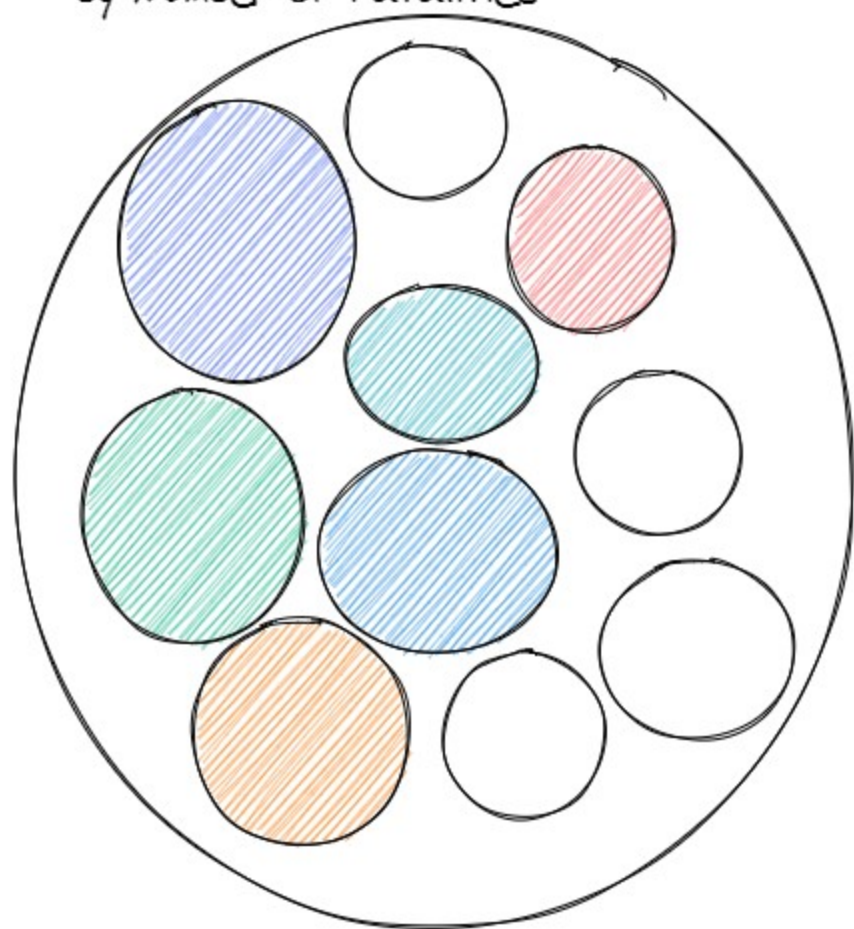
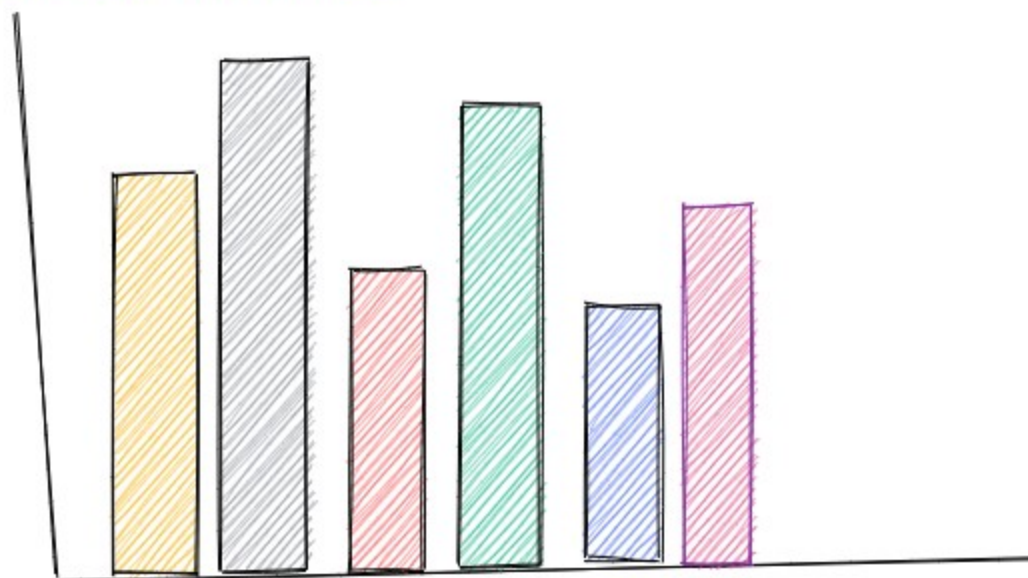


Bubble Chart with Airline Operator  
by Number of Fatalities

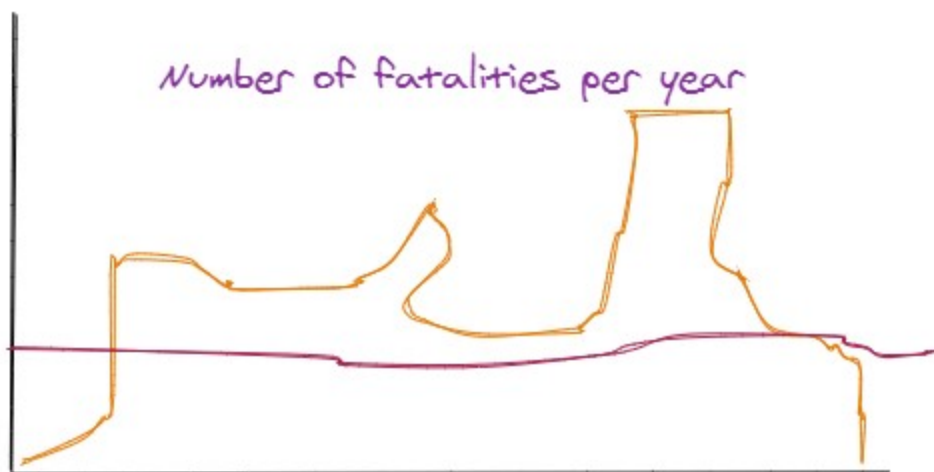


Narrative Early Planning

Causes of Fatalities



Number of fatalities per year



## //JS OBJECTS

```
import { Table } from "./Table.js";
import { Linechart } from "./Linechart.js";
import { Linechart2 } from "./Linechart2.js";
import { Bubble } from "./Bubble.js";
import { Pie } from "./Pie.js";
import { Barchart } from "./Barchart.js";

let causesTable, linechart, linechart2, bubble, pie, barchart;
```

## //DATA VARIABLES

```
let state = {

  geojson: null,
  airplaneData: null,
  fatalities: null,
  causesTable: null,
  topAirlines: null,
  barchart: null,
  summary: d3.select("#summary").append("div.row"),
  filteredData: [],

};
```

## //DATA PATHS

```
Promise.all([
  d3.csv("../Data/commercial.csv", d3.autoType),
  d3.csv("../Data/causes.csv", d3.autoType),
  d3.csv("../Data/crash-location.csv", d3.autoType),
  d3.csv("../Data/fatalities-per-year.csv", d3.autoType),
  d3.csv("../Data/bubble20.csv", d3.autoType),
  d3.csv("../Data/Airplane_Fatalities.csv", d3.autoType),
  d3.csv("../Data/causesTable.csv", d3.autoType),
]).then(([commercial, causes, barchart, fatalities, topAirlines, airplaneData, causesTable]) => {
  state.commercial = commercial ;
  state.causes = causes ;
  state.fatalities = fatalities;
  state.topAirlines = topAirlines;
  state.airplaneData = airplaneData;
  state.causesTable = causesTable;
```

```
state.barchart = barchart;  
  console.log("state: ", state);  
  init();  
});
```

### //CALLING OBJECTS

```
function init(){  
  pie = new Pie(state, setGlobalState);  
  barchart = new Barchart(state, setGlobalState);  
  causesTable = new Table(state, setGlobalState);  
  linechart = new Linechart(state, setGlobalState);  
  linechart2 = new Linechart2(state, setGlobalState);  
  bubble = new Bubble(state, setGlobalState);  
  console.log("table", table);  
  draw();  
}
```

### //DRAWINGS OBJECTS

```
function draw() {  
  console.log("linechart", linechart);  
  state.filteredData = state.airplaneData.filter(d=> d.Operator === state.selectedOperator);  
  barchart.draw(state, setGlobalState);  
  pie.draw(state, setGlobalState);  
  causesTable.draw(state, setGlobalState);  
  linechart.draw(state, setGlobalState);  
  linechart2.draw(state, setGlobalState);  
  bubble.draw(state, setGlobalState);  
}
```

### //I DECLARED, BUT I DID NOT USE THIS FUNCTION

```
function setGlobalState(nextState) {  
  state = { ...state, ...nextState };  
  console.log("new state:", state);  
  draw();  
}
```