山东大学计算机科学与技术学院

大数据分析实践课程实验报告

学号：202300130030	姓名：赵汉哲	班级：数据 23
实验题目：Canis 实践		
实验学时：4	实验日期：2025.11.14	

实验目标：
熟悉 Canis 的语法（“选择（selector）”、“划分(grouping)”、“时序效果(timing)”、“过渡效果（type）”）

实验描述：
使用 Canis 提供的 Online Editor 进行操作

1. Causes of Mortality over time
   代码如下：

```
{
  "charts": [
    {
      "source": "./charts/nightingale.dsvg"
    }
  ],
  "animations": [
    {
      "selector": ".rectangle",
      "grouping": {
        "groupBy": "Type",
        "reference": "start after previous",
        "grouping": {
          "groupBy": "id",
          "delay": 200
        }
      },
      "effects": [
        {
          "type": "wheel",
          "duration": 600
        }
      ]
    }
  ]
}
```

   将"groupBy": "Type"改为"groupBy": "Time"，使动画生成顺序从按类型生成改为按月生成：

```
11          "groupBy": "Month",
```

2. Event Planning
   代码如下：

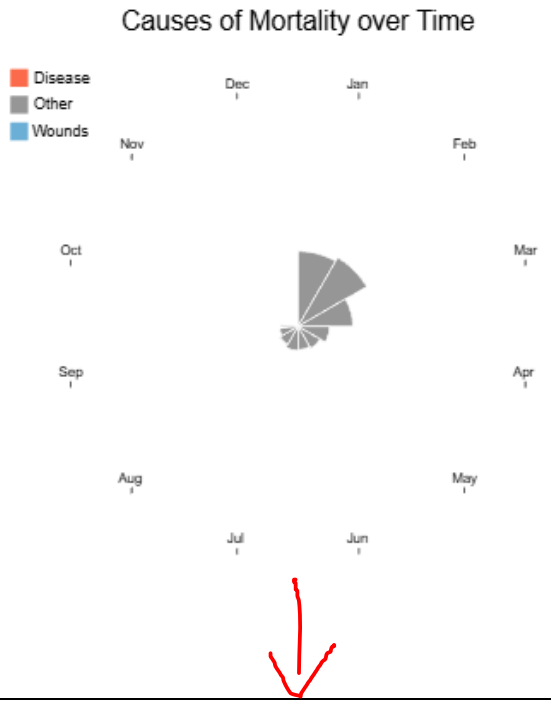
```
{
  "constants": [
    {
      "name": "unitTime",
      "value": 600
    },
    {
      "name": "fastDuration",
      "value": 300
    }
  ],
  "charts": [
    {
      "source": "./charts/gantt.dsvg"
    }
  ],
  "animations": [
    {
      "selector": ".axis-domain",
      "effects": [
        {
          "type": "grow",
          "duration": "fastDuration"
        }
      ]
    },
    {
      "reference": "start after previous",
      "selector": ".axis-tick, .axis-label",
      "effects": [
        {
          "duration": "fastDuration",
          "type": "fade"
        }
      ]
    },
    {
      "reference": "start after previous",
      "selector": ".text",
      "effects": [
        {
          "offset": {
            "field": "eventStartTime",
            "minOffset": "unitTime"
          },
          "duration": "fastDuration",
          "type": "wipe left"
        }
      ]
    },
    {
      "selector": ".rectangle",
      "effects": [
        {
          "offset": {
            "field": "eventStartTime",
            "minOffset": "unitTime"
          },
          "duration": {
            "field": "eventDurationTime",
            "minDuration": "unitTime"
          },
          "type": "wipe left"
        }
      ]
    }
  ]
}
```

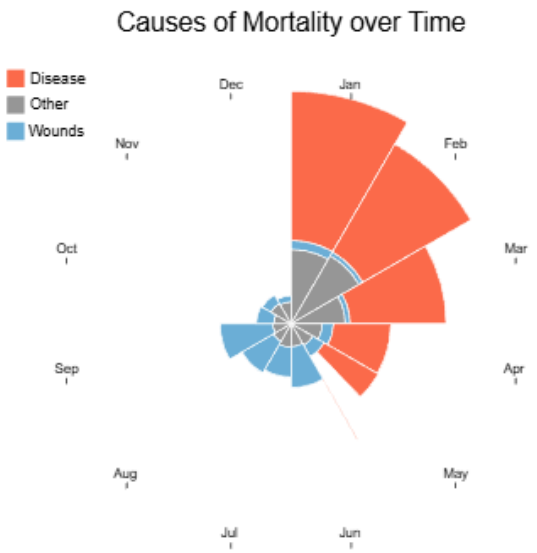
将".text"和".rectangle"的"type": "wipe left"改为"type": "wipe right"，使文本和矩形从右边开始出现。

结果图片：

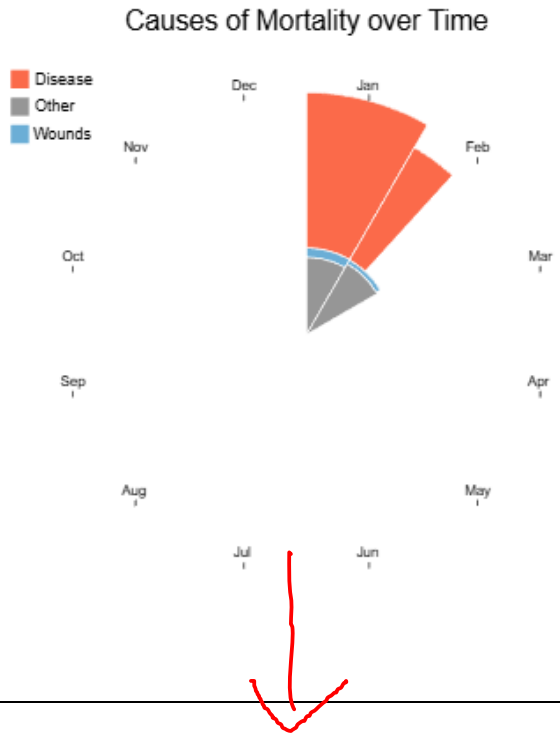
1. Causes of Mortality over time

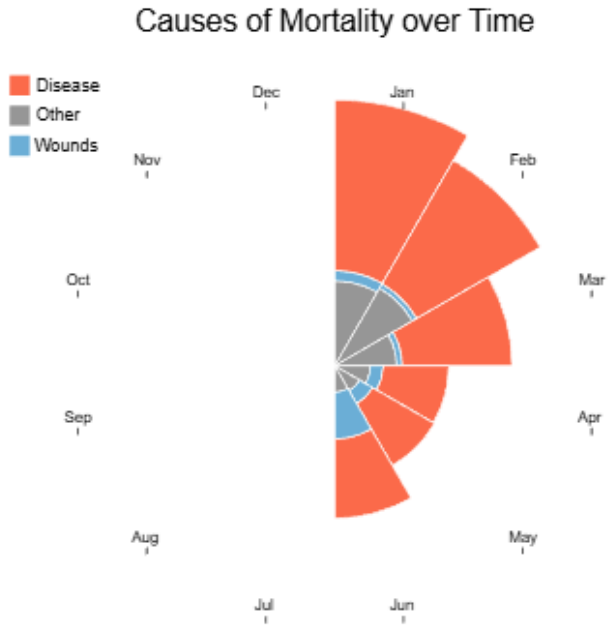
"groupBy": "Type":



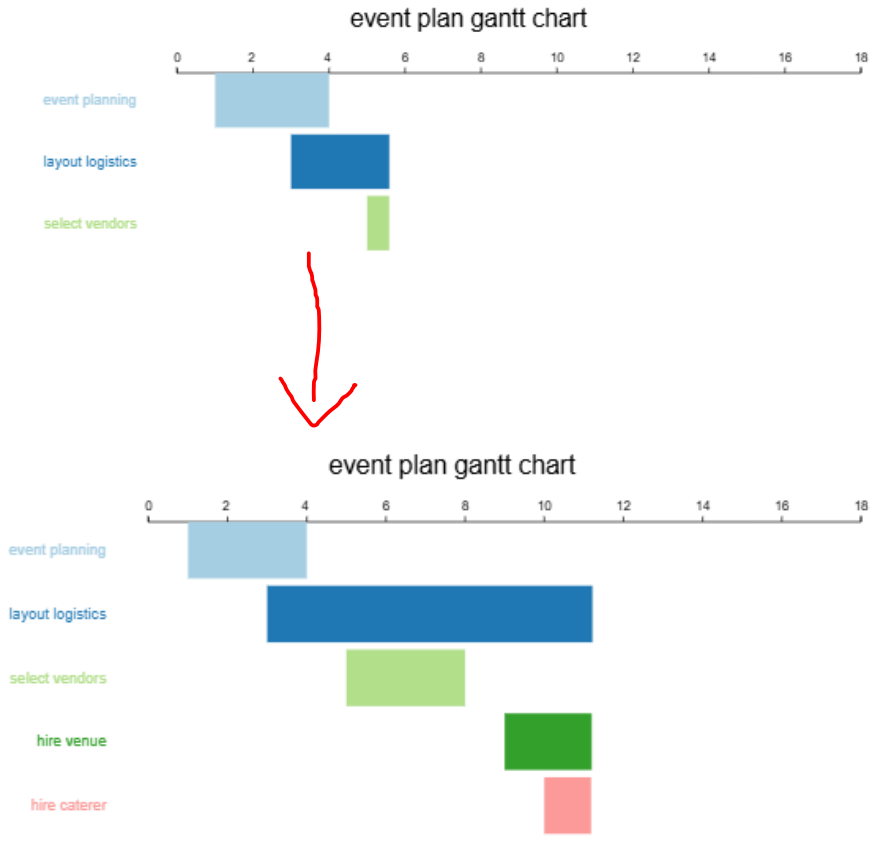


"groupBy": "Time":

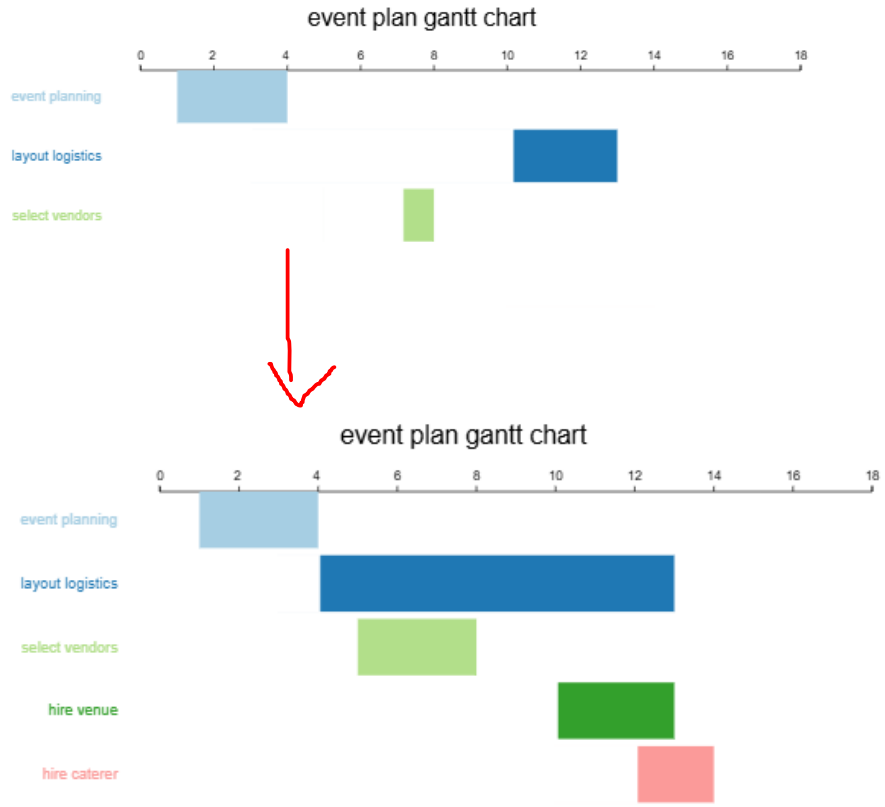




2. Event Planning
"wipe left":



"wipe right":


event plan gantt chart
0
2
4
6
8
10
12
14
16
18
event planning
layout logistics
select vendors
event plan gantt chart
0
2
4
6
8
10
12
14
16
18
event planning
layout logistics
select vendors
hire venue
hire caterer