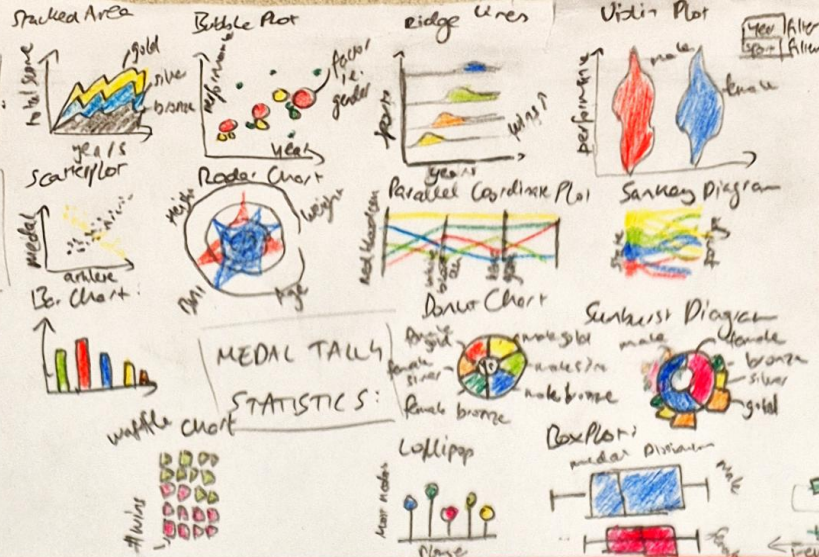


1. IDEAS

HISTORICAL TRENDS DATA

COMPARATIVE HEALTH STATISTICS

SPORTS TALLY



Name: Jason Abi Chetli
 Student ID: 31414059
 Email: jabi023@student.monash.edu.au
 Tutor Name: Ria Kalachetty
 Tutorial Studio: Wednesday 10-12
 Sheet: 1/5
 Task: FIT3179 Assignment 1

2. FILTER

Donut Chart



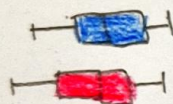
→ too basic and not the best at illustrating the point

Waffle Chart



→ not very informative
 can show similar data elsewhere

Box Plot



→ hard for my target audience to understand

3. CATEGORISE

Quantitative:

- Age (average, younger, older)
- Height
- Weight
- BMI
- % body fat
- white blood cells
- red blood cells
- hemoglobin concentration
- # medals

Categorical:

- Sport type (swimming, tennis, etc)
- Season (winter, summer)
- Gender (M, F)
- Medal type (gold, silver, bronze)
- Australian States

HISTORICAL TRENDS DATA

MEDAL TALLY

HEALTH STATS

SPORTS TALLY

See 1. for info.

4. COMBINE AND REFINE

Stacked bar chart is similar to butterfly chart, butterfly is probably better and should be used

Stacked Area Graph and butterfly Graph should be used for historical data

Sankey Diagram could be good for dependent variables

Combine (potentially) sankey + bar chart



Combine (potentially) parallel coordinate plot to sankey

Scatter plot could become a scatter plot matrix to show multi-correlation, alternatively using a bubble plot could show similarly similar

5. QUESTION

- What is the best way to allow users to compare average australian to athletes? bars? dots? lines? Annotations?
- Is a sunburst diagram too heavy and too data-to-ink?
- What images and colour scheme will be optimal?

Layout:



① Sankey + Bar Chart

- Gender → sports which then flows into the bar chart of the medals won
- or winter vs summer sports

② Violin Plot

- Illustrate Distributions such as BMI, age, white blood cells, hemoglobin etc - let user decide
- Compare w/ average Australian

③ Radar Chart

- Compare winter and summer athletes w/ Performance, weight, age
- overlay w/ gender

④ Lollipop Chart

- Starts on oldest, youngest, most won medals, females, males

Extra Notes:

- ① • Could do Stacked bar chart?
- ① • Enlarge ① figure

Name: Jason M. Chebli

Student ID: 3444059

Email: jubi2027@student.monash.edu

Tutor Name: R. Kalach, cmy

Schedule: Wednesdays 10-12

Sheet: 2/5

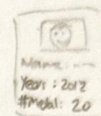
Task: FIT3179 Assignment 1

Operations:

① A drop down bar to let the user select the year for survey diagram

Year ▼

Tooltip for ④ to show athletes facts



For ③ an option to specify gender otherwise all gender will be shown

Gender ▼

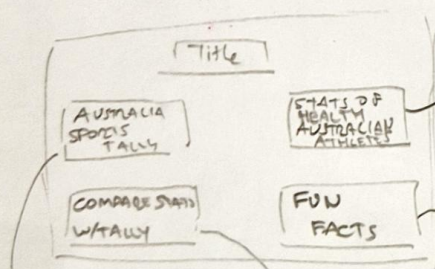
Tooltip for ③ shows:

- Count
- Variable i.e. blood cell count
- Gender

Focus:

❑ No main focus, all graphs are important. As such, it lets the reader decide what they want to look at

❑ Top 2 graphs should be slightly large to guide the reader's eyes



Interesting to help Australians compare - clearly distinguish between average Aussie and athlete by use of colour!

A few different Lollipops can help present fun facts about Olympics!

Helps indicate what makes a good athlete! Make sure it is clean and easy to understand comparing gender may be difficult

Showing total trend throughout different sports and categories so we can see what Australia usually is good at

Discussion:

Pros:

- ❑ Good tie of colour and theme
- ❑ Good range of different visualisations

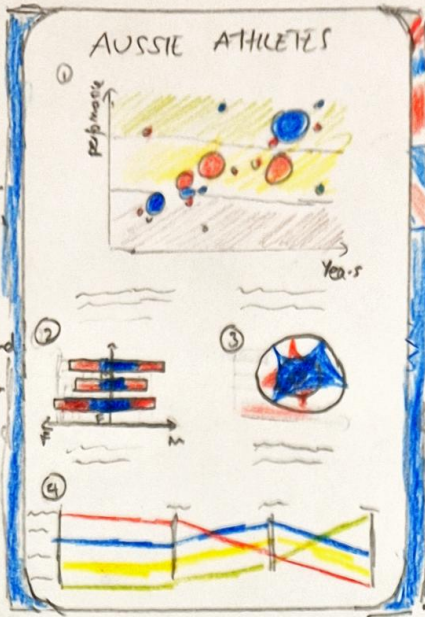
Consider Questions:

- ❑ Do we want a center-piece image? Should a vis be there instead?
- ❑ There is no main focus vis
- ❑ Sankey + Bar Chart may get messy especially if small

Layout:

① Bubble Plot

- Can be used to show performer over the years with sectioning depending on medal won and size to represent the amount



② Butterfly Chart

- Compare performer in some summer olympics or even olympics and commonwealth games?
- Vertical scale is gender/sport?

③ Radar Chart

- Used to compare performance, weight and age

- Overlay with gender and/or season or in a filter format

Extra Notes:

Maybe an Australian flag background

④ Parallel Coordinate Plot

- Can be used to compare the top 5 different athletes health stats
- This will show some for famous athletes
- May Australia's favourite athletes?

Name: Josh M. Chet.
Student ID: 31444059
Email: josi023@student.monash.edu
Tutor Name: Ria Kalachery
Sundays: Wednesdays 10-12
Sheet: 3/5
Task: FIT3179 Assignment 1

Operations:

Figure ③ should have a filter for summer/winter/fall and gender male/female/all

Season ▼ Gender ▼

Visualisation ④ should let you choose your athletes

Visualisation ④ should let you choose your athletes

Visualisation ② should have a tooltip that outlines:

- gender
- # medals won
- medal type

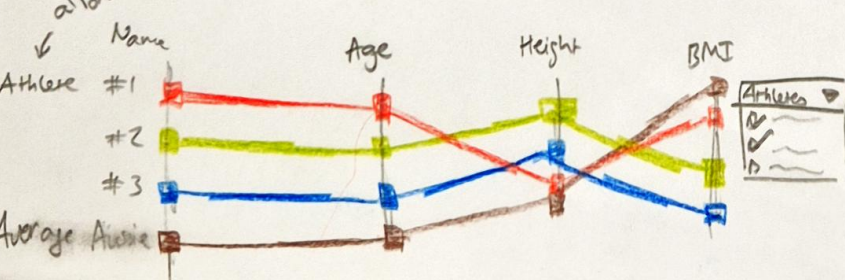
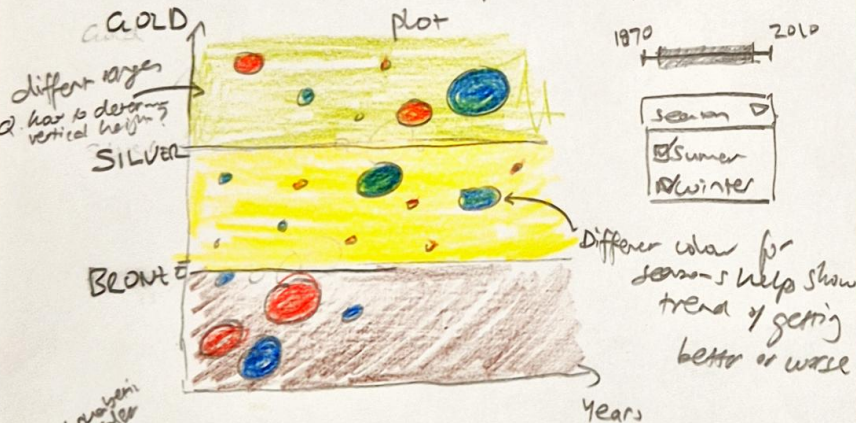
Visualisation ① should let the user select a range and highlight relevant ones, maybe allow user to adjust year range

Visualisation ② should have a tooltip that outlines:

Visualisation ① should let the user select a range and highlight relevant ones, maybe allow user to adjust year range

Focus:

Two main focuses: bubble plot and parallel coordinate



Discussion:

Pros:

- Good range of different visualisations and complexities
- I like the sectioning of the bubble plot
- I like the idea of Aussie flag as the background.

Cons and Questions:

- How do we determine the vertical height of the bubble in the bubble plot if categorical data?
- No stats on hemoglobin, blood count etc is shown?
- Will parallel coordinate plot get too messy?
- How much data can you really see from bubble plot?

Layout:

Name: Jess. M. West

Student ID: 31444057

Email: jubi203@student.unsw.edu.au

Tutor Name: Kim Kalachetty

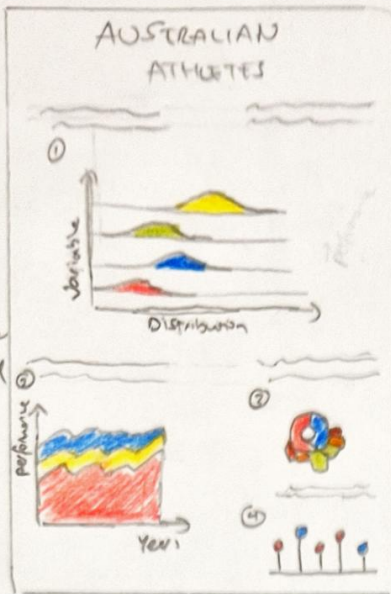
Studio: Wednesdays 10-12

Sheet: 4/5

Topic: FIT3179 Assignment 1

② Stacked Area Chart:

- Illustrate the num of gold medals, silver medals and bronze medals over the years stacked to show total won

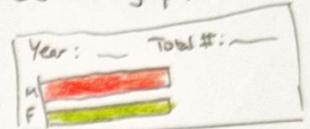


① Ridgeline Graph:

- Use to show variables distribution i.e. hemoglobin, height, age etc of each athlete to then let Aussies compare themselves to it. need a pink line up 5 bars

Operations:

Tooltip for ② should have embedded graph



Tooltip for ③ should show:

- Total
- Category Winter/Summer
- Medal Gold/Silver/Bronze

Tooltip for ④ to show more info on the athletes



Also a filter to select interesting facts!

③ Sunburst Diagram:

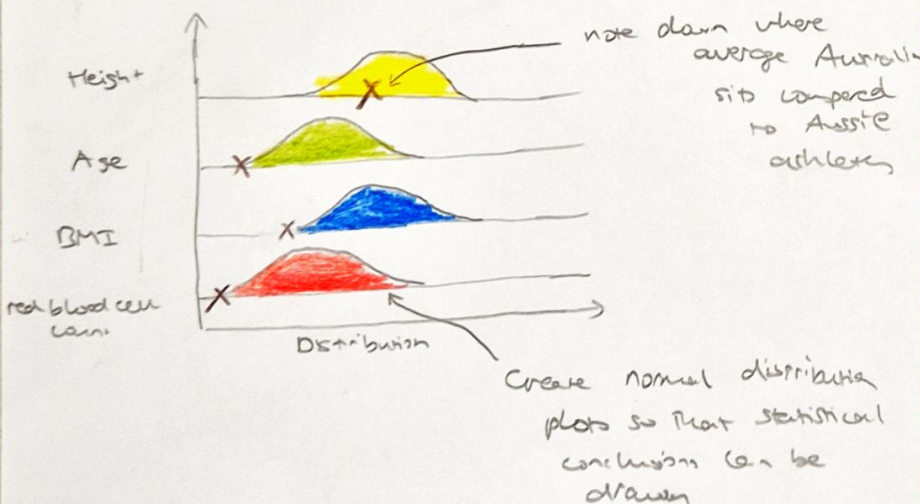
- Compare winter and summer sports and australia's performance in it. i.e. silver, bronze, gold

④ Lollipop Chart:

- Allows us to present stats/fun facts, such as youngest athlete, oldest, most medals won by an athlete, which sport are we best at etc.

Focus:

□ Main focus is the ridge-line graph:



□ This highlights main focus of comparing athletes to everyday Australians!

Discussion:

Pros:

- Ridgeline is a great tool to show statistical analysis
- Nice embedded tooltip graph and range of unique visualisations

Cons and Questions:

- Sunburst Diagram has a low data-to-insight ratio is that bad?
- Will the ridgelines be too difficult for target audience to understand?
- Are there enough complex visualisations?
- Should we have an image/what is the theme? color consistency??

Layout: The best of sheet 2 & 4 were used to generate the final design!

① Radar Plot:

□ Showing health stats of athletes @ summer + winter Olympics and comparing to average Aussie!
Stats: Height, weight, age, gender

④ Stacked Area Chart:

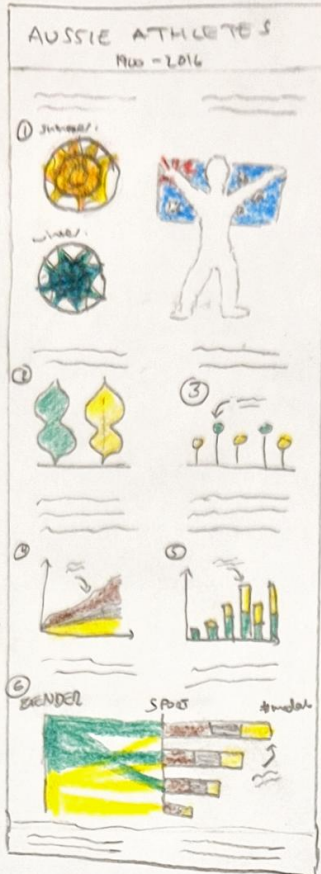
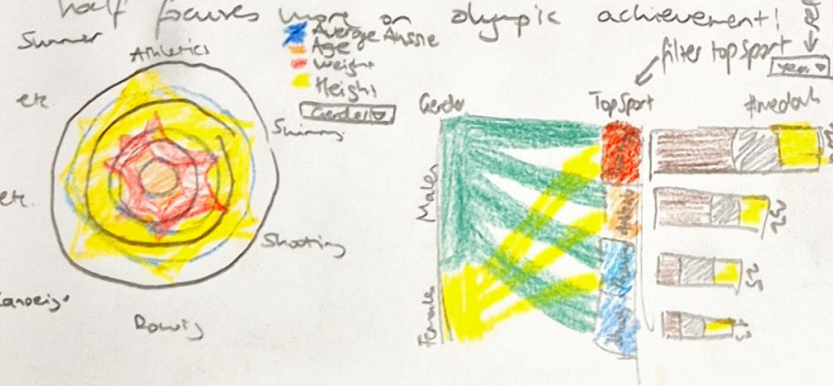
□ Show running total of gold, silver, bronze over time for summer olympics
□ Show impact of hosting olympics in 2000

⑥ Sankey + bar Chart

□ Show distribution of gender in main sports and how many medals won in that sport!

Focus:

There are two main focuses: the radar plot used to compare Average aussies to Average aussie athletes and the Sankey diagram + bar chart to illustrate how good/diverse and well performing the different sports are. The upper half of the whole visualisation focuses more on health stats while the lower half focuses more on olympic achievement!



⑤ Violin Plot:

□ Showing the distribution of stats of Aussie athletes to compare to average aussies. Stats: BMI, white blood cells, hemoglobin

③ Lollipop Chart:


□ Olympic Stats on athletes such as oldest, youngest, most medals won etc.

⑤ Stacked bar chart:

□ Let you see the allowance of females into olympics and the growth in Aussie female athletes

Name: Jason Asi Chebli
Student ID: 31444559
Email: jason.0003@student.monash.edu.au
Tutor Name: Nira Kalachetty
Tutor Studio: Wednesdays 10-12
Sheet: 5/5
Task: FIT3179 Assignment 2

Operations:

Vis ① could let you specify a gender [gender ▾]
Vis ② could show :-
- count
- variable
- gender
Vis ③ could show athlete facts:

Vis ④ could show you medals won in new year - medal type
Vis ⑤ could either have an embedded graph to show medals won by males/females or an animation
Vis ⑥ should have an embedded graph of males/females winning it under that sport

Detail:

Dependencies: → Tableau public servers
→ Tableau public extensions
→ R and excel for data wrangling
→ Using CSV files for database implementation

Estimated time and effort:

→ Sankey diagram, violin plot and radar plot will take the longest → estimate 1 day for each, the rest will take a day
→ Embedding and animation will also take a day
→ Time to build 5 days!

Specific Requirements:

→ Design for small screen (laptop view)
→ No horizontal scrolling