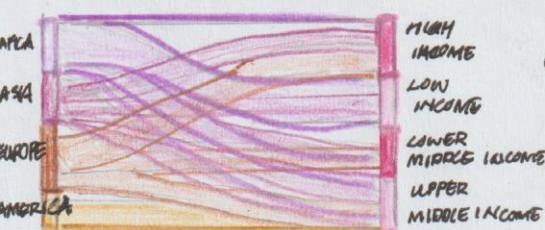


# IDEAS

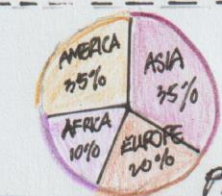


SHEET 1: BRAINSTORM  
NAME : YEE KHAI WEI  
DATE : 26/09/2024

## ALLUVIAL DIAGRAM



DISTRIBUTION OF COUNTRY INCOME GROUPS BY CONTINENTS



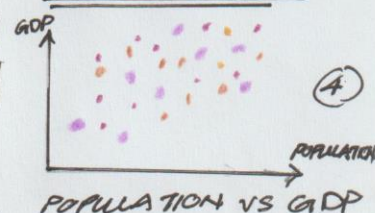
DISTRIBUTION OF GDP BY CONTINENT

PIE CHART

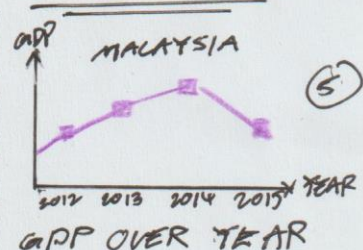
## CHOROPLETH MAP



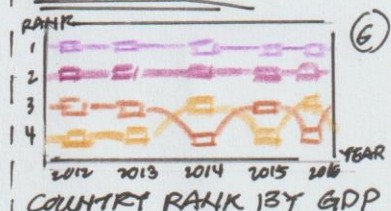
## SCATTER PLOT



## LINE CHART

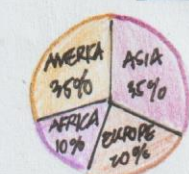


## BUMP CHART



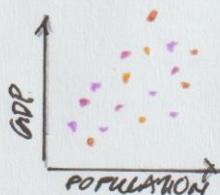
## FILTER

### ② PIE CHART



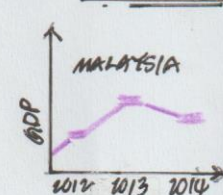
- OVERSIMPLIFIED DATA REPRESENTATION
- DIFFICULT TO GAUGE AREA DIFFERENCE
- BAR CHART OFFERS CLEARER COMPARISON

### ④ SCATTER PLOT



- OVERSIMPLIFIED COMPARISON
- PROVIDES MINIMAL INSIGHTS
- LACKS DEPTH FOR MEANINGFUL VISUALIZATION

### ⑤ LINE CHART



- REDUNDANT WITH ⑥
- PROVIDES NO ADDITIONAL INSIGHTS

## CATEGORISE

COUNTRY GDP & FACTORS

③ ④ ⑤ ⑥

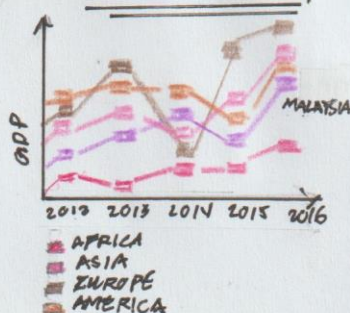
CONTINENT GDP COMPARISON

① ②

## COMBINE & REFINE

② & ⑤ CAN BE COMBINED TO SHOW MALAYSIA VERSUS CONTINENT GDP OVER THE YEARS USING

### COMBINED LINE CHART



## QUESTION

- CAN MORE DIVERSE VISUALIZATIONS BE ADDED TO BOOST ENGAGEMENT?
- IS DATA PRESENTED IN A CLEAR AND EASY TO INTERPRET WAY?
- DO THE VISUALIZATION ENCOURAGE USER INTERACTION AND DEEPER EXPLORATION?



# LAYOUT

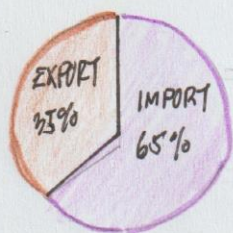
## COUNTRY GDP & FACTORS



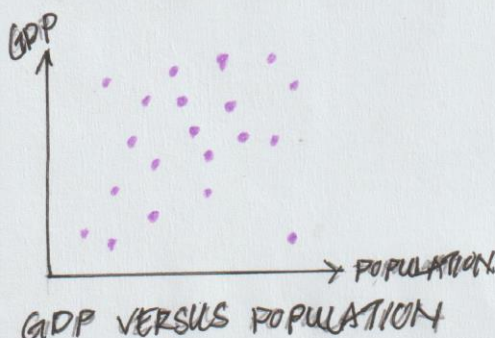
GDP PER CAPITA (USD)



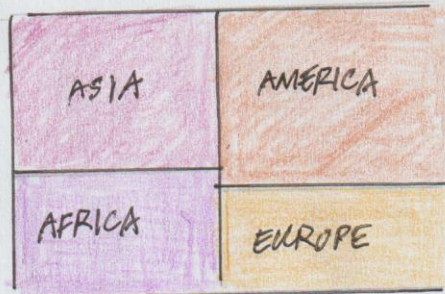
GLOBAL GDP PER CAPITA (USD)



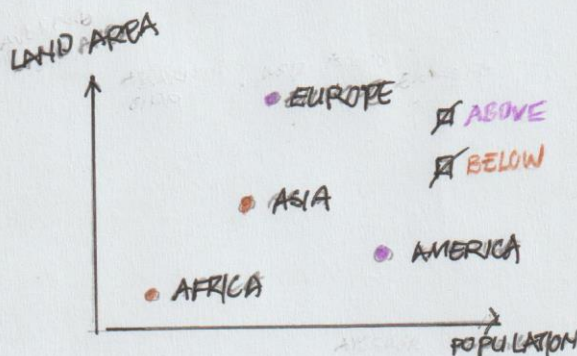
MALAYSIA IMPORT VERSUS EXPORT GDP



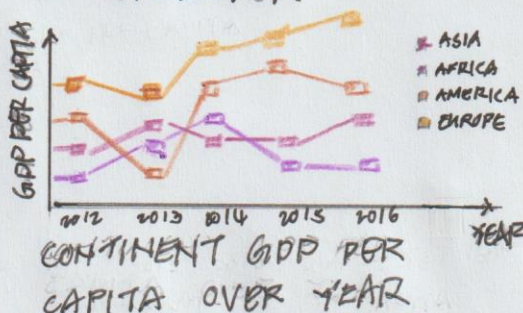
## CONTINENT GDP COMPARISON



GDP PER CAPITA BY CONTINENT



CONTINENT ABOVE / BELOW AVERAGE GDP BY LAND AREA & POPULATION

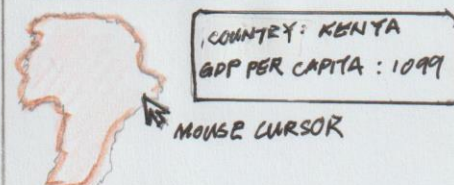


SHEET 2 : INITIAL IDEAS

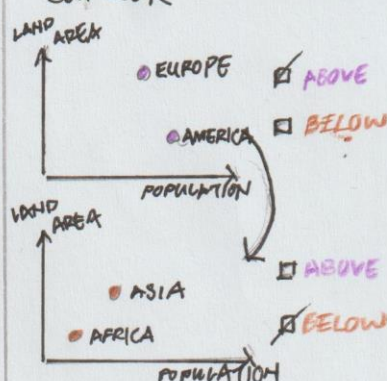
NAME : YEE KHAI WEI

DATE : 30/09/2024

## OPERATIONS



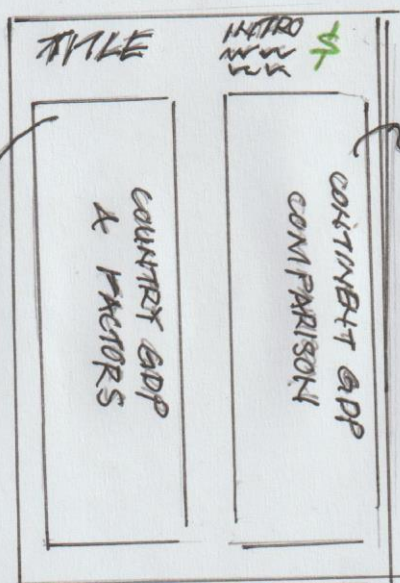
TOOL TIPS : USERS CAN HOVER OVER THE VISUALISATION TO INSPECT VALUES WITH MOUSE CURSOR



CHECKBOXES: USERS CAN SELECT DIFFERENT ATTRIBUTES TO VISUALIZE BY CHECKING THE CHECKBOX OF THE ATTRIBUTE

## FOCUS

EXAMINE COUNTRY LEVEL ECONOMIC PERFORMANCE, FOCUSING ON GDP PER CAPITA, EXPORTS, AND POPULATION IMPACT



COMPARES ECONOMIC OUTPUT ACROSS CONTINENTS, HIGHLIGHTING DIFFERENCES IN GDP, POPULATION, AND LONG-TERM TRENDS

## DISCUSSION

### PROS :

- + CLEAR VISUALIZATIONS
- + INTERACTIVE DATA SELECTION (TOOLTIPS & CHECKBOXES)
- + EFFECTIVE COLOR ENCODING

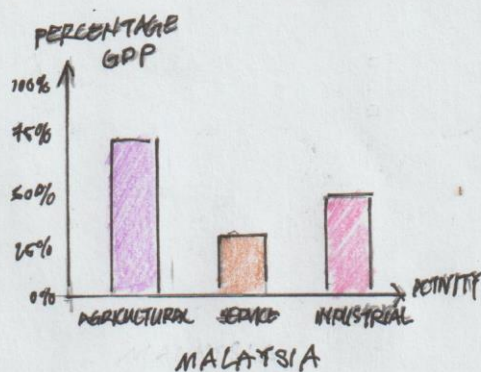
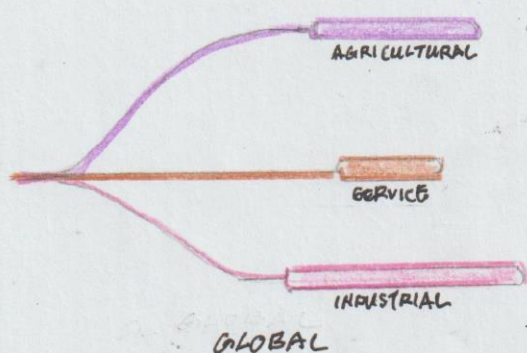
### CONS :

- TOO SIMPLE AND REPETITIVE
- LACKS STORYTELLING FRAMEWORK



# LAYOUT

## ① DISTRIBUTION OF GDP BASED ACTIVITIES



## ② GDP PER CAPITAL OVER YEAR



GDP PER CAPITA (USD)



YEAR: 1000 10000

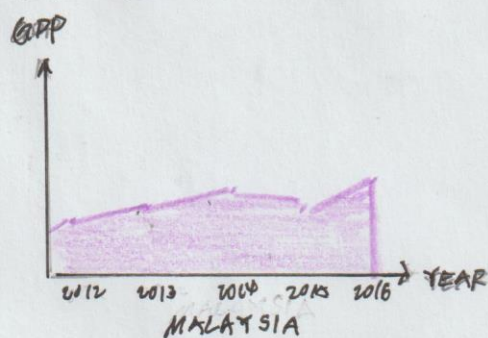
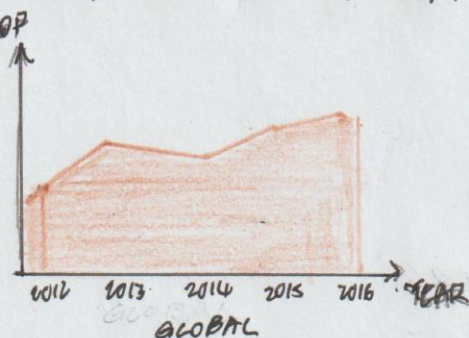


GDP PER CAPITA (USD)



YEAR: 1000 10000

## ③ DISTRIBUTION OF GDP OVER YEAR

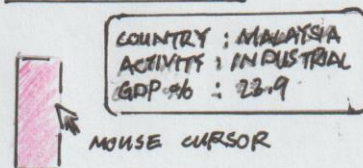


SHEET 3 : INITIAL IDEAS

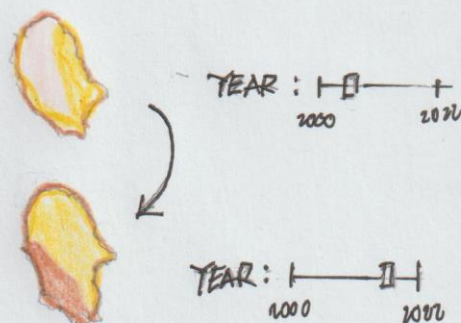
NAME : YEE KHAI WEI

DATE : 02/10/2024

## OPERATIONS



- TOOLTIPS : USERS CAN HOVER OVER THE VISUALIZATIONS TO INSPECT EXACT DATA VALUES USING THEIR MOUSE CURSOR

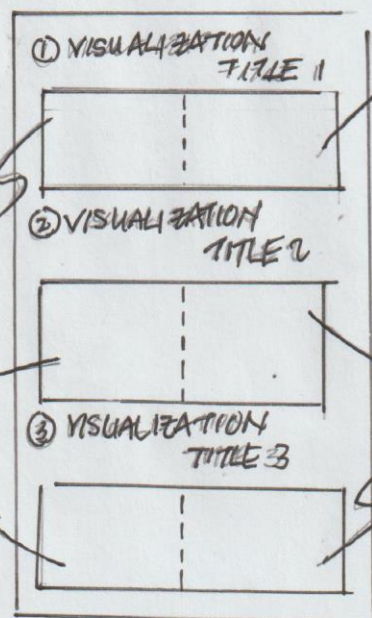


- SLIDER : USER CAN DYNAMICALLY ADJUST DATA TO EXPLORE SPECIFIC ASPECTS OF THE VISUALIZATION

## FOCUS

### LEFT SECTION:

GRAPH TO DISPLAY GLOBAL VISUALIZATIONS OF THE TOPIC, HIGHLIGHTING DATA RELATIONSHIPS AND PATTERNS GLOBALLY



### RIGHT SECTION:

CHART TO SHOW MALAYSIA BASED DISTRIBUTION OF THE DATA FROM THE LEFT SECTION, OFFERING CLEAR COMPARISON BETWEEN GLOBAL AND MALAYSIA TRENDS

## DISCUSSION

### PROS :

- + CONSISTENT FORMATING
- + OFFERS GLOBAL AND MALAYSIA COMPARISONS
- + INTERACTIVE DATA SELECTION (TOOLTIPS & SLIDER)

### CONS :

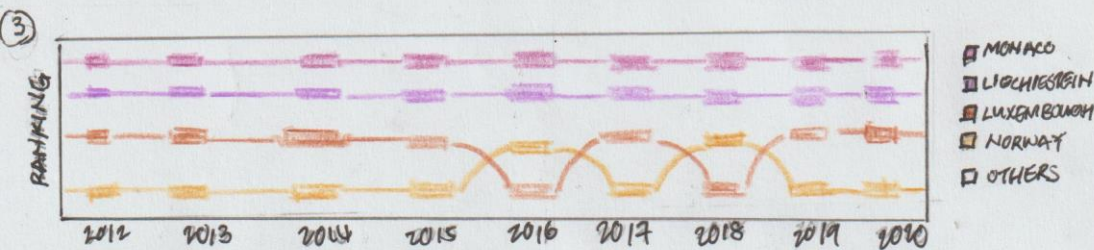
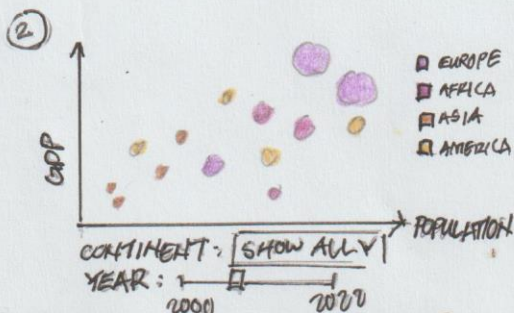
- REPETITIVE LAYOUT LESSEN IMPACT
- REDUNDANT RIGHT SECTION GRAPHS MAY NOT ADD SIGNIFICANT VALUE



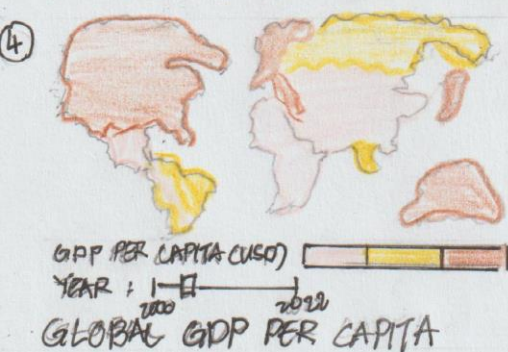
# LAYOUT



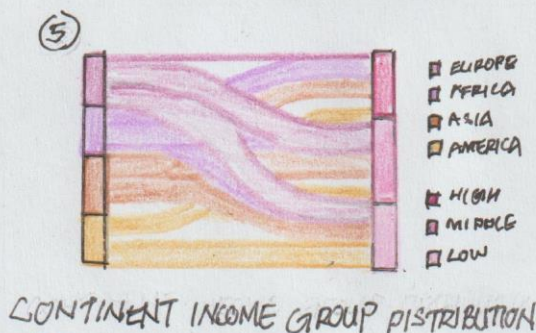
COUNTRIES ABOVE/BELOW AVERAGE GDP POPULATION, LAND AREA, AND GDP



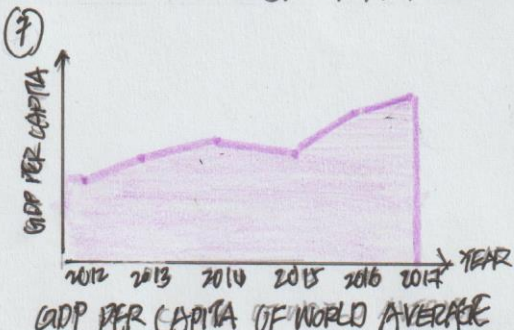
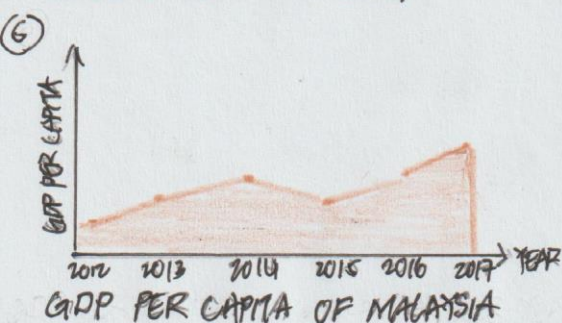
TOP COUNTRIES BY GDP PER CAPITA RANKINGS OVER YEAR



GLOBAL GDP PER CAPITA

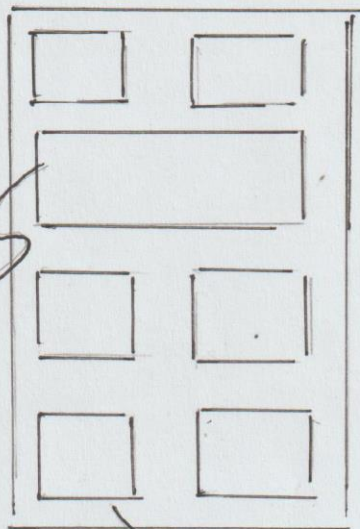


CONTINENT INCOME GROUP DISTRIBUTION



## FOCUS

A FULL-WIDTH CHART SPANS THE ENTIRE HORIZONTAL LAYOUT, POSITIONED AT THE VISUAL CENTER, SERVING AS THE FOCAL POINT AND GUIDING THE VIEWER'S ATTENTION



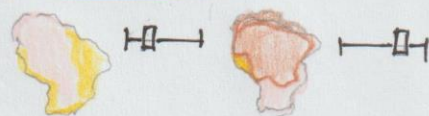
SYMMETRIC DESIGN CREATES A BALANCED AND HARMONIOUS LAYOUT, WITH A GOOD BALANCE OF COUNTRY AND CONTINENT COMPARISON CHARTS

## SHEET 4: INITIAL IDEAS

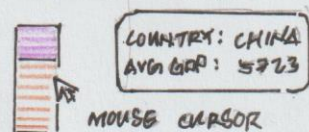
NAME : YEE KHAI WEI

DATE : 03/10/2024

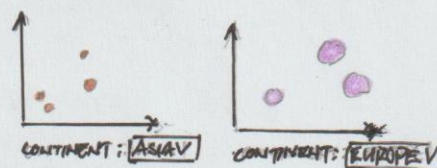
## OPERATIONS



SLIDER: USER CAN DYNAMICALLY ADJUST DATA TO EXPLORE SPECIFIC ASPECTS OF THE VISUALIZATION



TOOLTIPS: USERS CAN HOVER OVER THE VISUALIZATION TO INSPECT EXACT DATA VALUES WITH MOUSE CURSOR



SELECTION MENU: USERS CAN SELECT DIFFERENT ATTRIBUTES TO VISUALISE BY SELECTING FROM THE DROPDOWN MENU

## DISCUSSION

### PROS:

- + WIDE RANGE OF VISUALIZATION USED
- + SYMMETRIC AND BALANCED LAYOUT
- + INTERACTIVE ELEMENTS (SLIDER, TOOLTIP, SELECTION MENU)

### CONS:

- ORDERING OF CHARTS CAN BE IMPROVED
- ⑥ AND ⑦ ARE REPETITIVE AND COULD BE COMBINED



# LAYOUT

①



GDP PER CAPITA (USD)

YEAR: 2000 2022

GDP PER CAPITA OVER YEAR

②

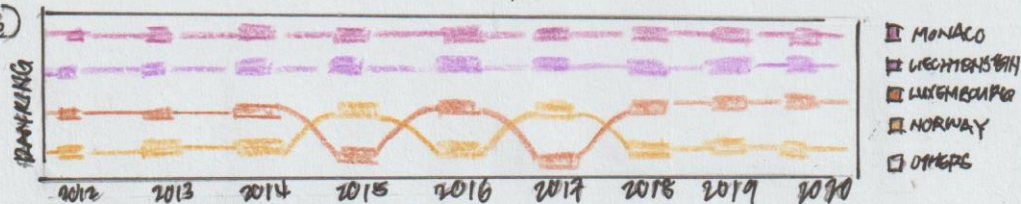


CONTINENT: SHOW ALL

YEAR: 2000 2022

POPULATION LAND AREA, AND GDP

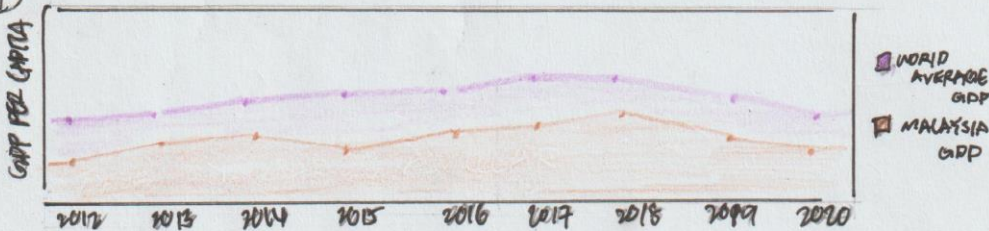
③



TOP COUNTRIES DISPLAY: 1 10

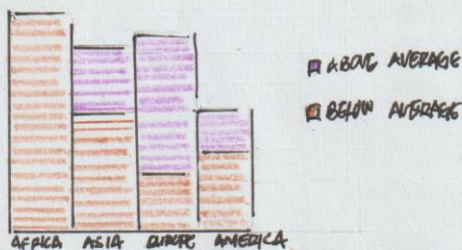
TOP COUNTRIES BY GDP PER CAPITA RANKINGS OVER YEAR

④



GDP PER CAPITA OF MALAYSIA AND WORLD AVERAGE OVER YEAR

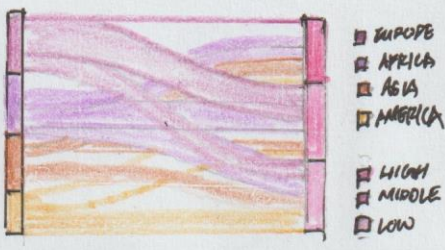
⑤



AFRICA ASIA EUROPE AMERICA

COUNTRIES ABOVE / BELOW AVERAGE GDP

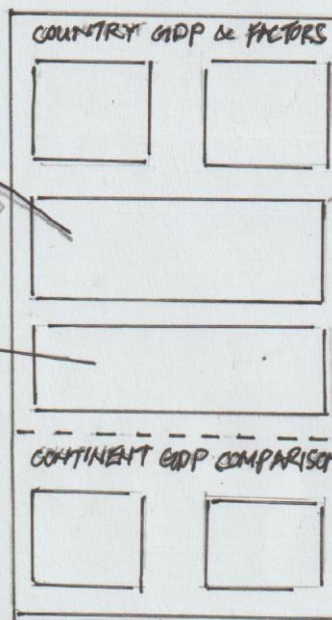
⑥



CONTINENT INCOME GROUP DISTRIBUTION

## FOCUS

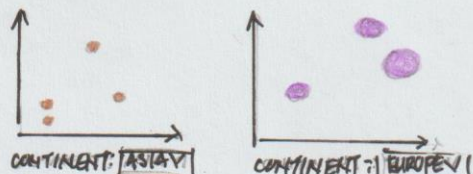
SYMMETRIC AND  
BALANCED DESIGN  
WITH FULL-WIDTH  
CHARTS THAT SPAN  
THE ENTIRE  
HORIZONTAL LAYOUT  
POSITIONED AT THE  
VISUAL CENTER,  
ATTRACTING AND  
GUIDING THE VIEWER'S  
ATTENTION



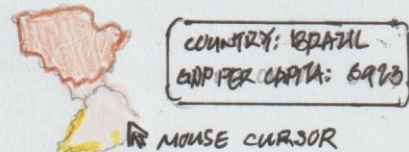
TELLS A STORY  
BY LEADING  
THE VIEWER FROM  
COUNTRY GDP  
AND FACTORS AT  
THE TOP TO  
CONTINENT GDP  
COMPARISON AT  
THE BOTTOM  
CREATING A GOOD  
VIEWING PATH  
FOR SMOOTH  
PROGRESSION

SHEET 3: REALISATION  
NAME: YEE KHA WEI  
DATE: 05/10/2024

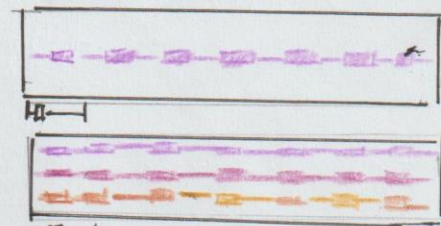
## OPERATIONS



SELECTION MENU: USERS  
CAN SELECT DIFFERENT  
ATTRIBUTES TO VISUALISE  
BY SELECTING FROM  
THE DROPDOWN MENU



TOOLTIPS: USERS CAN HOVER  
OVER THE VISUALISATION  
TO INSPECT EXACT DATA  
VALUES WITH MOUSE  
CURSOR



SLIDER: USERS CAN DYNAMICALLY  
ADJUST DATA TO EXPLORE  
SPECIFIC VISUALIZATION ASPECT

## DETAILS

- DATASET: 2 DATASETS.  
WITH A TOTAL OF 12850  
ROWS AND 29 ATTRIBUTES  
REPRESENTS THE GDP  
INFORMATION
- DEPENDENCIES: DESIGN  
SHEET 4; VEGA-LITE  
USED FOR DATA VISUALIZATION  
AND ANALYSIS
- ESTIMATES: COMPLETION  
IN 7 DAYS WITH NO  
ASSOCIATED COST