

FIT3179 DV2

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Lab: Tutorial 4, Tuesday 10am

5DS

Sheet: 1

IDEAS

choropleth Map	Histogram	Line chart
Proportional symbol map	dot map	violin plot
Tree map	heat map	Parallel coordinate plot
		dumbbell plot

FILTER

line chart
Proportional sunburst
Choropleth

CATEGORIES

```
graph TD; Speedcubing --> Players[Players]; Speedcubing --> Competitions[Competitions];  
Players --> fastestSolves["↳ fastest solves"];  
Players --> nationality["↳ nationality"];  
Players --> gender["↳ gender"];  
  
Events[Events] --> number["↳ number"];  
Events --> country["↳ country"];  
Events --> competitor["↳ number of competitor"];  
  
Participation[Participation] --> Participation[Participation]
```

Combine and Redfine

```
graph TD; Multiline[multiline] --> Stacked[stacked];  
Stacked --> Question[Question];
```

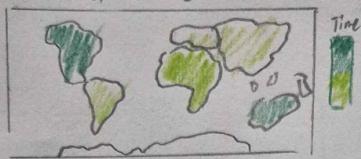
Question

- 1) can I implement this in HTML
- 2) is the dataset suitable to create this idiom
- 3) will it look good after implementing.
- 4) will the idiom be understood

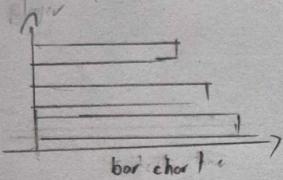
Sheet: 2

AYOUT

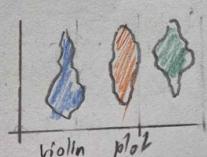
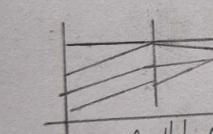
Main Title



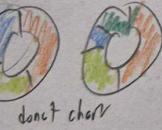
general
descriptions



stacked line chart

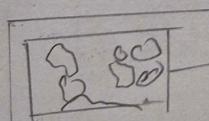


Parallel Coordinate Plot

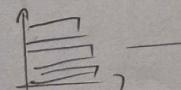


general
descriptions

FOCUS



show general
info at
the world time

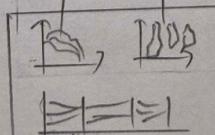


shows data
for various
selected country

focus on fastest
solving time
in
each country

show overall
participation
in each country

show
average
details



shows how
players perform
through events

Discussion

Advantage

- interaction is simple to use
- can view specific details of each country

Disadvantage

- Might be difficult to implement
- Many difficult idioms used.

Title : Rubik's Cube
Author: Garent Ngor
Date : 18/10/2025
Sheet: 2
Tools : Rubik's cube data
visualisation

Operation

click on country

shows fastest time
by that country

slider

2010

2020

Focus

show general info at the world time

shows data for various selected country

focus on fastest solving time in each country

show overall participation in each country

show average details

shows how players perform through events

LA Y O U T

Main Title

Proportional Symbol Map

Bump chart

small medium ad bar chart

Heat Map

dumbbell plot

Operation

America

select

zoom

select event

EVENT

14x4

FOCUS

shows overall data

shows trends and details

focus on different focus events

on event details

shows more detail about the general info above

Discussion

Advantage

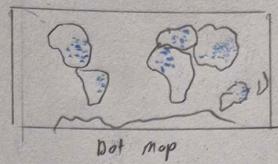
- Simple and straightforward for viewer to understand
- Operations are simple

Disadvantage

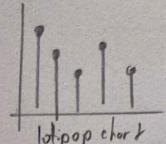
- not too much details is shown
- overall layout and idiom might be too simple.

AYOUT

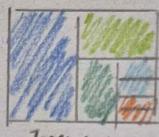
Main Title



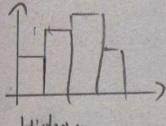
Dot map



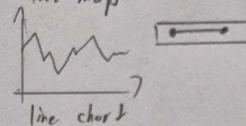
Dotplot chart



Treemap

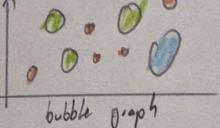


Histogram



Line chart

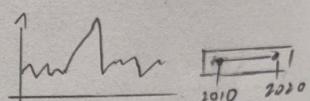
description



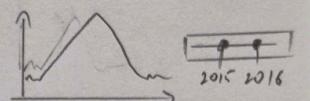
Bubble graph

Title: WCA speed cubing
Author: Goran Ngor
Date: 18/10/25
sheet: 4
Task: Cube solving visualization

Operation



select period



3x3

4x4

5x5

click to select event

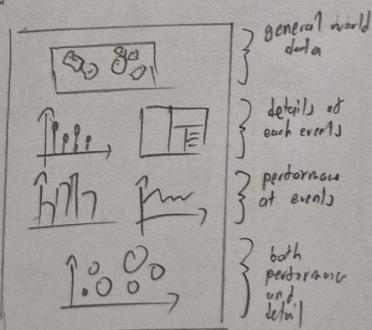
3x3

Discussion

Advantage

- Able to show wide variety of information
 - Interaction are simple
 - Layout looks nice
- Disadvantage
- only general info is shown
 - Might be too simple to implement

FOCUS



AYOUT

RUBIK's CUBE

Top fastest

Time

countries

Year

OPERATIONS

Top fastest in Asia

2010

Year

continent

2020

Year

decade

FOCUS

shows the trend over time from top countries

shows participation and competition start and details

Focuses on balancing general details and specific without being overwhelming

shows most important details (fastest value)

shows general view about competition details

DETAILS

- ① Database used is in sql format
- ② MySQL is used to extract the data used
- ③ used Jupyter for data cleaning
- ④ Estimated time to complete: 2 weeks
- ⑤ completed using HTML & CSS.