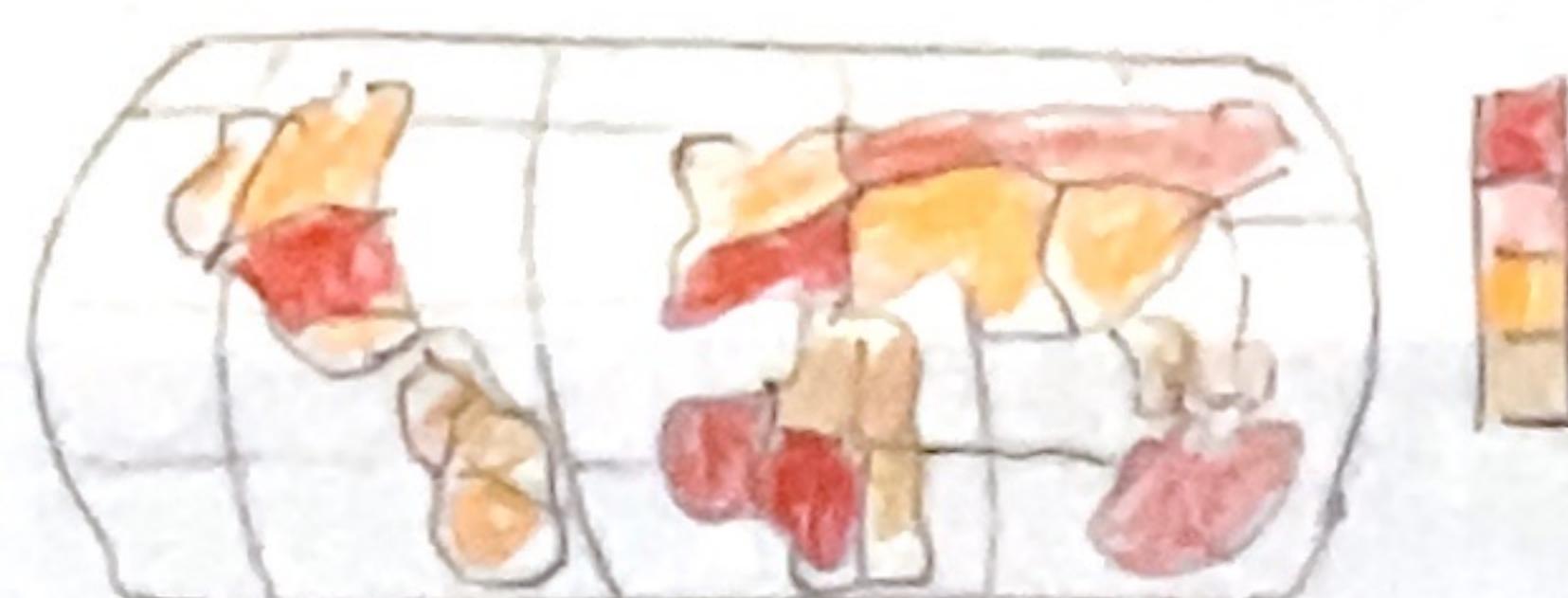


IDEAS

① World map: Internet Users per 100 people by country

(a) choropleth map

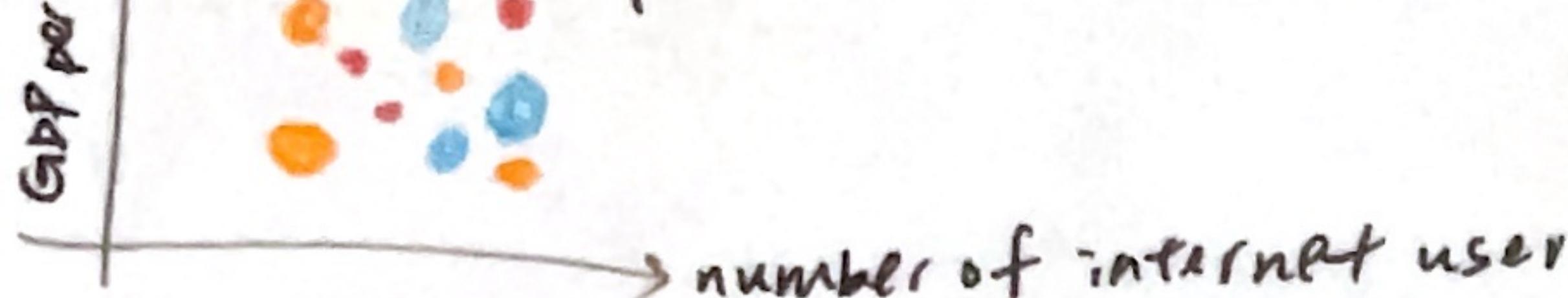


(b) proportional symbol map



② Internet Users vs Gross Domestic Product per capita

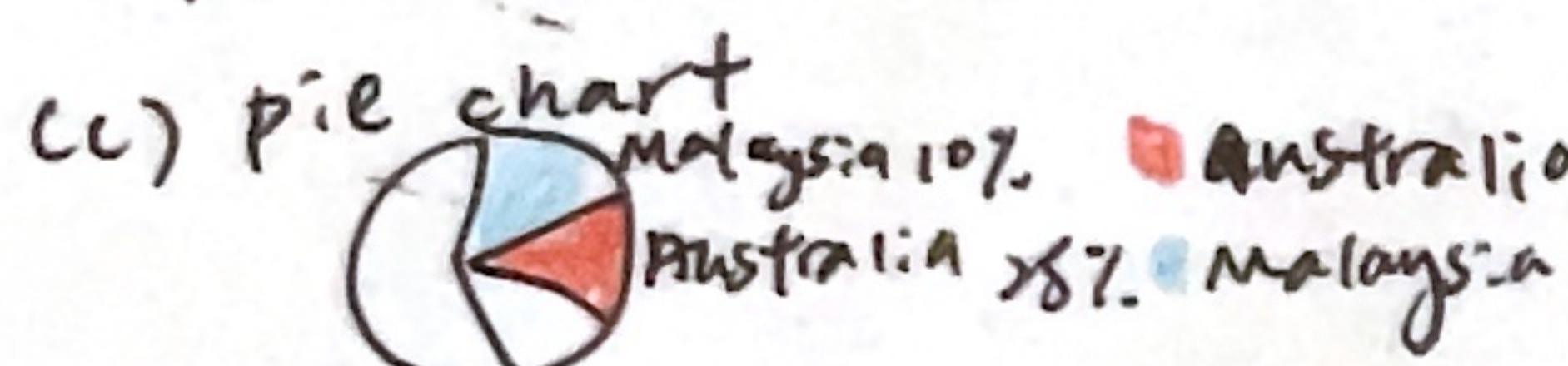
(a) scatter plot



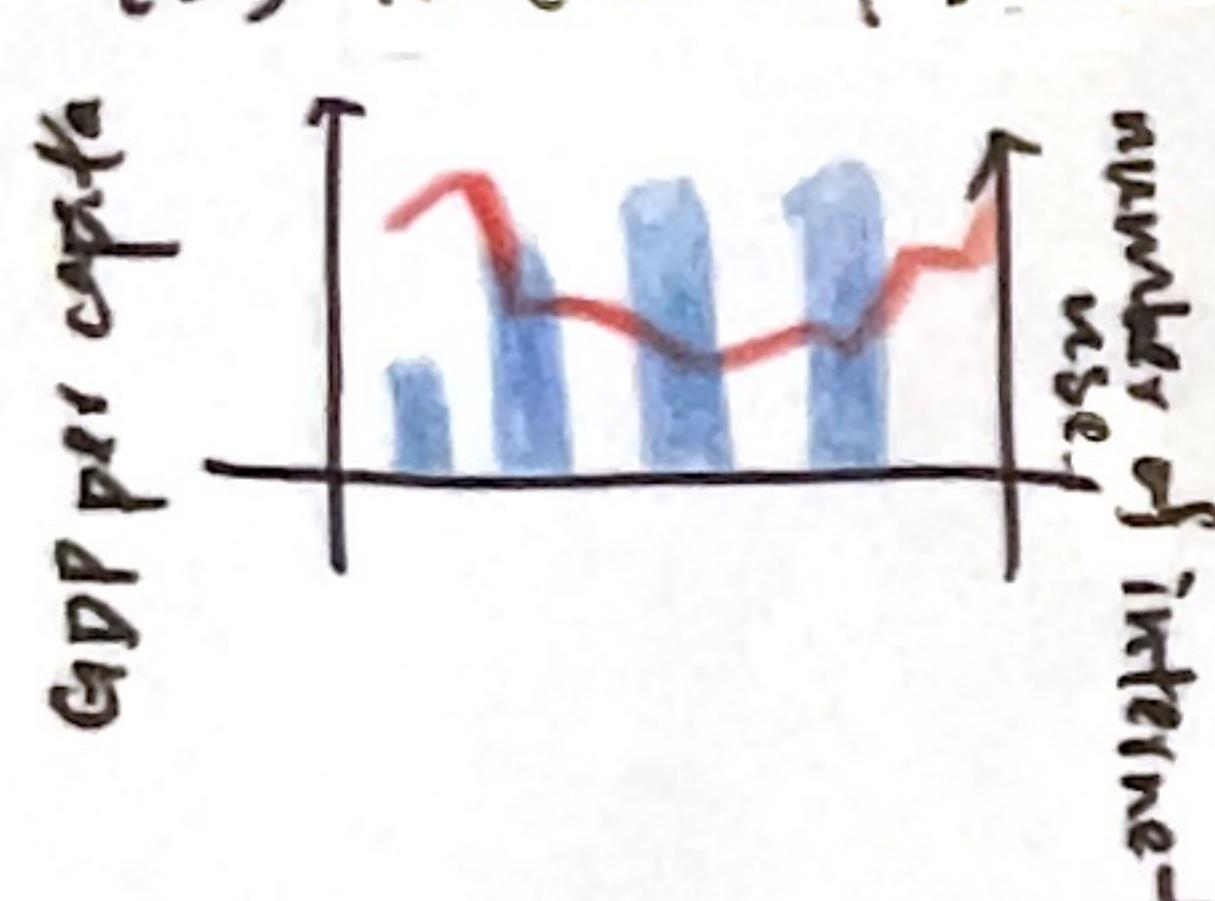
(b) box plot



(c) pie chart

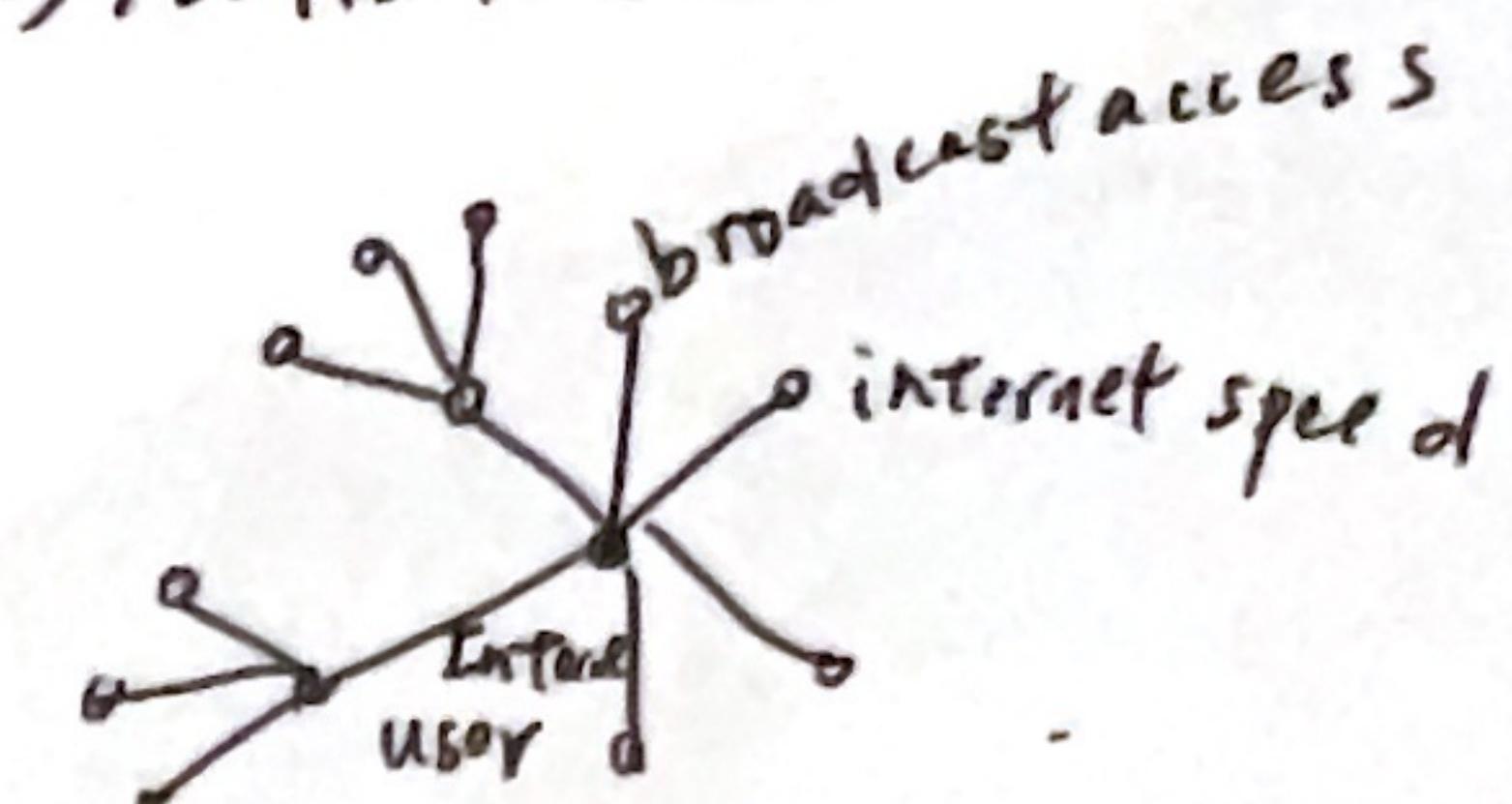


(d) line chart & bar chart



③ Global Internet user economic sector structure

(a) radial tree



(d) chord diagram



(b) Sankey diagram



(c) word cloud

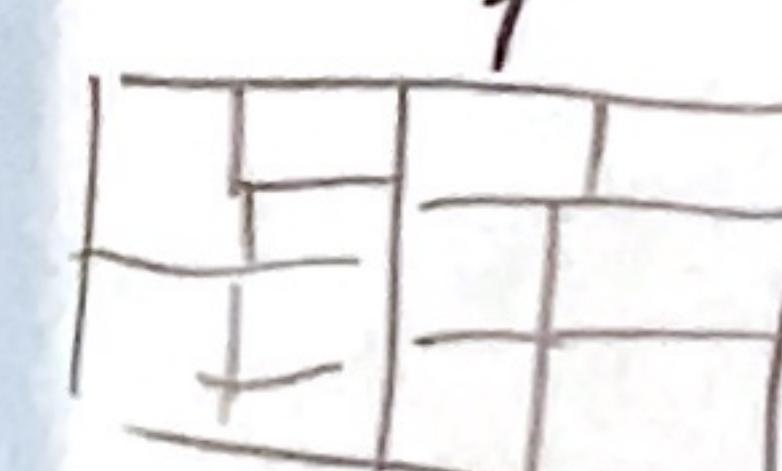
Social media
Internet Speed

④ Global Internet Bandwidth Consumption by content type

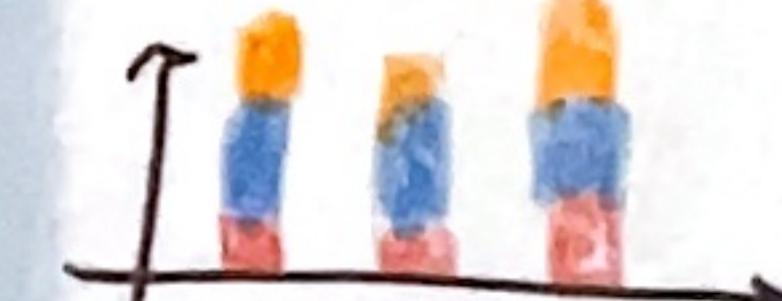
(a) stacked area chart, use line chart to filter



(b) treemap

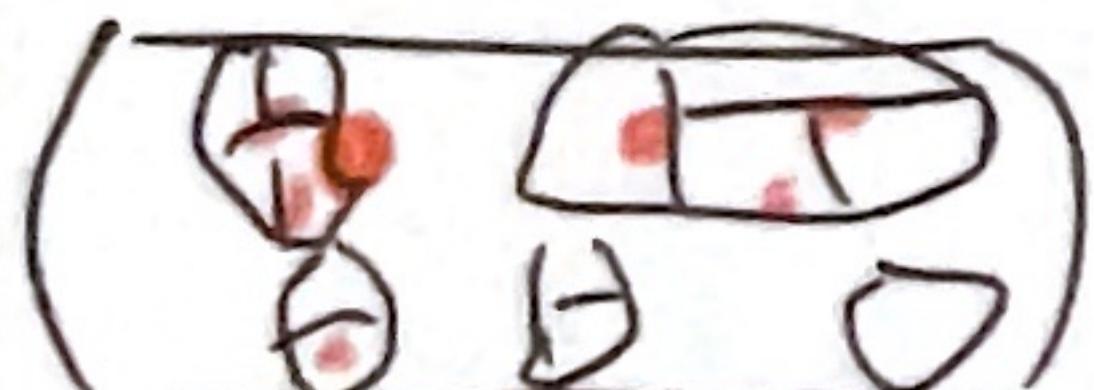


(c) stacked bar chart



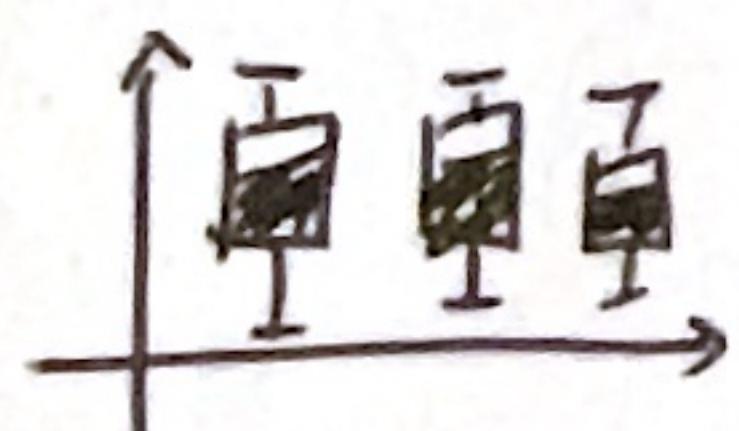
FILTERS

① ② proportional symbol map



→ because need to show every region's internet user number, choropleth map more suitable

② ④ box plot



→ box plot not easy to understand, should add more annotation

③ ④ word cloud

Social media
Internet Speed

→ not very aesthetically appealing
→ can also better represented using a different graph

Categorize

① spatial visualization

→ world map

② relational visualization

→ internet users vs GDP per capita
→ scatter plot

③ hierarchical visualization

→ global internet user income sector structure
→ sankey diagram

④ temporal visualization

→ global internet bandwidth consumption by content type

⑤ temporal visualization

→ Internet Growth over time by region

COMBINE & REFINER

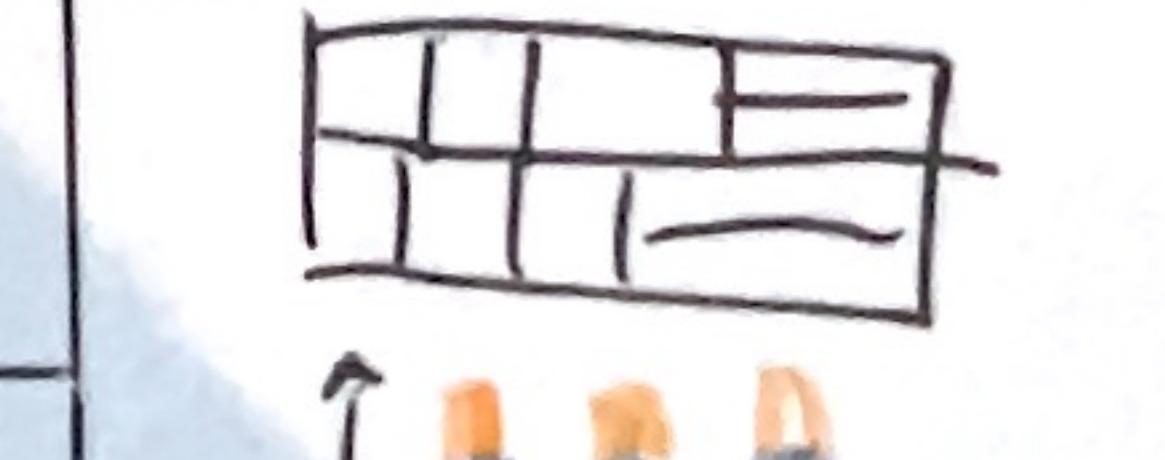
→ world map



→ Internet users vs GDP per capita

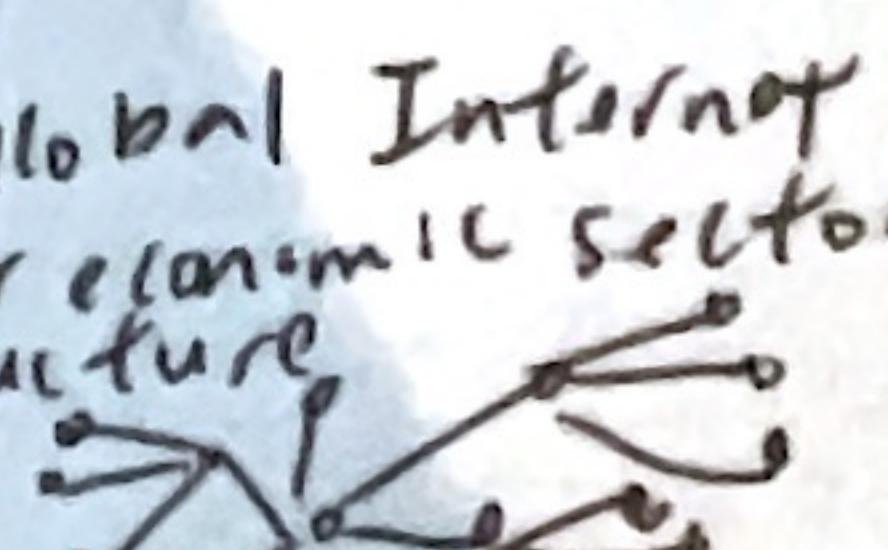


→ Global Internet Bandwidth consumption by content type

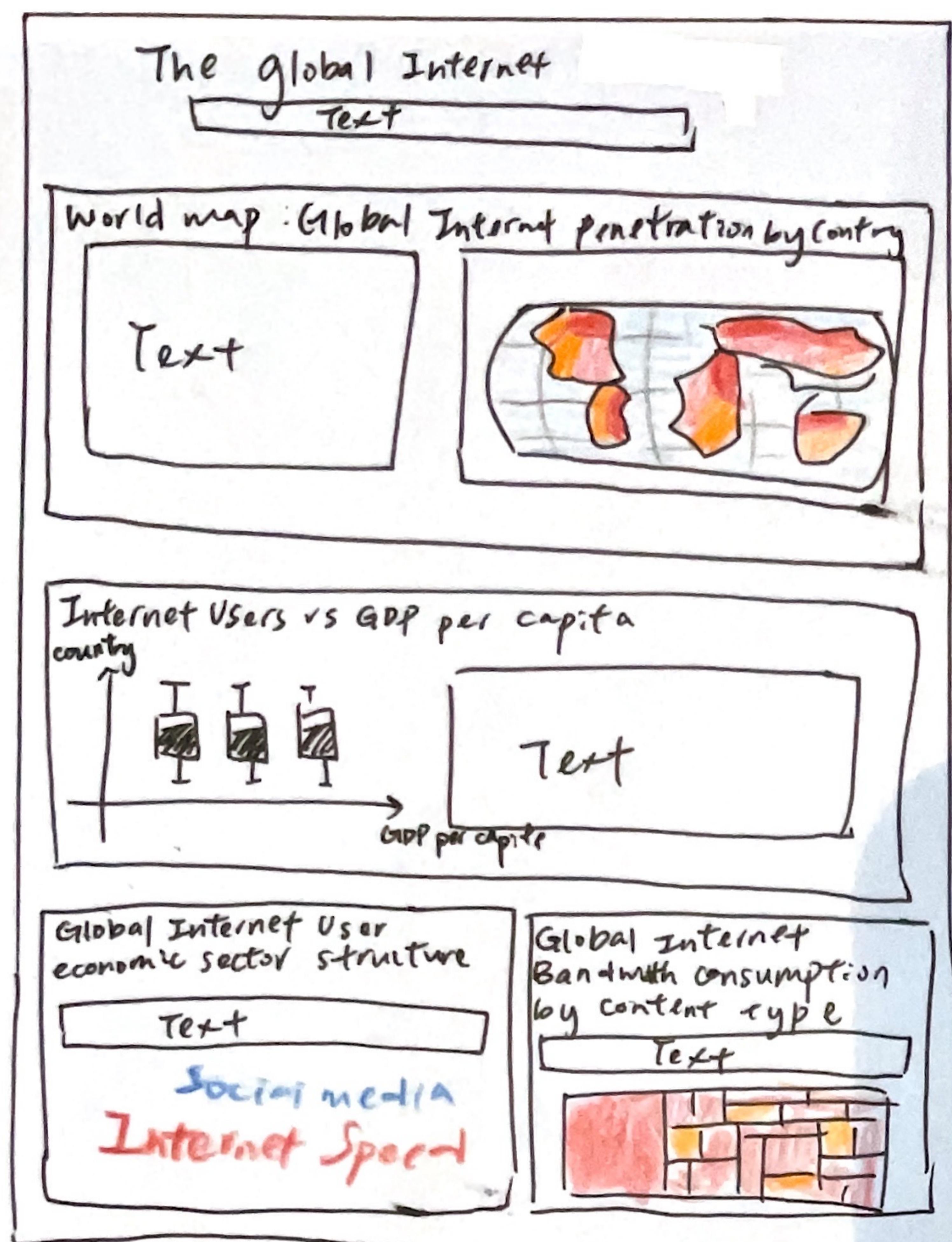


Questions

① For global Internet user economic sector structure, the size is similar, so maybe word cloud not so suitable?



LAYOUT



Sheet: 2

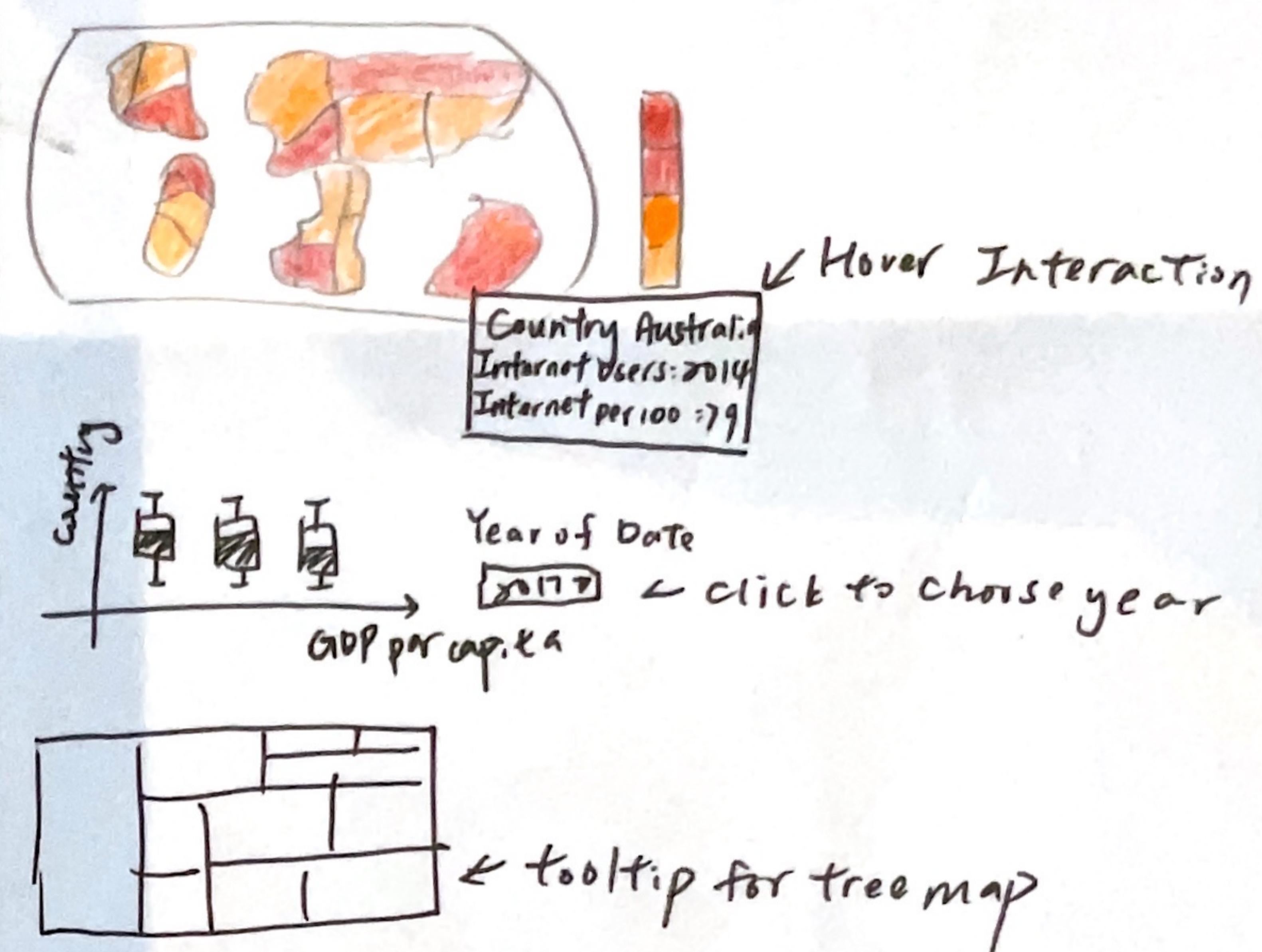
Name: Chia Yin Tian

Date : 10/11/2025

Title : The global Internet

Task: FIT 3179 Assignment 2

COMPONENTS & OPERATIONS



FOCUS

- No main focus, all graphs are important
- Some graphs are larger to emphasize their feature
- The grid boosts comparison, with extra space. User can interactively filter and explore data

Key visualization techniques :

- grid layout for easy chart comparison
- Interaction filters for country and time
- Larger world map for detailed trends

Discussions

Pros :

- Comparative view : Grid layout makes it easy compare multiple indicators
- Logical flow : Users follow a story
- simple navigation

Cons :

- A bit hard to compare : First two chart cannot view side by side
- Limited interaction : Users focus on one chart at a time, less dynamic analysis.

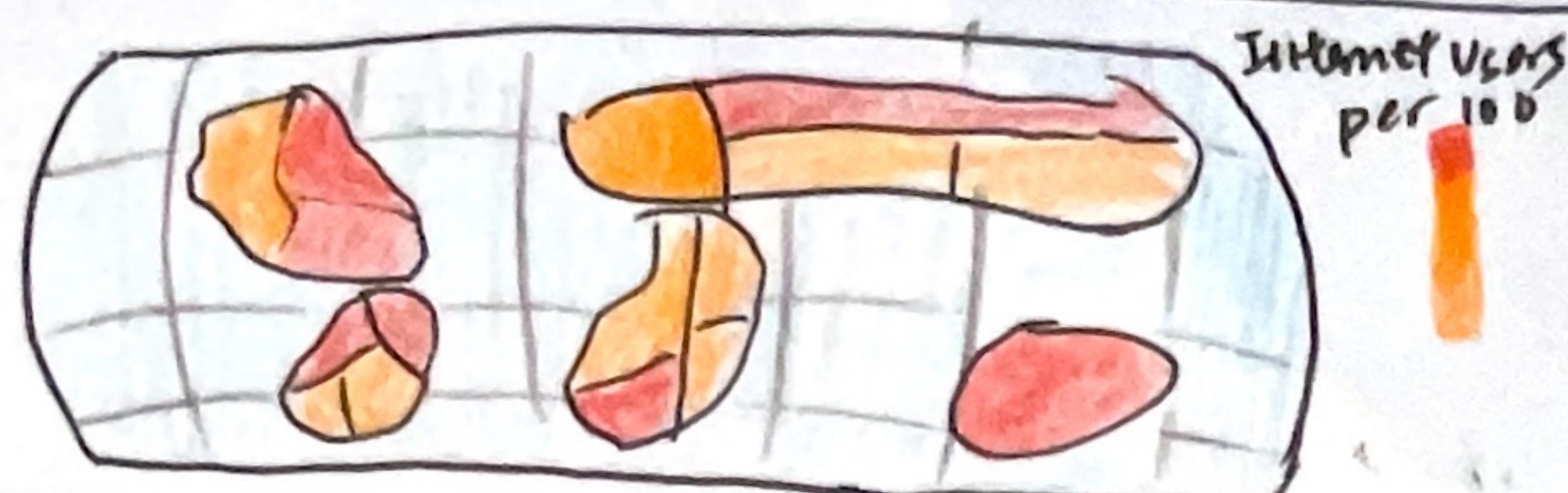
LAYOUT

The global Internet

Text

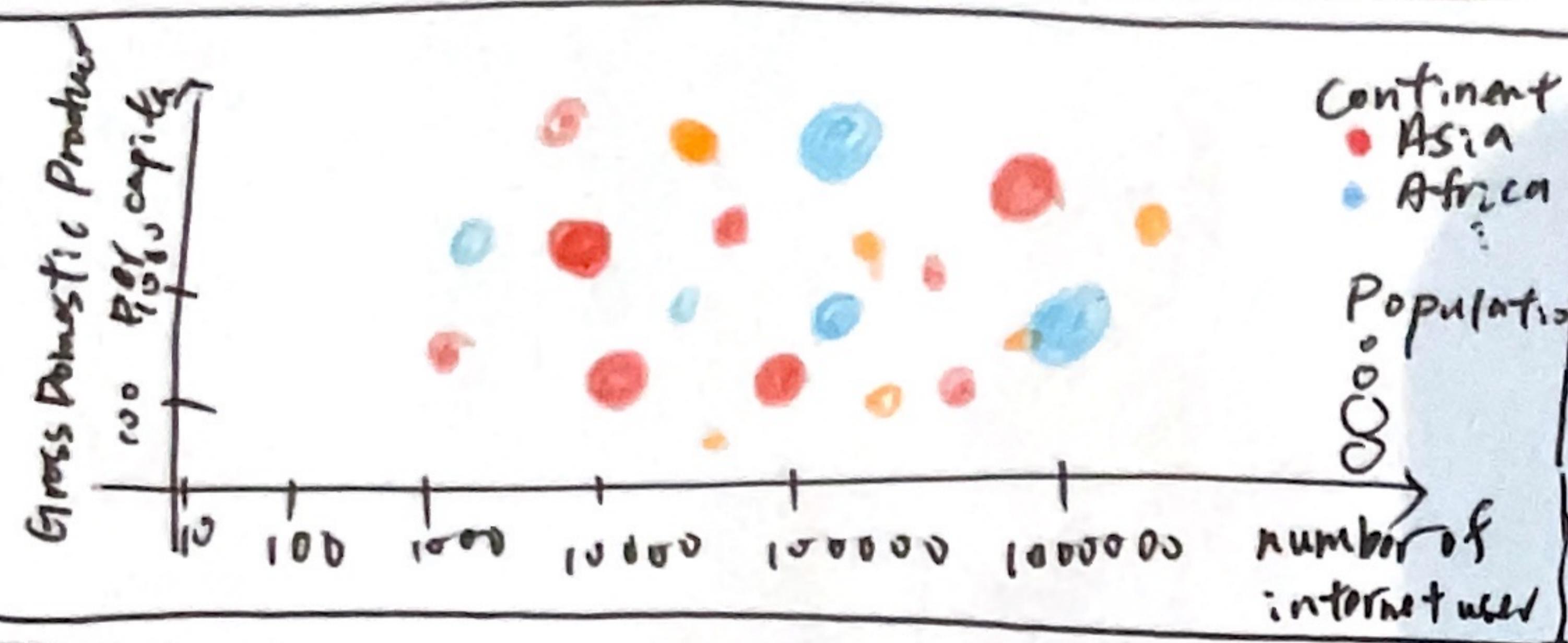
World map: Global Internet Penetration by country

Text



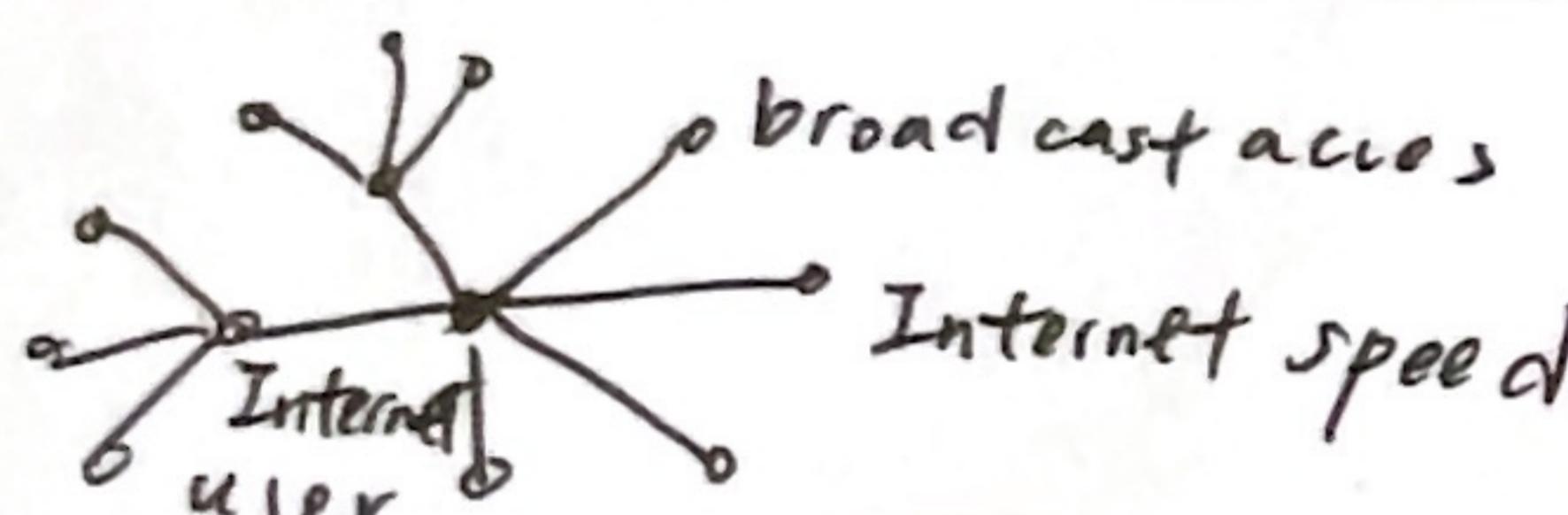
Internet Users vs Gross Domestic Product per capita

Text

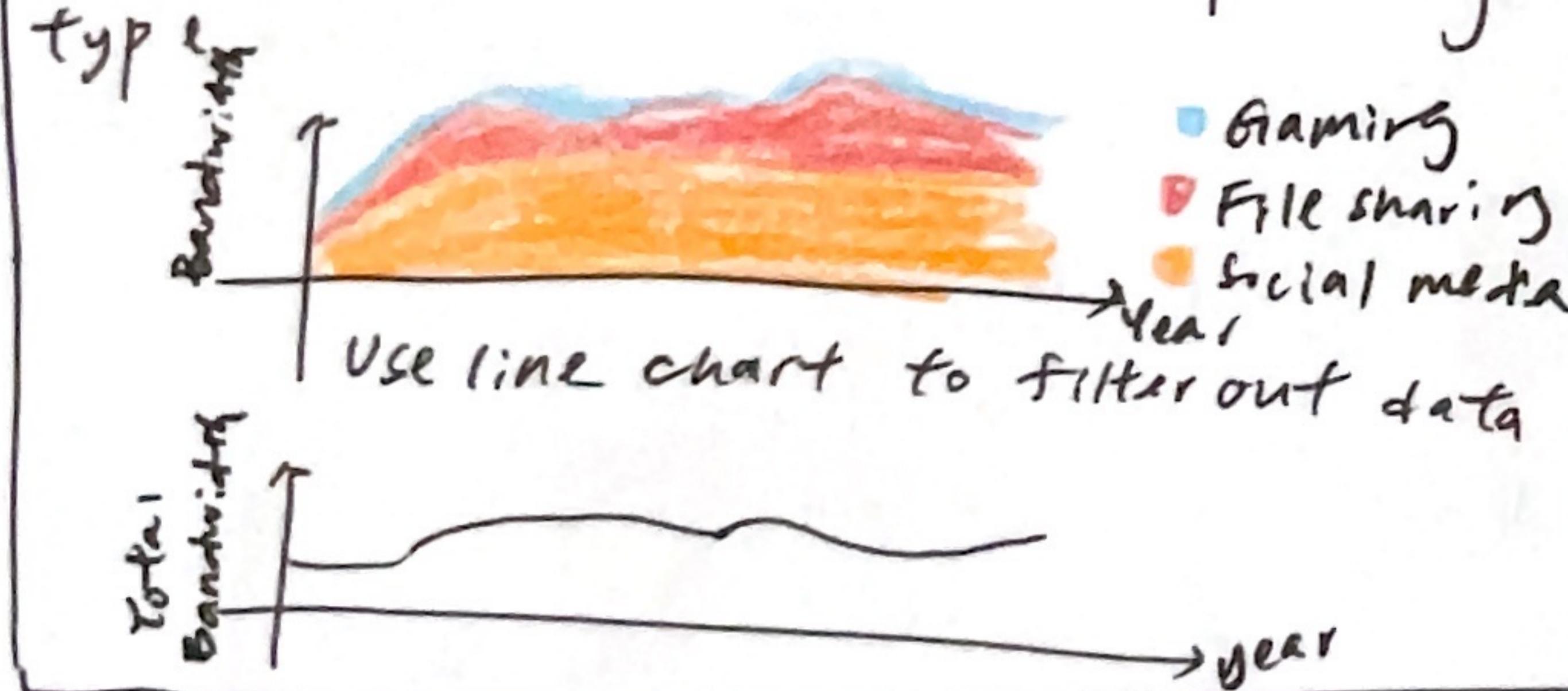


Global Internet user economic sector structure

Text



Global Internet Bandwidth Consumption by content type



FOCUS

- No main chart focus, all graphs are equally important
- main focus is story-telling & tight all idioms/paragraph together
- Emphasis on annotations to guide the user

Sheet : 3

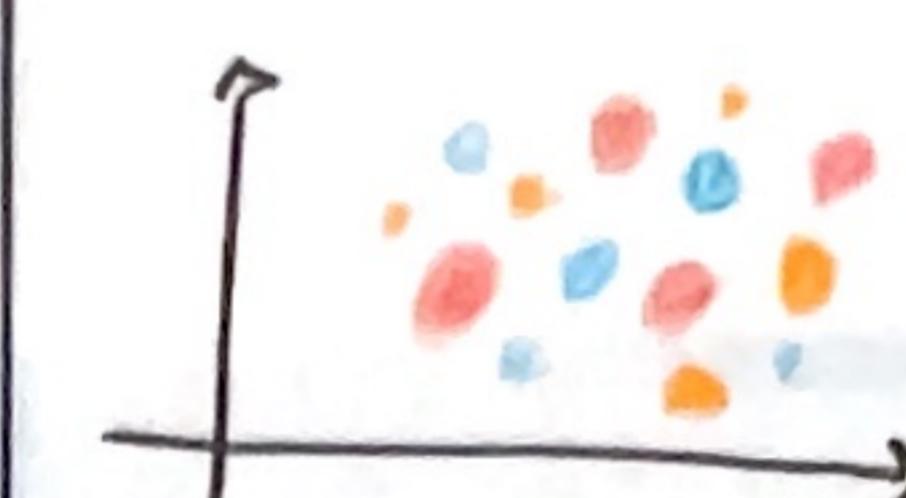
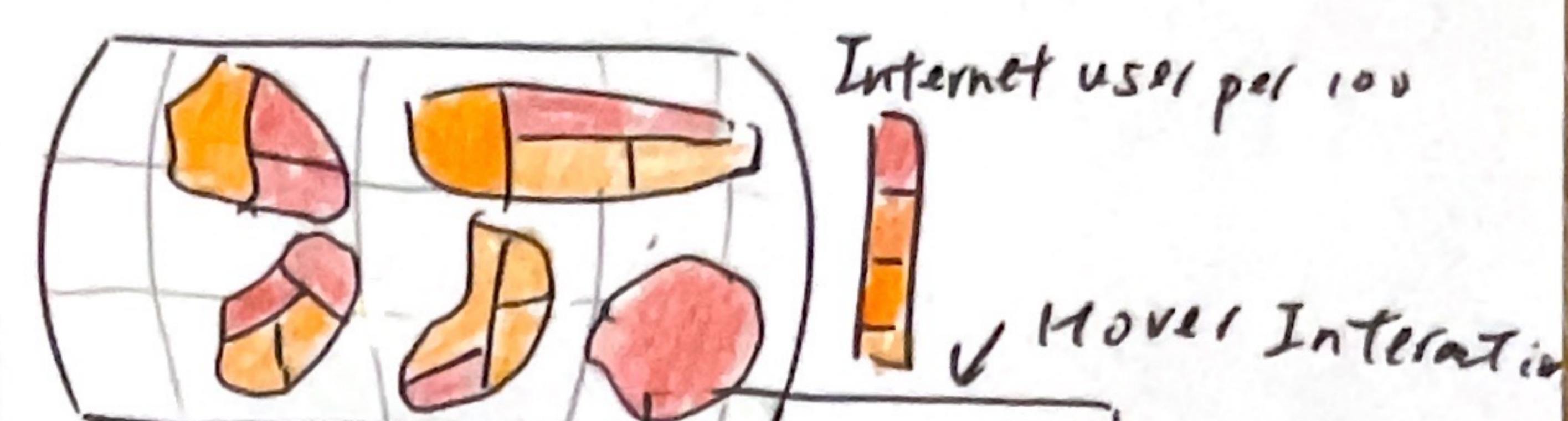
Name: Chia Xin Tian

Date : 10/11/2023

Title : The global Internet

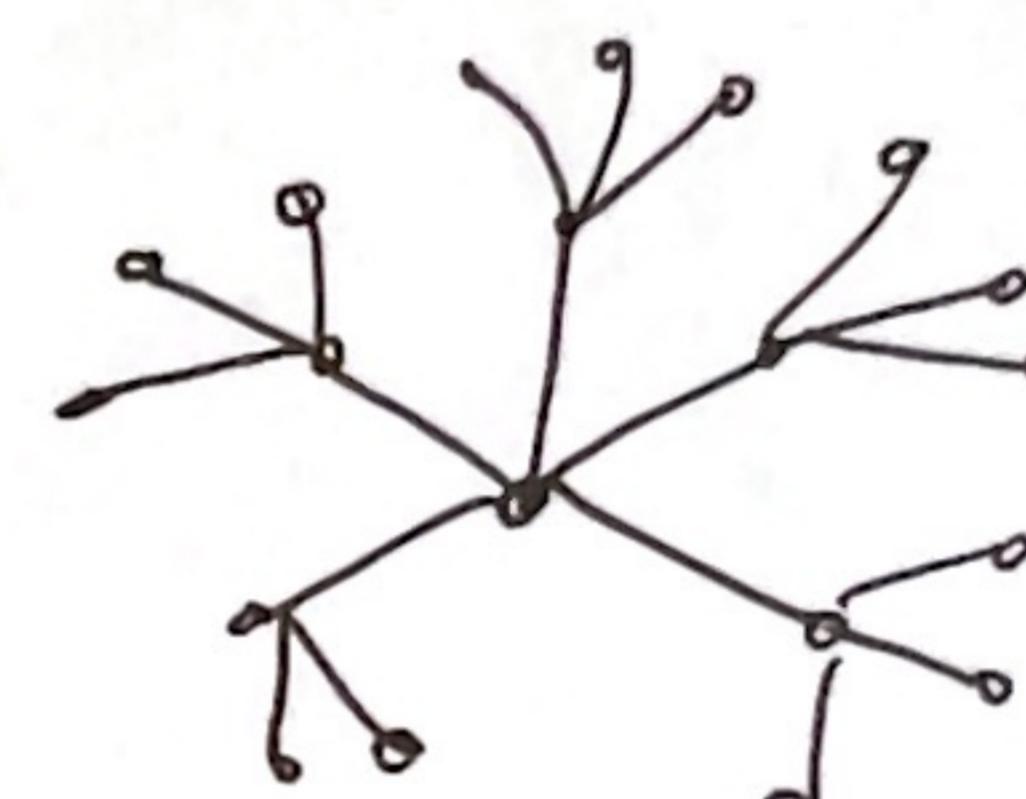
Task : FIT3179 Assignment 2

COMPONENTS & OPERATIONS



Minimum Population
Continent selection [Asia]

→ can choose different continent



Labels → can choose show/not show labels

radius → can choose radius / extent

rotate

layout cluster or tree

links → can choose link shape

Discussions

Pros:

- background that fill white space

- efficient use of space, present every graph with extra visual space

Cons:

- Hard to compare: Difficult to view side by side

- Limited interaction: User focus on one chart one time, less interaction.

LAYOUT

The Global Internet

Text

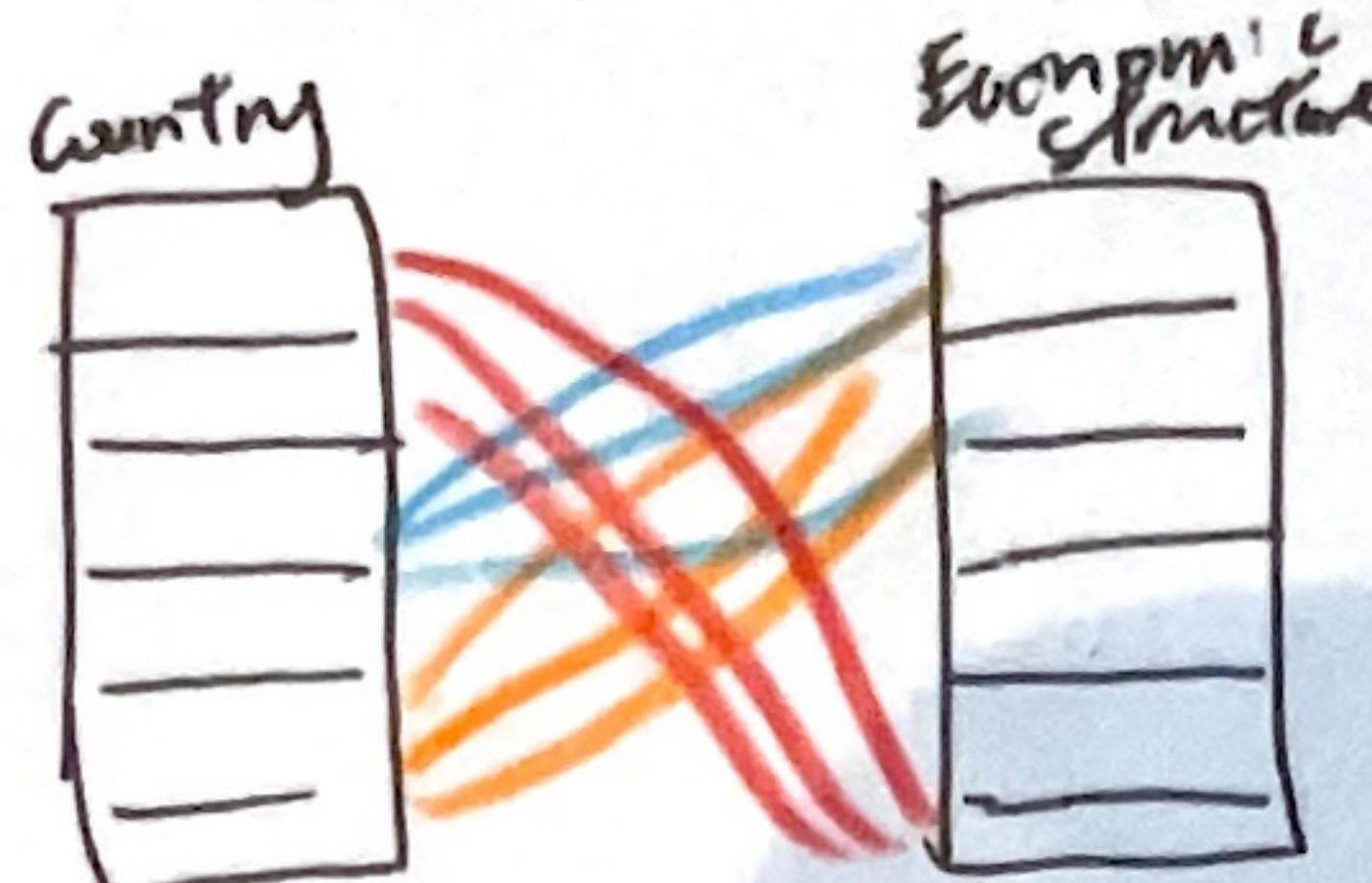
Internet users vs Gross Domestic Product per capita.

Text



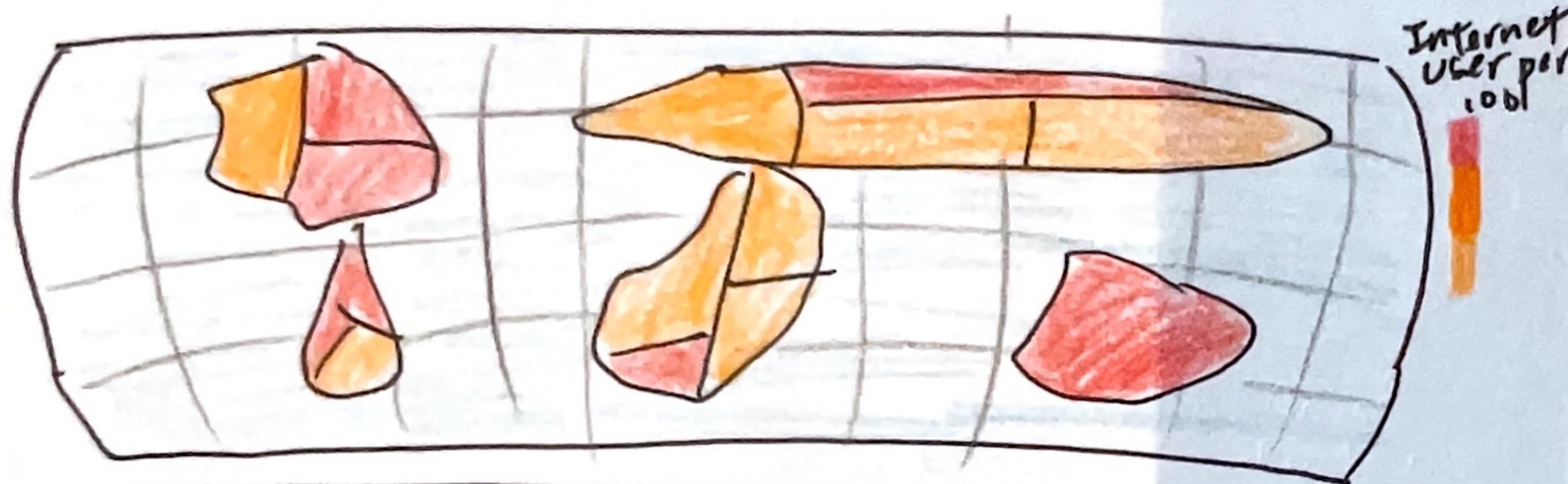
Global Internet user economic sector structure

Text



world map : Global Internet Penetration by Country

Text



Global Internet Bandwidth Consumption by content type

Bandwidth

Text

Gaming
File sharing
Social media

year

FOCUS



Australia 25%
← When click the portion you want, will only show country and percentage that you click

Country ▾

→ Will have country button to choose the country you want

Sheet : 4

Name: Chia Xin Tian

Date : 10/11/2025

Title : The Global Internet

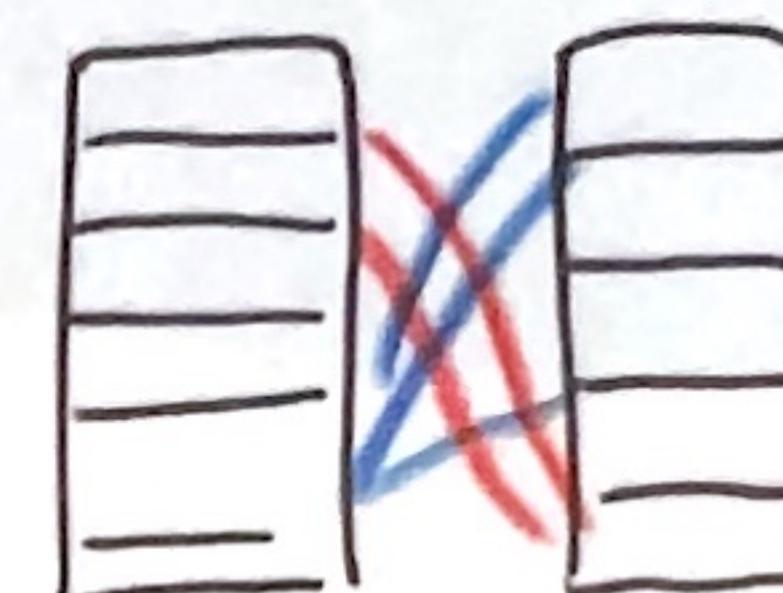
Task : FIT3179 Assignment 2

Components & Operations



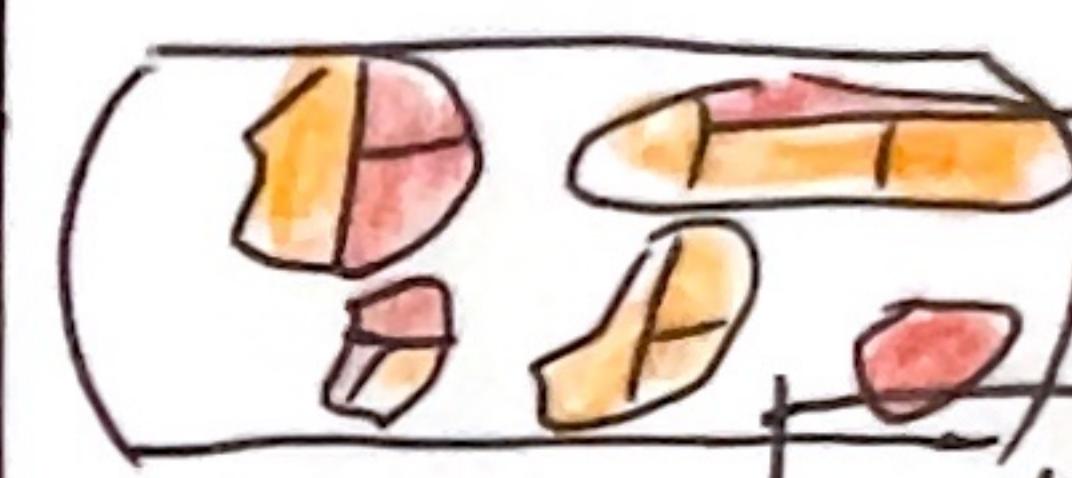
← Hover interaction

year ▾ → can choose year



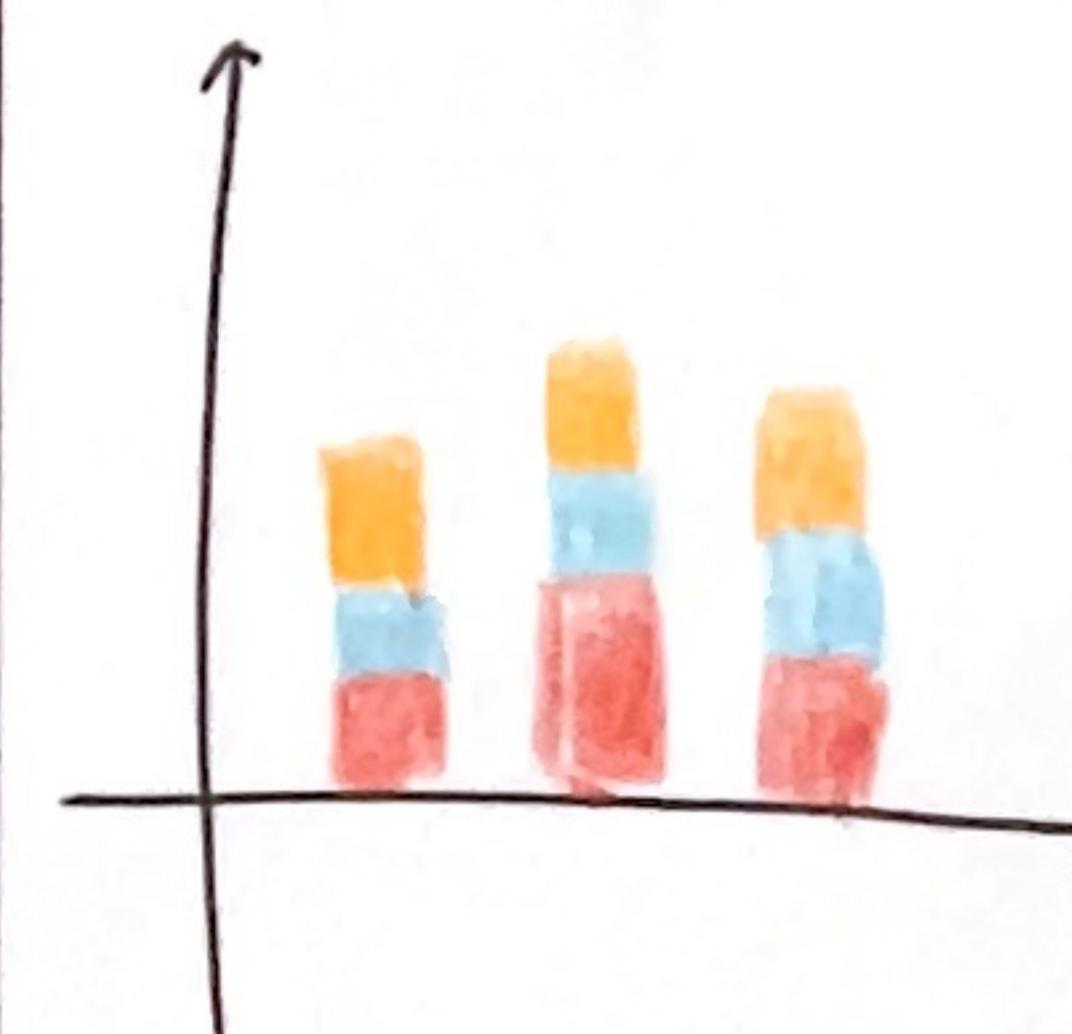
economic sector
multiple value

→ click to choose



← Hover Interaction

Country: Australia
Internet user: 2014
Internet per 100: 79



Country

→ can choose country

DISCUSSIONS

Pros :

- Easy comparison : Multiple visual type make it simple to spot differences

- User focus : easy for users to switch attention between chart and relationship

Cons :

- Info overload : showing many chart at once can be overwhelming

LAYOUT

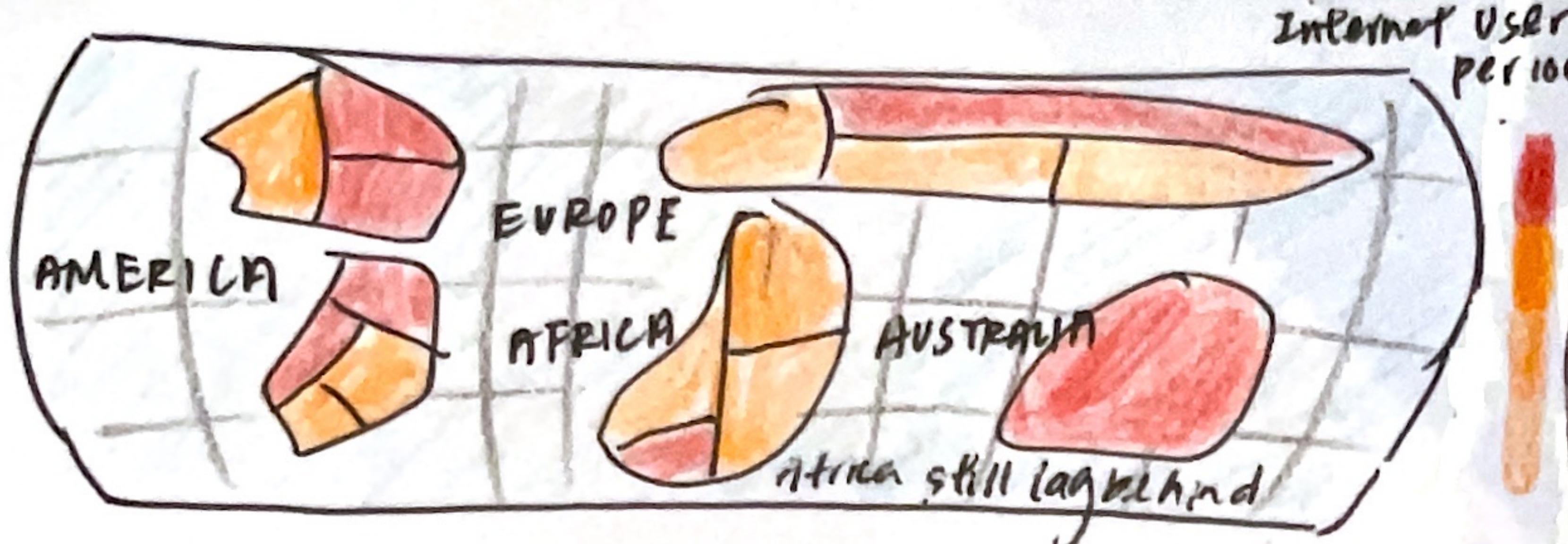
Based on sheet 3:

The global Internet

Text

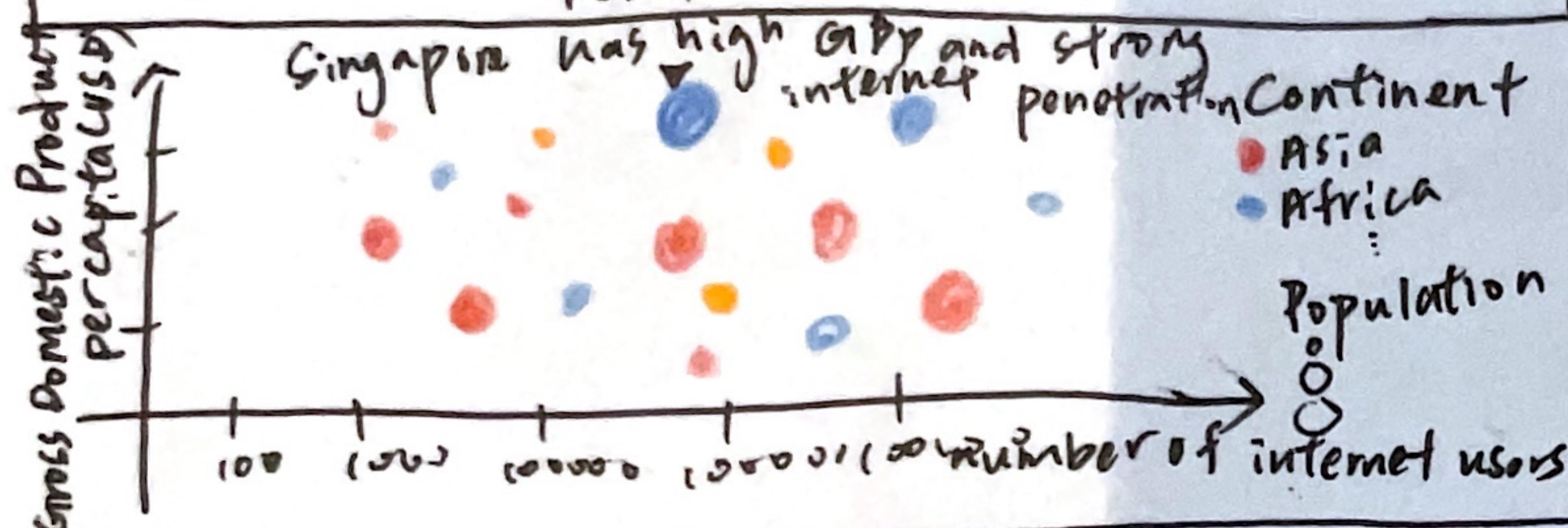
World map: Global Internet Penetration by Country

Text



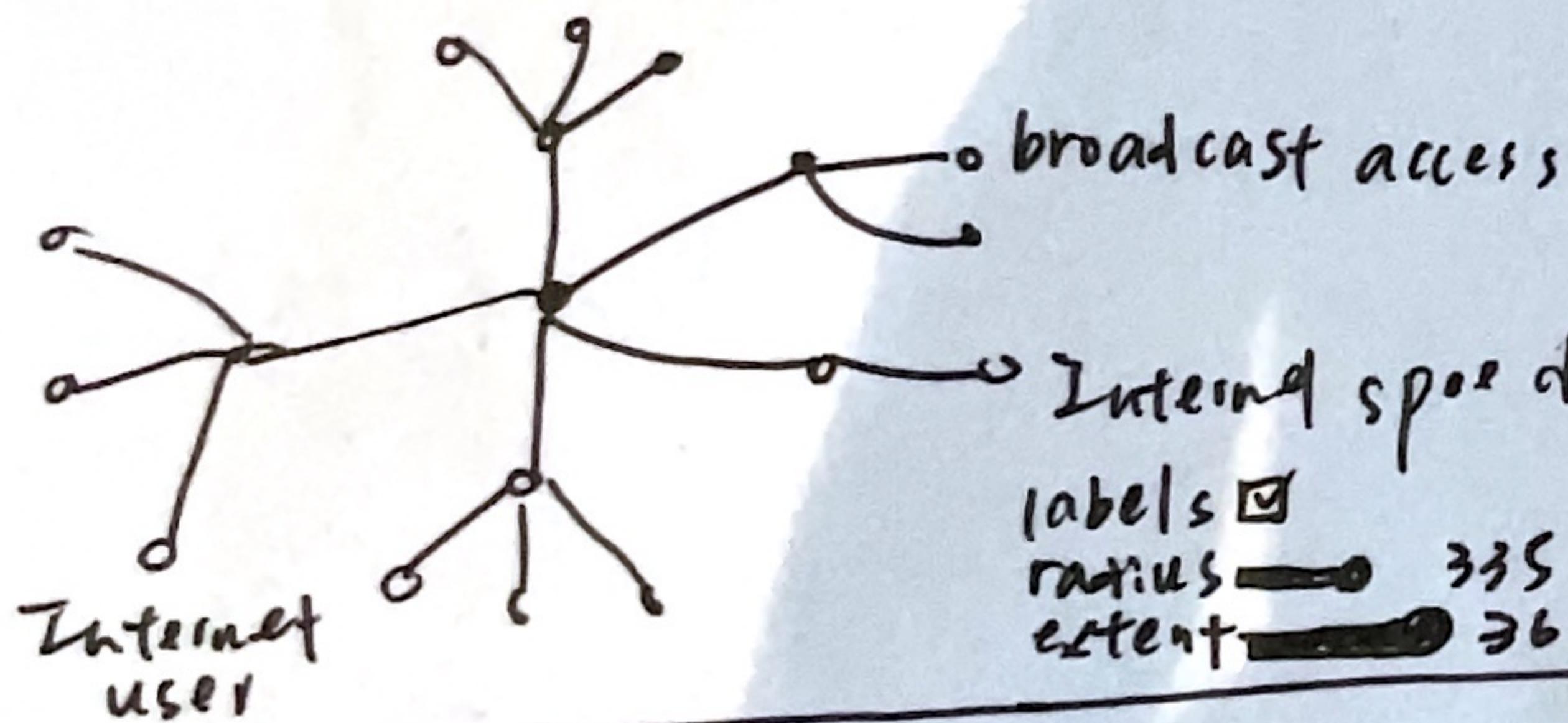
Internet Users vs Gross Domestic Product per capita

Text

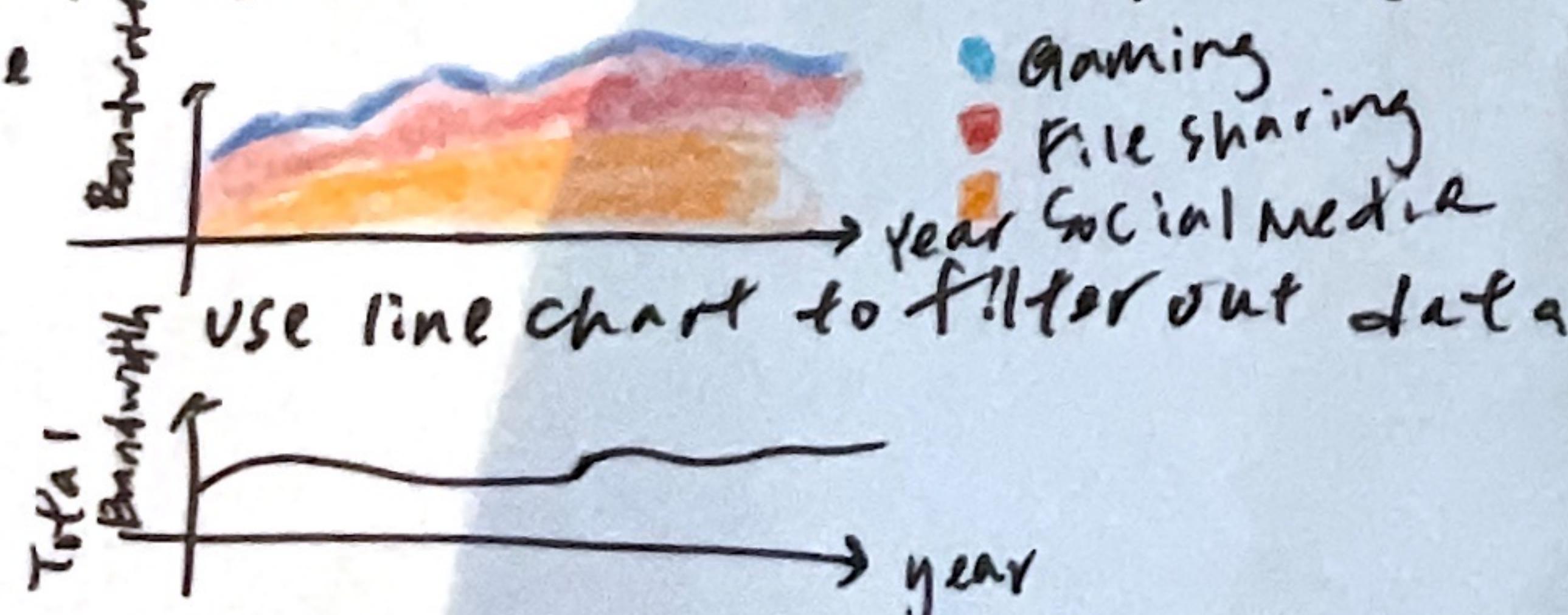


Global Internet user economic sector structure

Text



Global Internet Bandwidth Consumption by content type



FOCUS

- Global map that focus the overall Internet users
- Color and background use consist color

Sheet : 5

Name: Chia Xin Tian

Date : 10/11/2025

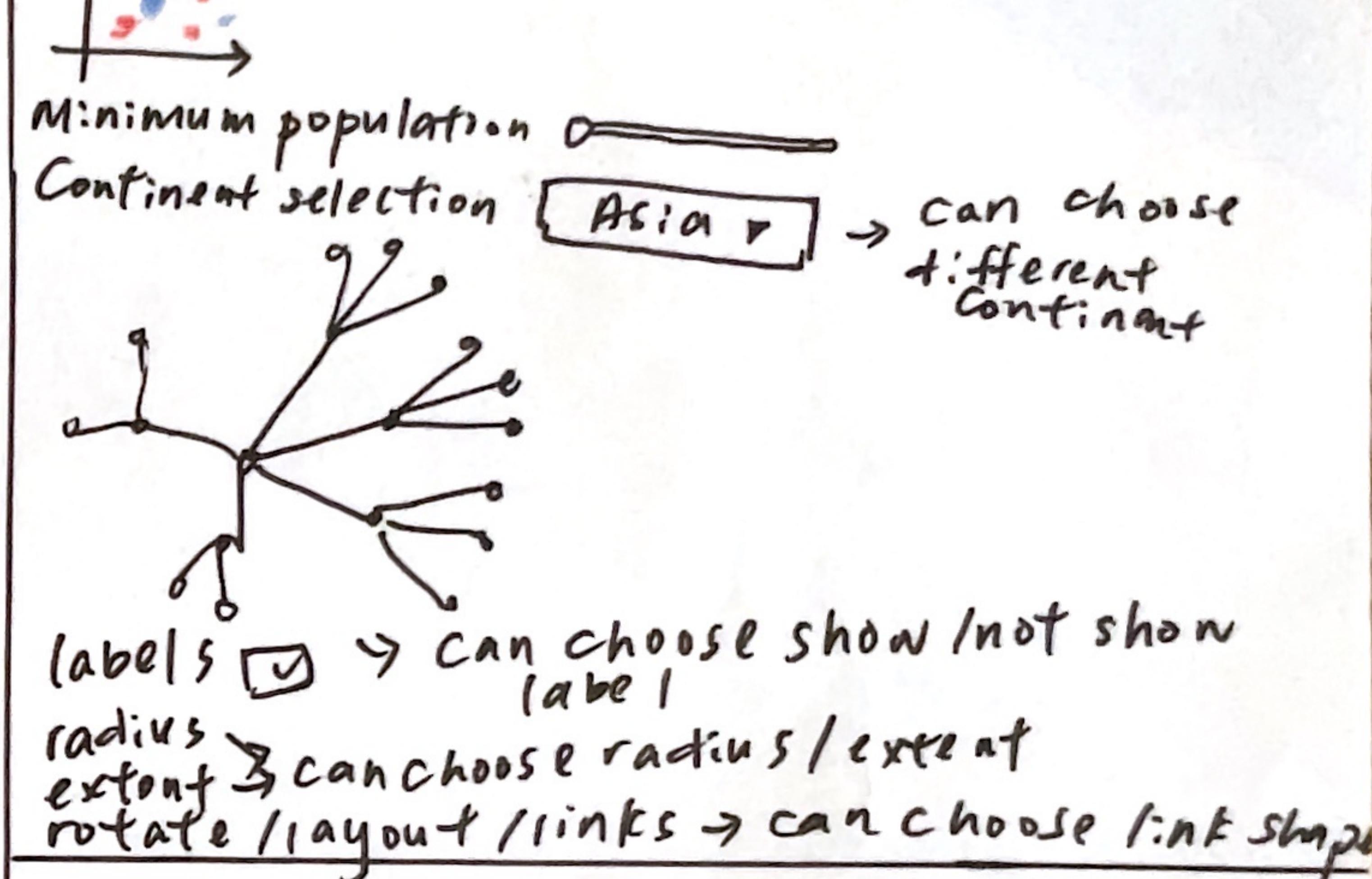
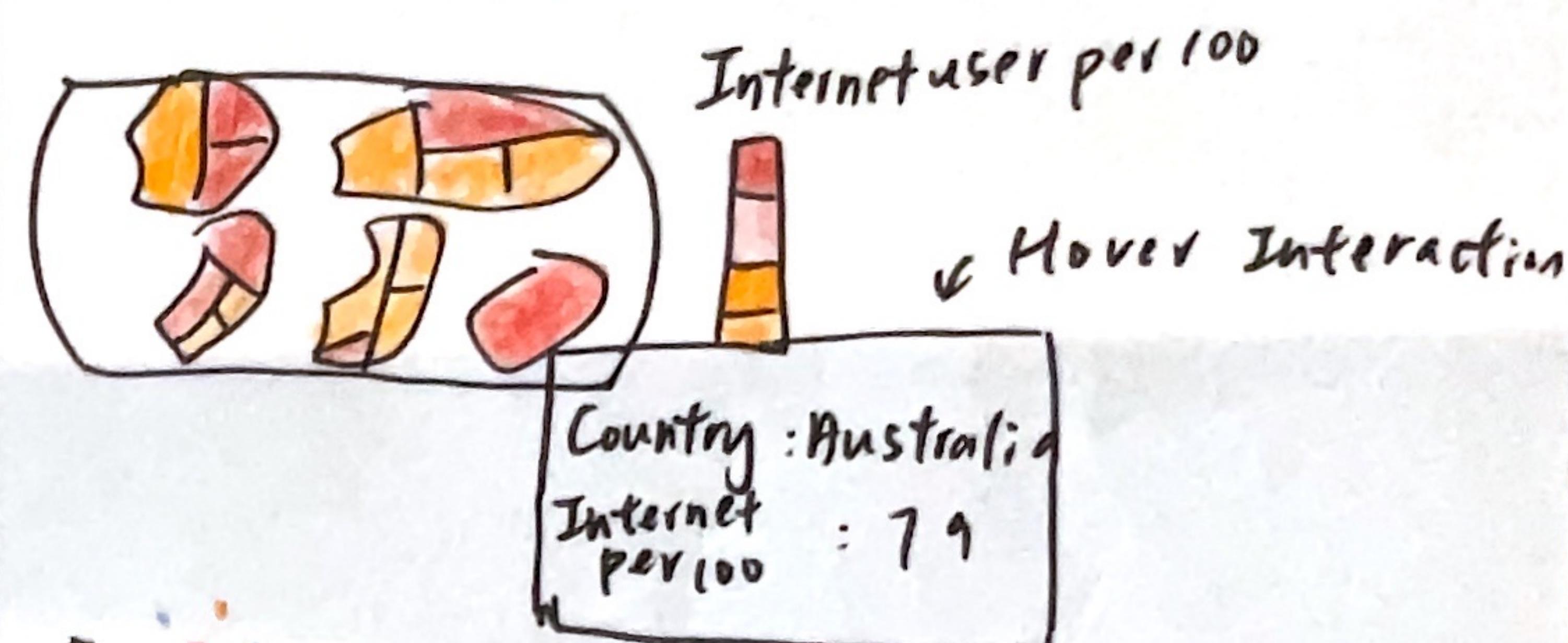
Title : The Global Internet

Task : FIT3179 Assignment 2

COMPONENTS & OPERATIONS

→ All tooltips covered

→ More text included



DETAILS

Dependencies:

→ Vega - lite / Vega

→ Dataset

→ Github

Estimated time & effort :

3 days

↳ 1 day → critique ↳ 1 day css, HTML

HTML

↳ 1 day work for map

↳ 1 day work for others & text

Specific requirement:

The overall structure of the HTML

& CSS