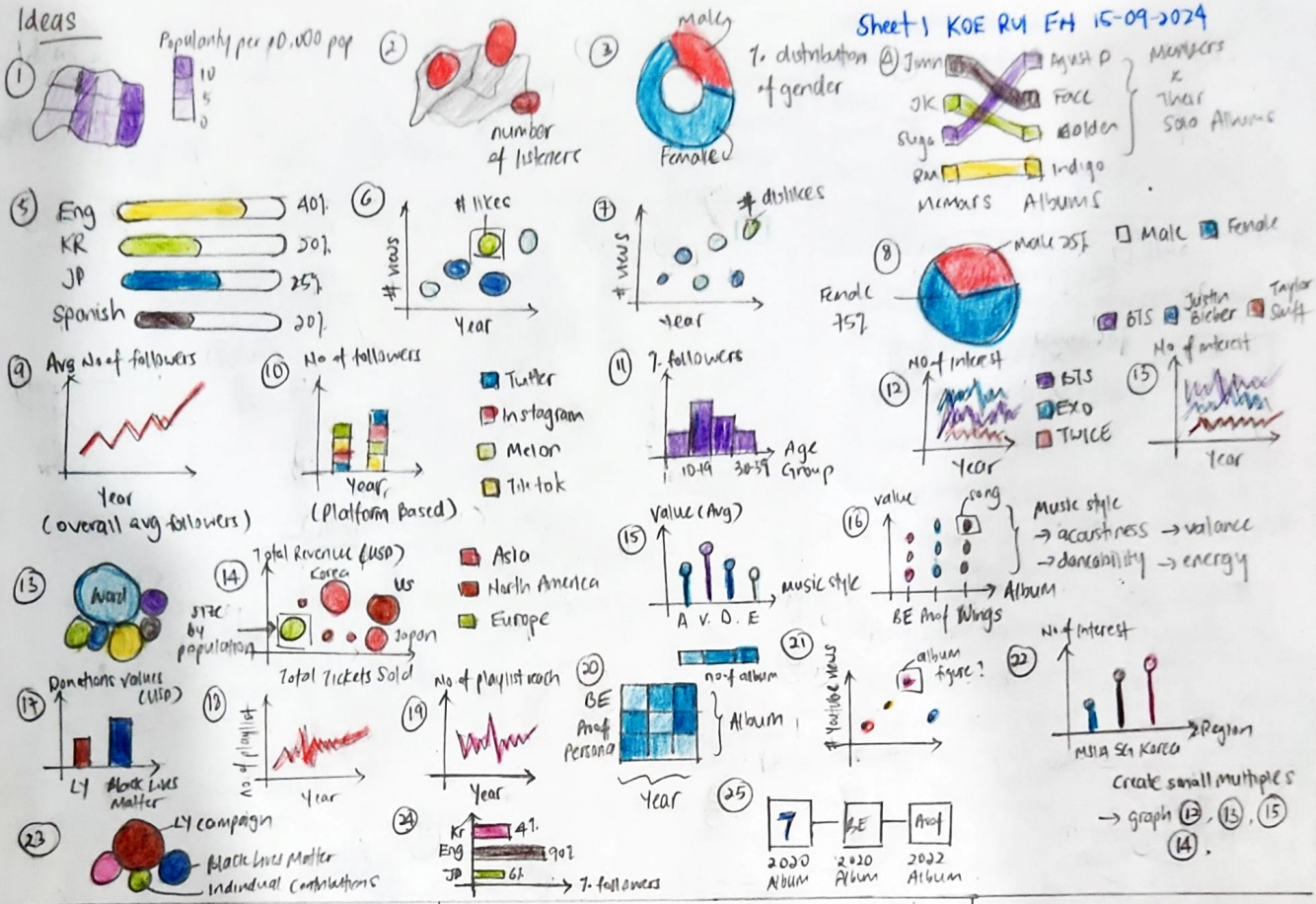
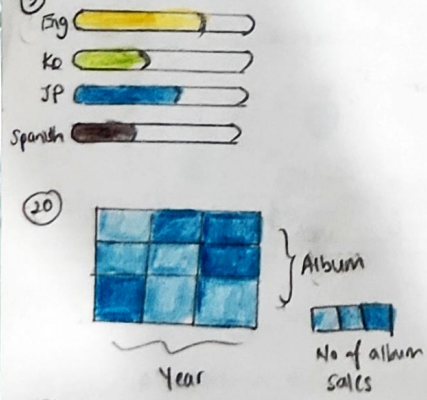
# Ideas

Sheet 1 KOE RY FH 15-09-2024




## ② Filter




## ③ Categorise

**Trends / Popularity of BTS**
- Number of Spotify monthly listeners
- Number of interest among artists
- Revenue / Gross of tour concerts
- Fan base evolution across different platforms

↓

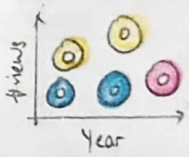
**Demographic of Followers**
- Percentage of gender distributions
- Age of followers
- Followers by language

↓

**Discography**
- Music style Evolution
- Lyrics Distribution
- Solo Albums

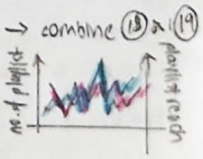
## ④ Combine & Refine

→ combine ⑥ & ⑦




→ combine ⑨ & ⑩

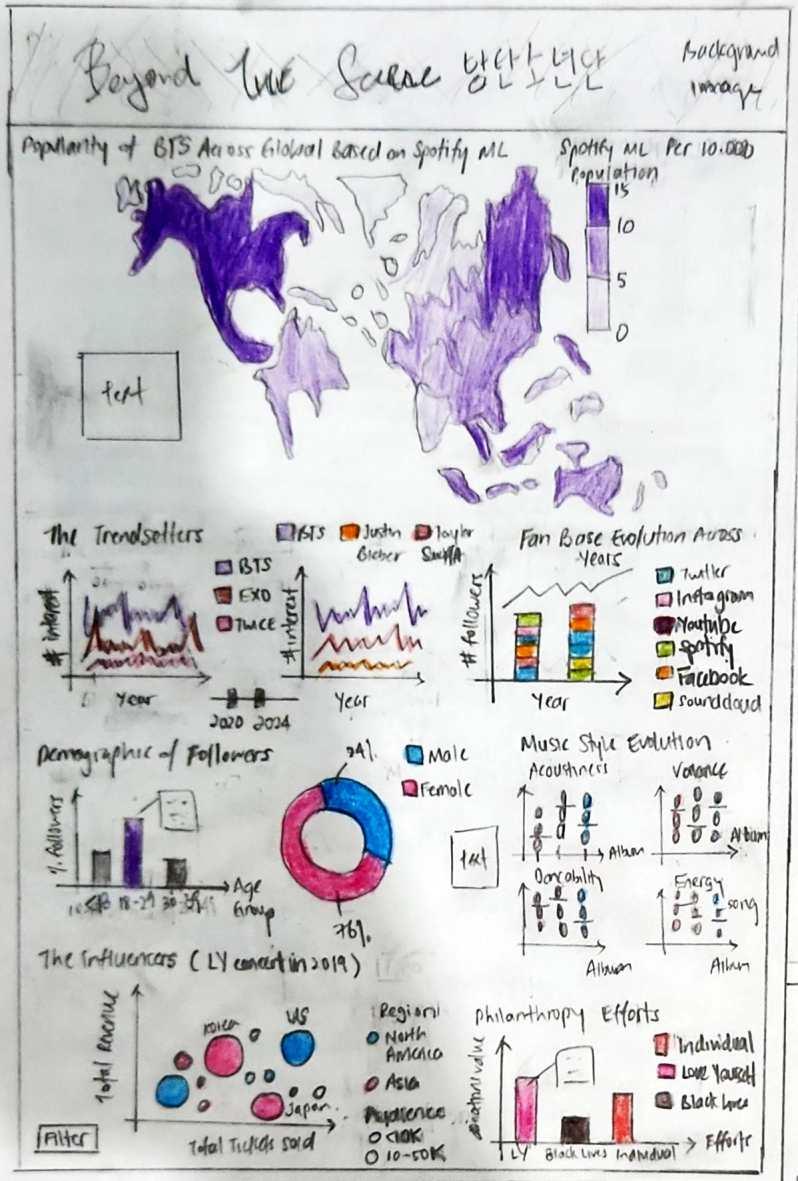
→ combine ⑱ & ⑲




## ⑤ Questions

- Does this viz tell a clear story?
- Could Alluvial / Sankey diagram be implemented using Vega-Lite?
- Any similar attributes can group as one chart?
- Does it convey essential information about bts as global naive to viewers.
- Does dual-axis chart make viewers hard to interpret, making them loss interest?
- Could vega-lite able to build custom charts like word cloud, timeline chart etc?

LAYOUT




Title: Dashboard View
Author: KOE RUI FEN
Date: 15-09-2024
Sheet: 2
Task: Design infographic poster

## OPERATIONS

- Tooltips
  - ↳ Hover over choropleth map → Country: xx; Spotify ML: xx; Spotify ML per 10,000 population: xx
  - ↳ Hover over multilines chart → Artist: xx; Interest Search: xx; Year: xx
  - ↳ Hover over dot strip plot → Song: xx; Energy: xx
  - ↳ Hover over bar chart
    - ↳ Effort: xx; Total donations: xx
  - ↳ Hover over histogram → Age group: xx; % followers: xx
  - ↳ Hover over bubble plot → Country: xx; Total Tickets sold: xx; Total Revenue
  - ↳ Hover over line chart / stacked bar chart → Year: xx; Avg no of followers: xx
    - ↳ platform: xx; No. of followers: xx
- Highlight over region when mouse hovers over for all visualisation
- Slide the slider to filter year of the interest search that viewers are interested to analyse.
- Filter drop down box to filter the region by dropping selection for viewers to select.

## DISCUSSION

### Advantages

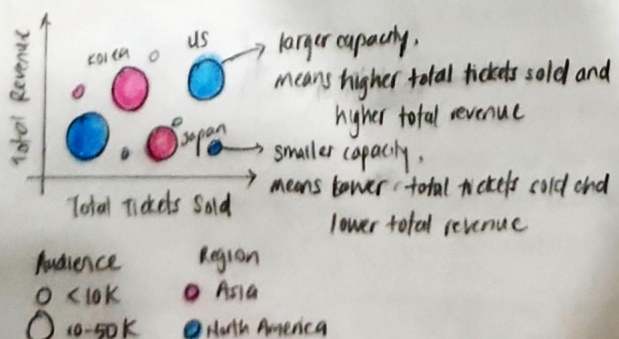
- Viewers can easily understand the information indicated in the dashboard and visualisation.
- Good flow of visualisation
  - ↳ easy to follow along and gives a clear information about BTS (popularity, discography, revenue etc.)
- Good user interactions
  - ↳ attract user to engage with data
- Viewers able to view the trend/popularity of BTS across the global and also the demographic of their followers
- Allows for wider range of vis to be used.

### Disadvantages

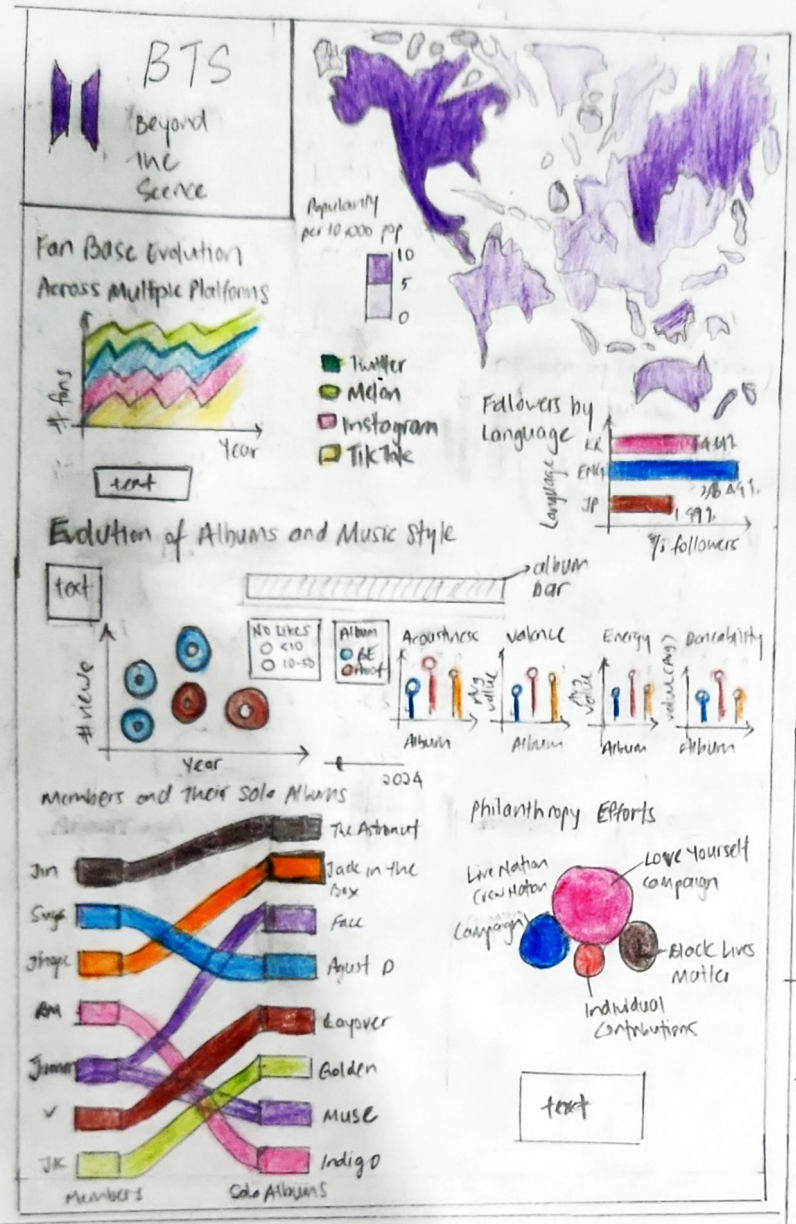
- Normalisation on choropleth map may be difficult to perform as some regions on the map may disappear after normalising.
- May visual cluttering, less white space
- May confuse viewers when viewing the combination of chart.
- Might be information overload

## FOCUS

① Focus on highlighting the relationship between total revenue and total tickets sold by audience / stadium capacity



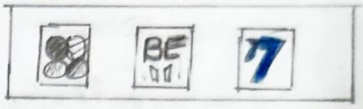
LAYOUT




Title: Dashboard View
Author: KOE RUI EN
Date: 15-09-2024
Sheet: 4
Task: Design a scrollable infographic poster

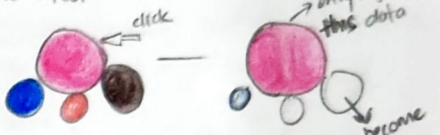
## OPERATIONS

- Bar at the top to filter / highlight album



↳ can filter by clicking the album icon

- Hovering mouse over visualisation to highlight data area that the viewers interested




- Slide the slider to filter year of number of Youtube viewers of all albums that viewers interested.

## DISCUSSIONS

### Advantages

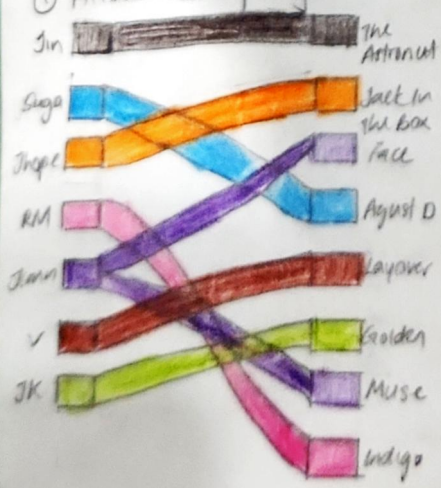
- Good user interaction.
  ↳ attract user's attention
- Use of colour palette to differentiate between categorical attributes
- User interaction is easy to implement and also easy for user to operate
- Users can understand the versatility of BTS and their popularity across global

### Disadvantages

- Too many vis → visual cluttering
  ↳ confuse viewers
- Proportional Symbol / Packed bubble chart may difficult to implement using Vega-Lite. This situation also applies to Alluvial Diagram.
- Layout is messy → Legend and Filter.
- Viewers may found difficult to interpret when the diagram contains inner and outer bubbles.

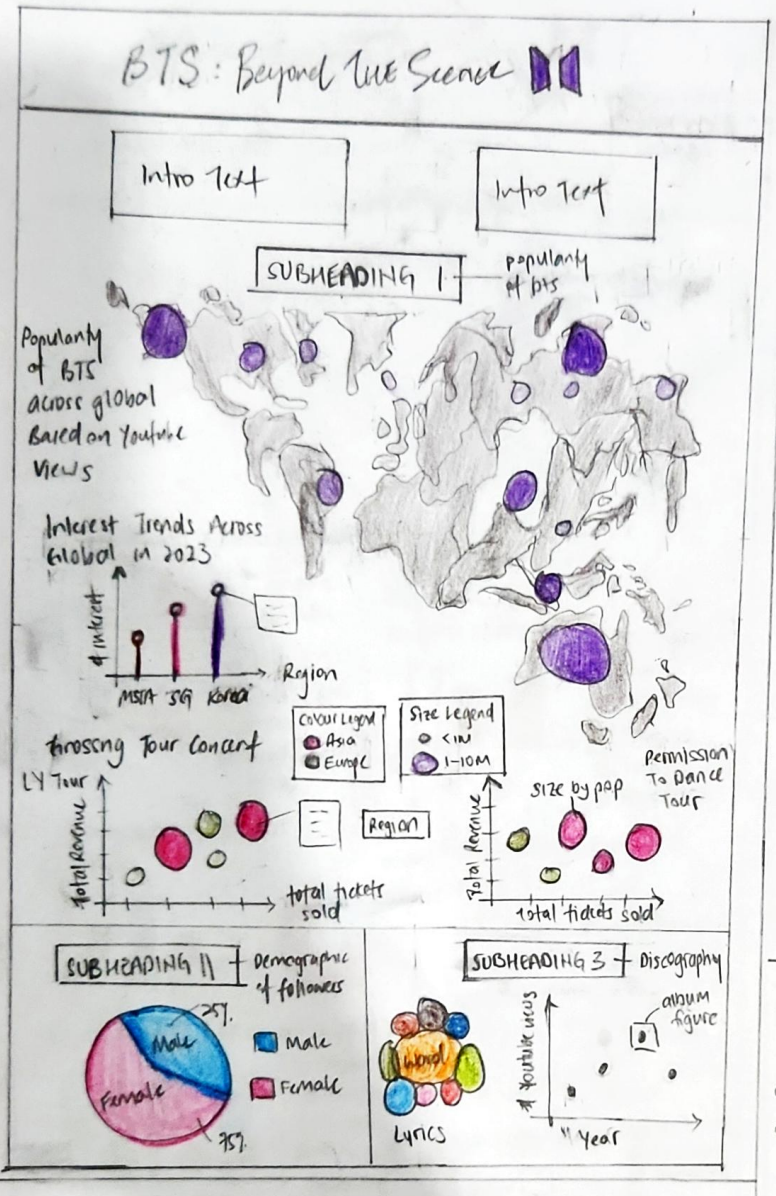
## FOCUS

① Alluvial / Sankey Diagram




- Illustrates which members have released solo work and the volume of their releases.
- The thickness of flow lines represent the number of album sales / number of solo work released
- Highlight how BTS members active in releasing solo work.

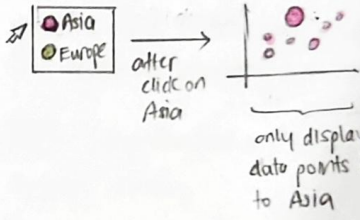
## LAYOUT




Title: Dashboard View
Author: KOE Rui En
Date: 15-09-2024
Sheet: 3
Task: Design infographic poster with annotations

## OPERATIONS

- Highlight over region when mouse hover over for all visualisation.
- Region drop-down box to filter the region by dropping selection for viewers to select.
- Hover mouse over data points to show tooltips for all visualisations.
- Highlight data points that viewers interested when they select on the legend




## FOCUS

① Word cloud

Lyrics

→ show the number of word to be appeared in the lyrics

→ highlight the features of lyrics that a song that BTS want to to express.

③ Proportional Symbol Map

→ show popularity of BTS across global based on Youtube views at different regions

→ the size of symbol (circle marks will indicate the popularity of BTS in certain countries / continents.

→ viewers are able to view and compare trends in popularity at different countries

## DISCUSSION

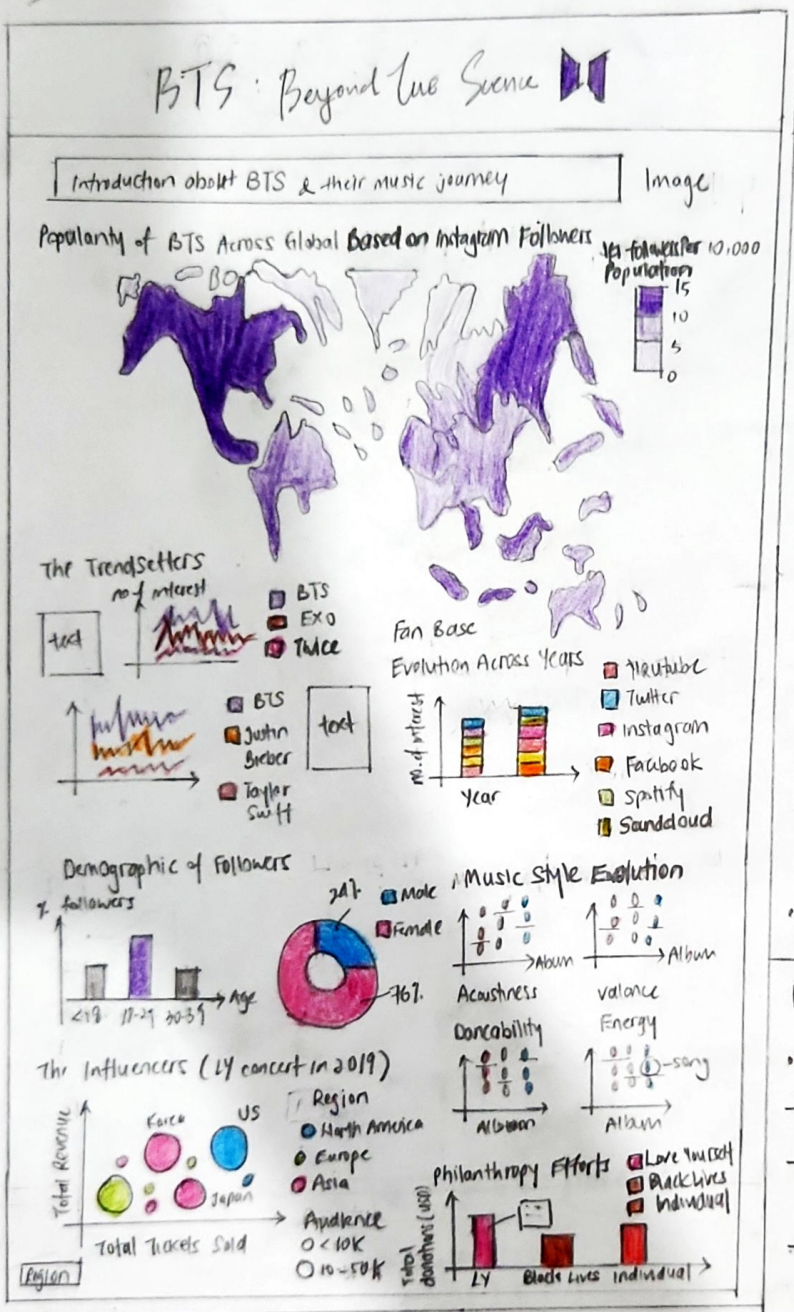
### Advantages

- Well segmented into clear sections
- Involves various implementation includes complex one and can highlight these
- Involves wide range of visualisations
  ↳ attract viewers attention
- Clear layout, avoid visual cluttering

### Disadvantages

- Word cloud may difficult to be implemented using Vega-Lite. May require external software
- Viewers may found difficult to interpret the proportional symbol map as some marks may too close to each other due to some values are similar between countries or two / more countries are close to each other
- Viewers may difficult to interpret when the bubble areas vary only slightly, causing viewers to be confused
- Lack of annotation or text descriptions.

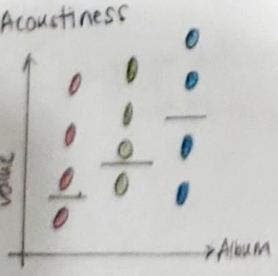
LAYOUT




FOCUS

① Dot strip plot

eg: Acoustiness



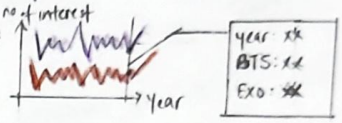

- Illustrates how music styles evol for songs released in each album.
- Compare the music characteristics vary from album to album.

Title : Dashboard View
Author : KOE RUI EN
Date : 15-09-2024
Sheet: 5
Task : Design the final layout

OPERATIONS

- Hover mouse over data points to show tooltips for all visualisations

eg.

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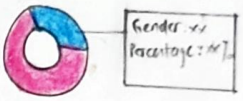


- Highlight over region when mouse hovers over for all visualisations
- Slide the slider to filter year of interest search that viewers are interested to analyse
- Region drop-down box to filter the region by dropping selection.
- Highlight data points that viewers interested when they select on the legend.

DETAIL

- Dependencies :
  → Vega-Lite to build map and diagrams.
  → HTML, CSS and pure CSS grid to visualise the idioms built using Vega-Lite
  → Excel for data formatting, scrapping, wrangling.
- Estimated time and effort :
  -> at least 4 days to build all idioms including cleaning and formatting and 3 days for final design/layout
  → need extra 1 day to do research before building idioms using Vega-Lite
- Specific requirements :
  → Device of least 1200×900 screen size to view dashboard
  → Need Geojson/Topojson files to build base maps