick = function() {reduceSlow(circle)};

function reduceSlow(circle){

circle.transition().duration(duration\*2)

.attr("r", 20);

}

</script>

</body>

</html>

<!DOCTYPE html>

<meta charset="utf-8">

<head>

<title>D3 Starter Fun Time!</title>

<meta http-equiv="content-type" content="text/html;charset=utf-8" />

<link rel="stylesheet" href="./styles/simple-style.css">

<link rel="icon" href="./favicon/favicon.ico">

<script src="https://d3js.org/d3.v5.min.js"></script>

</head>

<body>

<p>Hello</p>

<clipPath id ="myClip">

<div id="chartDiv"></div>

</clipPath>

<div id="otherDiv"></div>

<button id="next">Next</button>

<script>

var svgContainer = d3.select("body").append("svg")

.attr("width", 400)

.attr("height", 400);

//Draw the Circle

var circle = svgContainer.append("circle")

.attr("cx", 90)

.attr("cy", 90)

.attr("fill","blue")

.attr("r", 80);

var smcircle = svgContainer.append("circle")

.attr("cx", 260)

.attr("cy", 90)

.attr("fill","blue")

.attr("r", 20);

</script>

</body>

</html>

#STATIC ENCODING: area

var svgContainer = d3.select("body").append("svg")

.attr("width", 400)

.attr("height", 400);

//Draw the Circle

var circle = svgContainer.append("circle")

.attr("cx", 90)

.attr("cy", 90)

.attr("fill","blue")

.attr("r", 80);

var smcircle = svgContainer.append("circle")

.attr("cx", 260)

.attr("cy", 90)

.attr("fill","blue")

.attr("r", 20);

#functions

function reduceSlow(circle){

circle.transition().duration(duration\*2)

.attr("r", 20);

}

function reduceMed(circle){

circle.transition().duration(duration)

.attr("r", 20);

}

function reduceFast(circle){

circle.transition().duration(duration/2)

.attr("r", 20);

}

function linearReductionFast(){

circle.transition()

.duration(duration/2)

.attr("cx", 600)

.attr("r",20)

}

function linearReductionMed(){

circle.transition()

.duration(duration)

.attr("cx", 600)

.attr("r",20)

}

function linearReductionSlow(){

circle.transition()

.duration(duration\*2)

.attr("cx", 600)

.attr("r",20)

}

// encoding: LENGTH

var svgContainer = d3.select("body").append("svg")

.attr("width", 700)

.attr("height", 700);

//Draw the Circle

var rect = svgContainer.append("rect")

.attr("x", 90)

.attr("y", 90)

.attr("width", 50)

.attr("fill","blue")

.attr("height", 100);

document.getElementById("next").onclick = function() {redSlow(rect)};

function redSlow(rect){

rect.transition().duration(duration\*2)

.attr("height", 30);

}

function redMed(rect){

circle.transition().duration(duration)

.attr("r", 20);

}

function redFast(rect){

circle.transition().duration(duration/2)

.attr("r", 20);

}

PULSATING CIRCLE

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Title</title>

<style>

circle {

fill: #0000FF;

stroke: #000000;

}

</style>

<script type="text/javascript" src="https://d3js.org/d3.v3.min.js"></script>

</head>

<body>

</body>

<script type="text/javascript">

var data = [

{"x": 50, "y": 50, "pulse": false},

];

var svg = d3.select("body")

.append("svg")

.attr("width", 2000)

.attr("height", 2000);

var plot\_area = svg

.append("g")

.attr("id", "plot-area")

.attr("transform", "translate(0, 0)");

var circles = plot\_area.selectAll("circle").data(data);

circles.enter()

.append("circle")

.attr("r", 30)

.attr("cx", function(d) { return d.x; })

.attr("cy", function(d) { return d.y; })

.attr("stroke-width", 2);

plot\_area.selectAll("circle")

.on("click", function(d) {

d.pulse = !d.pulse;

if (d.pulse) {

var selected\_circles = d3.select(this);

pulsate(selected\_circles);

}

});

function pulsate(selection) {

recursive\_transitions();

function recursive\_transitions() {

if (selection.data()[0].pulse) {

selection.transition()

.duration(400)

.attr("stroke-width", 2)

.attr("r", 15)

.ease('sin-in')

.transition()

.duration(800)

.attr('stroke-width', 3)

.attr("r", 30)

.ease('bounce-in')

.each("end", recursive\_transitions);

} else {

// transition back to normal

selection.transition()

.duration(200)

.attr("r", 30)

.attr("stroke-width", 2)

.attr("stroke-dasharray", "1, 0");

}

}

}

</script>

</html>

#POSITION STATIC

<!DOCTYPE html>

<meta charset="utf-8">

<head>

<title>D3 Starter Fun Time!</title>

<meta http-equiv="content-type" content="text/html;charset=utf-8" />

<link rel="stylesheet" href="./styles/simple-style.css">

<link rel="icon" href="./favicon/favicon.ico">

</head>

<body>

<clipPath id ="myClip">

<div id="chartDiv">

<!-- <button id="next">Next</button> -->

</div>

</clipPath>

<!-- <div id="otherDiv"></div> -->

<script src="./libraries/d3.v5.min.js"></script>

<!-- <script src="./scripts/main.js"></script> -->

<script type= "text/javascript">

var svgContainer = d3.select("body").append("svg")

.attr("width", 700)

.attr("height", 700);

//position

var dot = svgContainer.append("circle")

.attr("cx", 90)

.attr("cy", 90)

.attr("fill","blue")

.attr("pulse",false)

.attr("stroke-width", 2)

.attr("r", 5);

var dot = svgContainer.append("circle")

.attr("cx", 190)

.attr("cy", 90)

.attr("fill","blue")

.attr("pulse",false)

.attr("stroke-width", 2)

.attr("r", 5);

var myLine = svgContainer.append("svg:line")

.attr("x1", 40)

.attr("y1", 50)

.attr("x2", 40)

.attr("y2", 150)

.style("stroke", "rgb(6,120,155)")

</script>

</body>

</html>

#POSITION +SPEED

<!DOCTYPE html>

<meta charset="utf-8">

<head>

<title>D3 Starter Fun Time!</title>

<meta http-equiv="content-type" content="text/html;charset=utf-8" />

<link rel="stylesheet" href="./styles/simple-style.css">

<link rel="icon" href="./favicon/favicon.ico">

</head>

<body>

<clipPath id ="myClip">

<div id="chartDiv">

<button id="next">Plany Animation</button>

</div>

</clipPath>

<!-- <div id="otherDiv"></div> -->

<script src="./libraries/d3.v5.min.js"></script>

<!-- <script src="./scripts/main.js"></script> -->

<script type= "text/javascript">

duration = 5000

var svgContainer = d3.select("body").append("svg")

.attr("width", 700)

.attr("height", 700);

//position

var dot1 = svgContainer.append("circle")

.attr("cx", 90)

.attr("cy", 90)

.attr("fill","blue")

.attr("pulse",false)

.attr("stroke-width", 2)

.attr("r", 5);

var dot2 = svgContainer.append("circle")

.attr("cx", 190)

.attr("cy", 90)

.attr("fill","blue")

.attr("pulse",false)

.attr("stroke-width", 2)

.attr("r", 5);

var myLine = svgContainer.append("svg:line")

.attr("x1", 40)

.attr("y1", 50)

.attr("x2", 40)

.attr("y2", 150)

.style("stroke", "rgb(6,120,155)")

document.getElementById("next").onclick = function() {move(dot2)};

function move(dot2){

dot2.transition()

.duration(duration)

.attr("cx", 400)

}

</script>

</body>

</html>

#POSITION+SLOW SPEED

Same code as above with one change

function move(dot2){

dot2.transition()

.duration(duration\*2)

.attr("cx", 400)

}

#POSITION+HIGH SPEED

Same code as above with one change

function move(dot2){

dot2.transition()

.duration(duration/2)

.attr("cx", 400)

}

#ANGLES STATIC

<!DOCTYPE html>

<meta charset="utf-8">

<head>

<title>D3 Starter Fun Time!</title>

<meta http-equiv="content-type" content="text/html;charset=utf-8" />

<link rel="stylesheet" href="./styles/simple-style.css">

<link rel="icon" href="./favicon/favicon.ico">

</head>

<body>

<!-- <style>

.button{

position:absolute;

margin-bottom: 60%;

margin-right: 30%;

bottom:0;

right:0;

}

</style> -->

<div id="chartDiv">

<!-- <button class = "button" id="next">Play Animation</button> -->

</div>

<!-- <div id="otherDiv"></div> -->

<script src="./libraries/d3.v5.min.js"></script>

<!-- <script src="./scripts/main.js"></script> -->

<script type= "text/javascript">

duration = 5000

var svgContainer = d3.select("body").append("svg")

.attr("width", 700)

.attr("height", 700);

var myLine = svgContainer.append("svg:line")

.attr("x1", 40)

.attr("y1", 150)

.attr("x2", 250)

.attr("y2", 150)

.style("stroke", "rgb(6,120,155)")

var angle = svgContainer.append("svg:line")

.attr("x1", 40)

.attr("y1", 150)

.attr("x2", 250)

.attr("y2", 30)

.style("stroke", "rgb(6,120,155)")

var line = svgContainer.append("svg:line")

.attr("x1", 40)

.attr("y1", 150)

.attr("x2", 40)

.attr("y2", 10)

.style("stroke", "rgb(6,120,155)")

.attr("stroke-dasharray", "4")

</script>

</body>

</html>

#ANGLE + SPEED

<!DOCTYPE html>

<meta charset="utf-8">

<head>

<title>D3 Starter Fun Time!</title>

<meta http-equiv="content-type" content="text/html;charset=utf-8" />

<link rel="stylesheet" href="./styles/simple-style.css">

<link rel="icon" href="./favicon/favicon.ico">

</head>

<body>

<!-- <style>

.button{

position:absolute;

margin-bottom: 60%;

margin-right: 30%;

bottom:0;

right:0;

}

</style> -->

<div id="chartDiv">

<button class = "button" id="next">Play Animation</button>

</div>

<!-- <div id="otherDiv"></div> -->

<script src="./libraries/d3.v5.min.js"></script>

<!-- <script src="./scripts/main.js"></script> -->

<script type= "text/javascript">

duration = 5000

var svgContainer = d3.select("body").append("svg")

.attr("width", 700)

.attr("height", 700);

var myLine = svgContainer.append("svg:line")

.attr("x1", 40)

.attr("y1", 150)

.attr("x2", 250)

.attr("y2", 150)

.style("stroke", "rgb(6,120,155)")

var angle = svgContainer.append("svg:line")

.attr("x1", 40)

.attr("y1", 150)

.attr("x2", 40)

.attr("y2", 10)

.style("stroke", "rgb(6,120,155)")

var line = svgContainer.append("svg:line")

.attr("x1", 40)

.attr("y1", 150)

.attr("x2", 40)

.attr("y2", 10)

.style("stroke", "rgb(6,120,155)")

.attr("stroke-dasharray", "4");

document.getElementById("next").onclick = function() {move(angle)};

function move(angle){

angle.transition()

.duration(duration)

.attr("x2", 200)

}

</script>

</body>

</html>

#COLOR BLUE

<!DOCTYPE html>

<meta charset="utf-8">

<head>

<title>D3 Starter Fun Time!</title>

<meta http-equiv="content-type" content="text/html;charset=utf-8" />

<link rel="stylesheet" href="./styles/simple-style.css">

<link rel="icon" href="./favicon/favicon.ico">

</head>

<body>

<div id="chartDiv">

<button class = "button" id="next">Play Animation</button>

</div>

<script type="text/javascript" src="https://d3js.org/d3.v3.min.js"></script>

<script type= "text/javascript">

duration = 5000

var svgContainer = d3.select("body").append("svg")

.attr("width", 700)

.attr("height", 700);

var circle = svgContainer.append("circle")

.attr("cx", 90)

.attr("cy", 90)

.attr("fill","rgba(0,0,250, 1)")

.attr("pulse",false)

.attr("stroke-width", 2)

.attr("r", 80);

document.getElementById("next").onclick = function() {changeColor(circle)};

function changeColor(circle){

circle.transition()

.duration(duration/2)

.attr("fill","rgba(0,0,250, 0.6)")

}

</script>

</body>

</html>

# COLOR Low speed

<!DOCTYPE html>

<meta charset="utf-8">

<head>

<title>D3 Starter Fun Time!</title>

<meta http-equiv="content-type" content="text/html;charset=utf-8" />

<link rel="stylesheet" href="./styles/simple-style.css">

<link rel="icon" href="./favicon/favicon.ico">

</head>

<body>

<div id="chartDiv">

<button class = "button" id="next">Play Animation</button>

</div>

<script type="text/javascript" src="https://d3js.org/d3.v3.min.js"></script>

<script type= "text/javascript">

duration = 5000

var svgContainer = d3.select("body").append("svg")

.attr("width", 700)

.attr("height", 700);

var circle = svgContainer.append("circle")

.attr("cx", 90)

.attr("cy", 90)

.attr("fill","rgba(0,0,250, 1)")

.attr("pulse",false)

.attr("stroke-width", 2)

.attr("r", 80);

document.getElementById("next").onclick = function() {changeColor(circle)};

function changeColor(circle){

circle.transition()

.duration(duration\*2)

.attr("fill","rgba(0,0,250, 0.3)")

}

</script>

</body>

</html>

#COLOR low to high, normal speed

<!DOCTYPE html>

<meta charset="utf-8">

<head>

<title>D3 Starter Fun Time!</title>

<meta http-equiv="content-type" content="text/html;charset=utf-8" />

<link rel="stylesheet" href="./styles/simple-style.css">

<link rel="icon" href="./favicon/favicon.ico">

</head>

<body>

<script type="text/javascript" src="https://d3js.org/d3.v3.min.js"></script>

<div id="chartDiv">

<button class = "button" id="next">Play Animation</button>

</div>

<script type= "text/javascript">

duration = 5000

var svgContainer = d3.select("body").append("svg")

.attr("width", 700)

.attr("height", 700);

var circle = svgContainer.append("circle")

.attr("cx", 90)

.attr("c y", 90)

.attr("fill","rgba(0,0,250, 0.4)")

.attr("pulse",false)

.attr("stroke-width", 2)

.attr("r", 80);

document.getElementById("next").onclick = function() {changeColor(circle)};

function changeColor(circle){

circle.transition()

.duration(duration)

.attr("fill","rgba(0,0,250, 1)")

}

</script>

</body>

</html>

#NEW POSITION

<!DOCTYPE html>

<meta charset="utf-8">

<head>

<title>D3 Starter Fun Time!</title>

<meta http-equiv="content-type" content="text/html;charset=utf-8" />

<link rel="stylesheet" href="./styles/simple-style.css">

<link rel="icon" href="./favicon/favicon.ico">

</head>

<body>

<clipPath id ="myClip">

<div id="chartDiv">

<button id="next">Plany Animation</button>

</div>

</clipPath>

<!-- <div id="otherDiv"></div> -->

<script src="./libraries/d3.v5.min.js"></script>

<!-- <script src="./scripts/main.js"></script> -->

<script type= "text/javascript">

duration = 5000

var svgContainer = d3.select("body").append("svg")

.attr("width", 700)

.attr("height", 700);

var dot2 = svgContainer.append("circle")

.attr("cx", 100)

.attr("cy", 90)

.attr("fill","blue")

.attr("pulse",false)

.attr("stroke-width", 2)

.attr("r", 8);

var myLine = svgContainer.append("svg:line")

.attr("x1", 40)

.attr("y1", 50)

.attr("x2", 40)

.attr("y2", 150)

.style("stroke", "rgb(6,120,155)")

document.getElementById("next").onclick = function() {move(dot2)};

function move(dot2){

dot2.transition()

.duration(duration)

.attr("cx", 200)

}

</script>

</body>

</html>

#NEW POSITION static

<!DOCTYPE html>

<meta charset="utf-8">

<head>

<title>D3 Starter Fun Time!</title>

<meta http-equiv="content-type" content="text/html;charset=utf-8" />

<link rel="stylesheet" href="./styles/simple-style.css">

<link rel="icon" href="./favicon/favicon.ico">

</head>

<body>

<clipPath id ="myClip">

<div id="chartDiv">

<!-- <button id="next">Plany Animation</button> -->

</div>

</clipPath>

<!-- <div id="otherDiv"></div> -->

<script src="./libraries/d3.v5.min.js"></script>

<!-- <script src="./scripts/main.js"></script> -->

<script type= "text/javascript">

duration = 5000

var svgContainer = d3.select("body").append("svg")

.attr("width", 700)

.attr("height", 700);

var dot2 = svgContainer.append("circle")

.attr("cx", 150)

.attr("cy", 90)

.attr("fill","blue")

.attr("pulse",false)

.attr("stroke-width", 2)

.attr("r", 8);

var myLine = svgContainer.append("svg:line")

.attr("x1", 40)

.attr("y1", 50)

.attr("x2", 40)

.attr("y2", 150)

.style("stroke", "rgb(6,120,155)")

// document.getElementById("next").onclick = function() {move(dot2)};

function move(dot2){

dot2.transition()

.duration(duration)

.attr("cx", 200)

}

</script>

</body>

</html>

#LENGTH new

<!DOCTYPE html>

<meta charset="utf-8">

<head>

<title>D3 Starter Fun Time!</title>

<meta http-equiv="content-type" content="text/html;charset=utf-8" />

<link rel="stylesheet" href="./styles/simple-style.css">

z

<link rel="icon" href="./favicon/favicon.ico">

</head>

<body>

<clipPath id ="myClip">

<div id="chartDiv">

<button id="next">Play Animation</button>

</div>

</clipPath>

<!-- <div id="otherDiv"></div> -->

<script src="./libraries/d3.v5.min.js"></script>

<!-- <script src="./scripts/main.js"></script> -->

<script type= "text/javascript">

duration = 5000

var svgContainer = d3.select("body").append("svg")

.attr("width", 700)

.attr("height", 700);

//Draw the Circle

var rect = svgContainer.append("rect")

.attr("x", 90)

.attr("y", 90)

.attr("width", 20)

.attr("fill","blue")

.attr("height", 100);

document.getElementById("next").onclick = function() {redSlow(rect)};

function redSlow(rect){

rect.transition().duration(duration\*2)

.attr("y", 120)

.attr("height", 30);

}

</script>

</body>

</html>

#ANGLE+ fast Speed 60 degrees

<!DOCTYPE html>

<meta charset="utf-8">

<head>

<title>D3 Starter Fun Time!</title>

<meta http-equiv="content-type" content="text/html;charset=utf-8" />

<link rel="stylesheet" href="./styles/simple-style.css">

<link rel="icon" href="./favicon/favicon.ico">

</head>

<body>

<!-- <style>

.button{

position:absolute;

margin-bottom: 60%;

margin-right: 30%;

bottom:0;

right:0;

}

</style> -->

<div id="chartDiv">

<button class = "button" id="next">Play Animation</button>

</div>

<!-- <div id="otherDiv"></div> -->

<script src="./libraries/d3.v5.min.js"></script>

<!-- <script src="./scripts/main.js"></script> -->

<script type= "text/javascript">

duration = 5000

var svgContainer = d3.select("body").append("svg")

.attr("width", 700)

.attr("height", 700);

var myLine = svgContainer.append("svg:line")

.attr("x1", 40)

.attr("y1", 150)

.attr("x2", 200)

.attr("y2", 150)

.style("stroke", "rgb(6,120,155)")

var angle = svgContainer.append("svg:line")

.attr("x1", 40)

.attr("y1", 150)

.attr("x2", 40)

.attr("y2", 10)

.style("stroke", "rgb(6,120,155)")

var line = svgContainer.append("svg:line")

.attr("x1", 40)

.attr("y1", 150)

.attr("x2", 40)

.attr("y2", 10)

.style("stroke", "rgb(6,120,155)")

.attr("stroke-dasharray", "4");

document.getElementById("next").onclick = function() {move(angle)};

function move(angle){

angle.transition()

.duration(duration/2)

.attr("x2", 120.83)

}

</script>

</body>

</html>