1. **AREA**
2. **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">

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

</head>

<body>

<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","black")

.attr("r", 80);

var smcircle = svgContainer.append("circle")

.attr("cx", 260)

.attr("cy", 90)

.attr("fill","black")

.attr("r", 30);

</script>

</body>

</html>

\*\*\*\*\*\*\*\*\*\*

1. **Motion**

<!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>

<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","black")

.attr("r", 80);

var smcircle = svgContainer.append("circle")

.attr("cx", 260)

.attr("cy", 90)

.attr("fill","black")

.attr("r", 20);

document.getElementById("next").onclick = function() {linearReductionFast()}; //REPLACE WITH OTHER FUNCTION NAMES DEFINED BELOW

#functions

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)

}

</script>

</body>

</html>

\*\*\*\*\*\*\*\*\*\*

1. **POSITION**
2. **Static**

#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="https://d3js.org/d3.v5.min.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","black")

.attr("pulse",false)

.attr("stroke-width", 2)

.attr("r", 5);

var dot = svgContainer.append("circle")

.attr("cx", 190)

.attr("cy", 90)

.attr("fill","black")

.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(0,0,0)")

</script>

</body>

</html>

1. **Motion**

#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">Play Animation</button>

</div>

</clipPath>

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

<script src="https://d3js.org/d3.v5.min.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","black")

.attr("pulse",false)

.attr("stroke-width", 2)

.attr("r", 5);

var dot2 = svgContainer.append("circle")

.attr("cx", 190)

.attr("cy", 90)

.attr("fill","black")

.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(0,0,0)")

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

function moveSlow(dot2){

dot2.transition()

.duration(duration\*2)

.attr("cx", 400)

}

function moveFast(dot2){

dot2.transition()

.duration(duration/2)

.attr("cx", 400)

}

function moveSlowMed(dot2){

dot2.transition()

.duration(duration)

.attr("cx", 400)

}

</script>

</body>

</html>

\*\*\*\*\*\*\*\*

1. **ANGLE**
2. **Static**

#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>

<div id="chartDiv">

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

</div>

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

<script src="https://d3js.org/d3.v5.min.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(0,0,0)")

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

.attr("x1", 40)

.attr("y1", 150)

.attr("x2", 250)

.attr("y2", 30)

.style("stroke", "rgb(0,0,0)")

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

.attr("x1", 40)

.attr("y1", 150)

.attr("x2", 40)

.attr("y2", 10)

.style("stroke", "rgb(0,0,0)")

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

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

.attr("x1", 300)

.attr("y1", 150)

.attr("x2", 550)

.attr("y2", 150)

.style("stroke", "rgb(0,0,0)")

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

.attr("x1", 300)

.attr("y1", 150)

.attr("x2", 300)

.attr("y2", 10)

.style("stroke", "rgb(0,0,0)")

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

</script>

</body>

</html>

\*\*\*\*\*\*\*\*\*\*

1. **Motion**

<!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="https://d3js.org/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(0,0,0")

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

.attr("x1", 40)

.attr("y1", 150)

.attr("x2", 40)

.attr("y2", 10)

.style("stroke", "rgb(0,0,0)")

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

.attr("x1", 40)

.attr("y1", 150)

.attr("x2", 40)

.attr("y2", 10)

.style("stroke", "rgb(0,0,0)")

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

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

function moveSlow(angle){

angle.transition()

.duration(duration\*2)

.attr("x2", 200)

}

function moveFast(angle){

angle.transition()

.duration(duration/2)

.attr("x2", 200)

}

function moveMed(angle){

angle.transition()

.duration(duration)

.attr("x2", 200)

}

</script>

</body>

</html>

\*\*\*\*\*\*\*

1. **LENGTH**
2. **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">

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="https://d3js.org/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","black")

.attr("height", 100);

var rect = svgContainer.append("rect")

.attr("x", 150)

.attr("y", 150)

.attr("width", 20)

.attr("fill","black")

.attr("height", 40);

</script>

</body>

</html>

1. **Motion**

<!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="https://d3js.org/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","black")

.attr("height", 100);

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

function redSlow(rect){

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

.attr("y", 160)

.attr("height", 40);

}

function redMed(rect){

rect.transition().duration(duration)

.attr("y", 160)

.attr("height", 40);

}

function redFast(rect){

rect.transition().duration(duration/2)

.attr("y", 160)

.attr("height", 40);

}

</script>

</body>

</html>

\*\*\*\*\*\*

1. **COLOR**
2. **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>

<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(0,0,0, 1)")

.attr("pulse",false)

.attr("stroke-width", 2)

.attr("r", 80);

var circle = svgContainer.append("circle")

.attr("cx", 300)

.attr("cy", 90)

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

.attr("pulse",false)

.attr("stroke-width", 2)

.attr("r", 80);

</script>

</body>

</html>

\*\*\*\*\*\*\*\*\*\*

1. **Motion**

<!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(0,0,0, 1)")

.attr("pulse",false)

.attr("stroke-width", 2)

.attr("r", 80);

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

function changeColorSlow(circle){

circle.transition()

.duration(duration\*2)

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

}

function changeColorMed(circle){

circle.transition()

.duration(duration)

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

}

function changeColorSlowFast(circle){

circle.transition()

.duration(duration\*2)

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

}

</script>

</body>

</html>