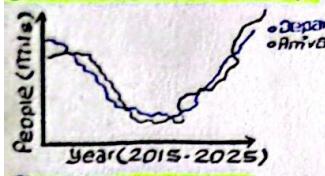


DATA DESIGN SHEETS : SHEET 1  
NAME: GURVINDER SINGH  
DATE : 10/10/2025

IDEAS :

① Arrivals And Departures (2015-2025)

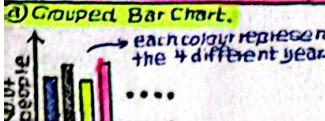
② Line Chart (Time Series)



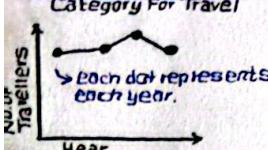
③ Stacked Area Chart



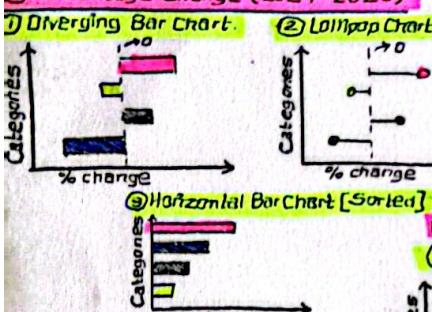
④ Arrivals And Departures by Category of Travel.



⑤ Line Chart → Multi-Small multiples. Category For Travel



⑥ Percentage Change (2024-2025)



FILTERS

① Arrivals And Departures (2015-2025)

- we only need 1 clear time series graph.

- keep

② Line Chart ③ Stacked Area Chart

drop others.

→ Line Chart → Best for long time series.

→ Stacked Area chart → Best for combined volume.

② Arrivals And Departures By Category

- keep

③ Grouped Bar Chart → Clear And Balanced

④ Line-Chart [small multiples] → Best way to avoid clutter and focuses on trends.

⑤ Percentage Change (2024-2025)

- keep

① Diverging Bar Graph & ② Lollipop Chart (Diverging)

Cleanest way to emphasize direction and scale of change.

of change.

Categorise -

Arrivals And Departures (a,b)

Arrivals And Departures By Category (a,b)

% Change (1 and 2)

Top 10 source country (b)

Counties Aussies Visit (a,c)

State And Territory of residence (2,3)

Reason For Travel (1,3)

Flight Prices (1)

Travel Budget (1,2) → Prices (1,2)

④ Top 10 Source Country

③ Coupled Bar chart each bar represents each year.

④ Choropleth Maps



② Pie Chart

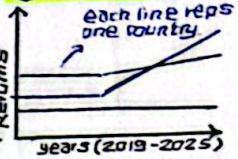


⑤ Countries Aussies Visit

③ Bump Chart

④ Dot Chart

⑥ Line Chart



⑦ State And Territory Of Residence (Resident Returns)

① Group (clustered) Bar chart

② Heatmap

③ Maps



→ colour code representation

⑧ Reason For Travel (Gender Based)

① Stacked Bar chart

② Emojo Graph

③ Pyramid Chart

→ colour reps. male/Female

→ male Female

→ Percentage (%)

→ Percentage (%)

→ Percentage (%)

⑨ Travel Budget

① Side-By-Side Radial chart

② Grouped Bar chart

⑩ Prices Of Aussie Adventures

① Bubble chart

→ size = total spent in billions



② Dumbbell Chart



③ Reason For Travel (Gender Based)

keep ① → ③

All graphs provide overview summaries, and symmetrical comparison.

④ Travel Budget

keep ① and ②

\*However might not be feasible

→ Too cluttered

→ Humans might not be good @ judging angles and axes.

⑤ Prices Of Aussie Adventures

keep ① and ②

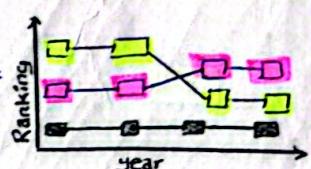
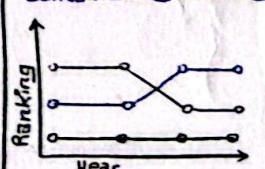
\*might be too monotonous.

⑥ Domestic Flight Prices

keep ①

Combine And Refine

Combine 5(a) and 5(d)



Summarise And Questions

→ Does the visualization provide knowledge to users.

→ Is the implementation of the graphs easy?

↳ Lollipop chart

↳ Bump chart

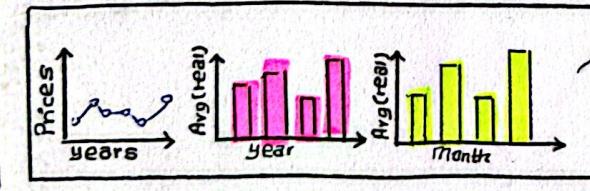
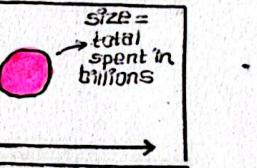
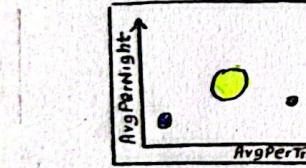
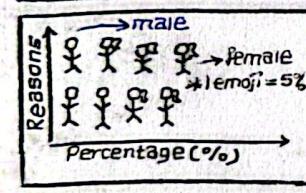
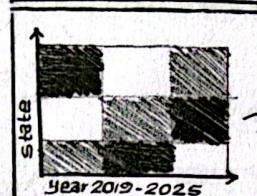
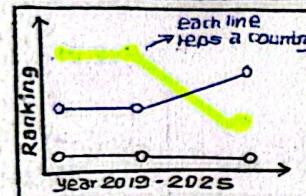
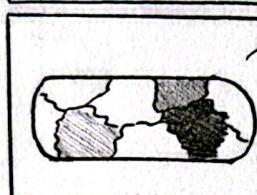
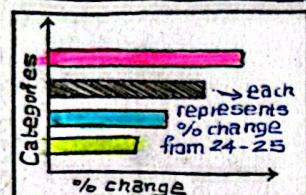
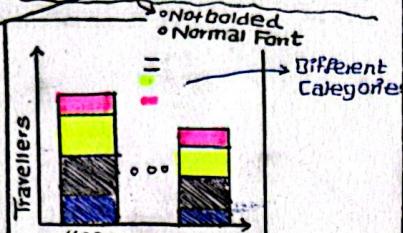
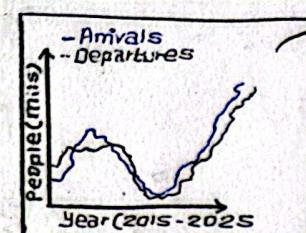
↳ Emojo chart

→ If it is hard, use other options? Bar graphs?

**FIVE DESIGN SHEETS : SHEET2**  
NAME : GURVINDER SINGH  
DATE : 10/10/2025  
TITLE : HTML View  
Description : FIT3179 BY2

### HTML VIEWS

Title : Flights, Funds And Fun : The Story of Aussie Travel  
Short Descriptions :



### PART AND FOCUS

- All graphs are important, as they play their own individual part.
- Therefore no main focus.
- If any of it is not included, the purpose of the visualisation is not achieved.

Chart 1 : Passenger Flow  
↳ narrative anchor, shows recovery.

Chart 2 : % change  
↳ shows the % ↑ or ↓ from 2024 → 2025

Chart 3 : Countries Aussies Visit  
↳ shows Aussie's preferred location

Chart 4 : Reason for Travel  
↳ Analyse and compare the reason for travel between gender.

Chart 5 : Prices  
↳ Analyse how travel spending is distributed across different categories of expenditure

Chart 2 : Arrivals And Departure By Category.

Chart 3 : To analyze and visualize how many people enter or leave the country.

Chart 4 : Source Market

Chart 5 : Quick recognition of where tourists are from

Chart 6 : State And Territory of residence

Chart 7 : Analyse and visualize visitor/resident trend across state.

Chart 8 : Travel Budget

Chart 9 : Analyze the travel budgets for domestic/international travels.

Chart 10 : Flight Prices

Chart 11 : Compare flight prices (domestic) per year or by month.

**Components And OPERATIONS**  
Users can filter data for passenger arrivals and departures

Slider Option OR dropdown

Sliders :  Year  
↳ drag this to change year

Dropdown :  user can choose multiple years to compare

Dropdown to filter years or video playback.

Dropdown :

Video Playback :

|| > year

- Having tool tips when hovering on specific point or area.  
→ need example : Country Name, No. of passengers.  
→ Pops up when hovering on data or area (map).

Have colour codes to show what each colour means.  
e.g. Arrivals

300 000  
200 000  
100 000

Add legends.

Focus on Melbourne → other domestic terminals.

Dropdown to see the prices, avg(real) year and avg(real) month.

Destination  click  
set one as default.  
filter by destination country.

### Pros & Cons

- o Bubble chart seems rather monotonous.
- o Data if updated might not be reflected in real-time.
- o Is building a emoji chart feasible?
- o Chart (Flight Prices) seems to be spread too wide.  
↳ use horizontal/vertical.
- o No storytelling.
- o Bar chart and stacked bar chart may not be feasible when there are multiple categories.  
↳ change charts.

### Pros :

- o Design has a logical flow
- o All charts serve different purpose. Not repetitions
- o Charts used are common and easy to understand.

## FIVE DESIGN SHEET : SHEET 3

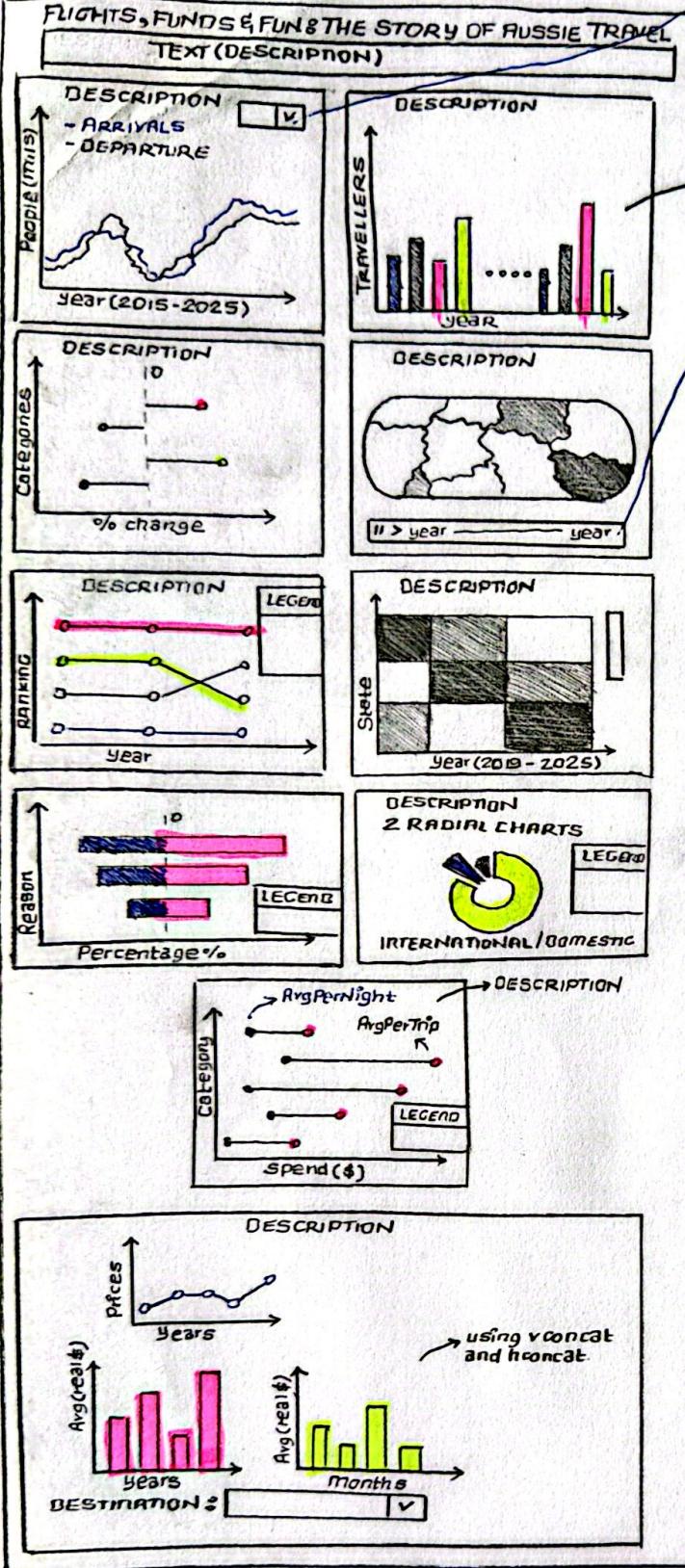
NAME : CURVINDER SINGH

DATE : 10/10/2025

TITLE : ALTERNATIVE DESIGN SHEET

DESCRIPTION : FIT 3179 DV2

## COMPONENTS AND OPERATIONS



→ Dropdown that allows users to focus on a range of years.

Add a clicking to highlight ability

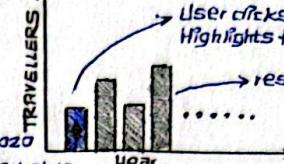
### Examples :

Change to button :

Jun 2019 Jun 2020

clickable

year



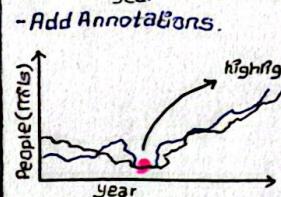
### Tooltips :

- Having tooltups that are different and do not contain the same information.

when hovering

Month : Feb 2020

Millions : 1.29



### Pros And Cons -

#### Cons :

- No annotations.
- Change of layout? → Vertical?
- Potential of having whitespaces.
- Graphs like the pyramid chart and grouped bar chart
- Both is poor for many categories (too cluttered)
- small difference may get harder to read.
- Pyramid chart is limited to 2 categories.

- Graph is too plain and boring

↳ Add background? KPI cards?

- Video playback may be hard to implement.

- Colours too similar.

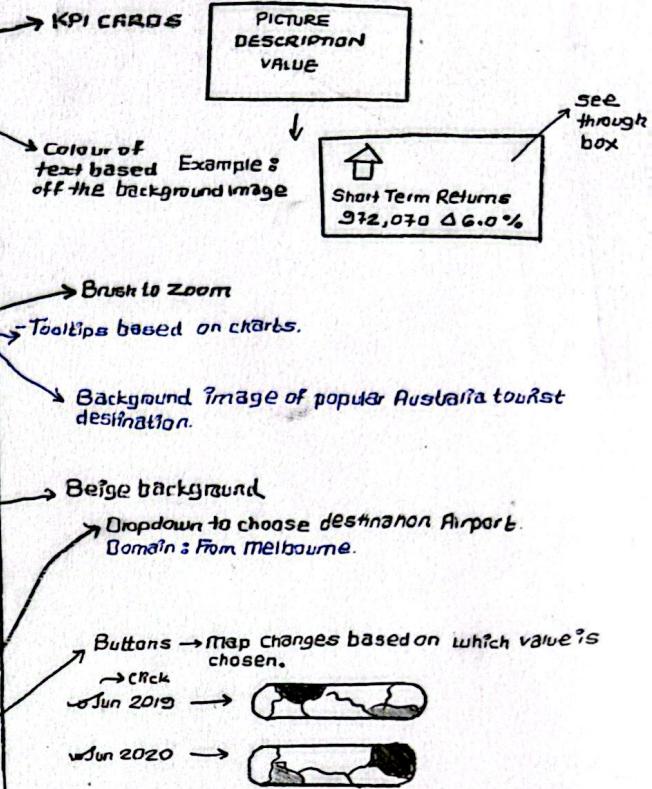
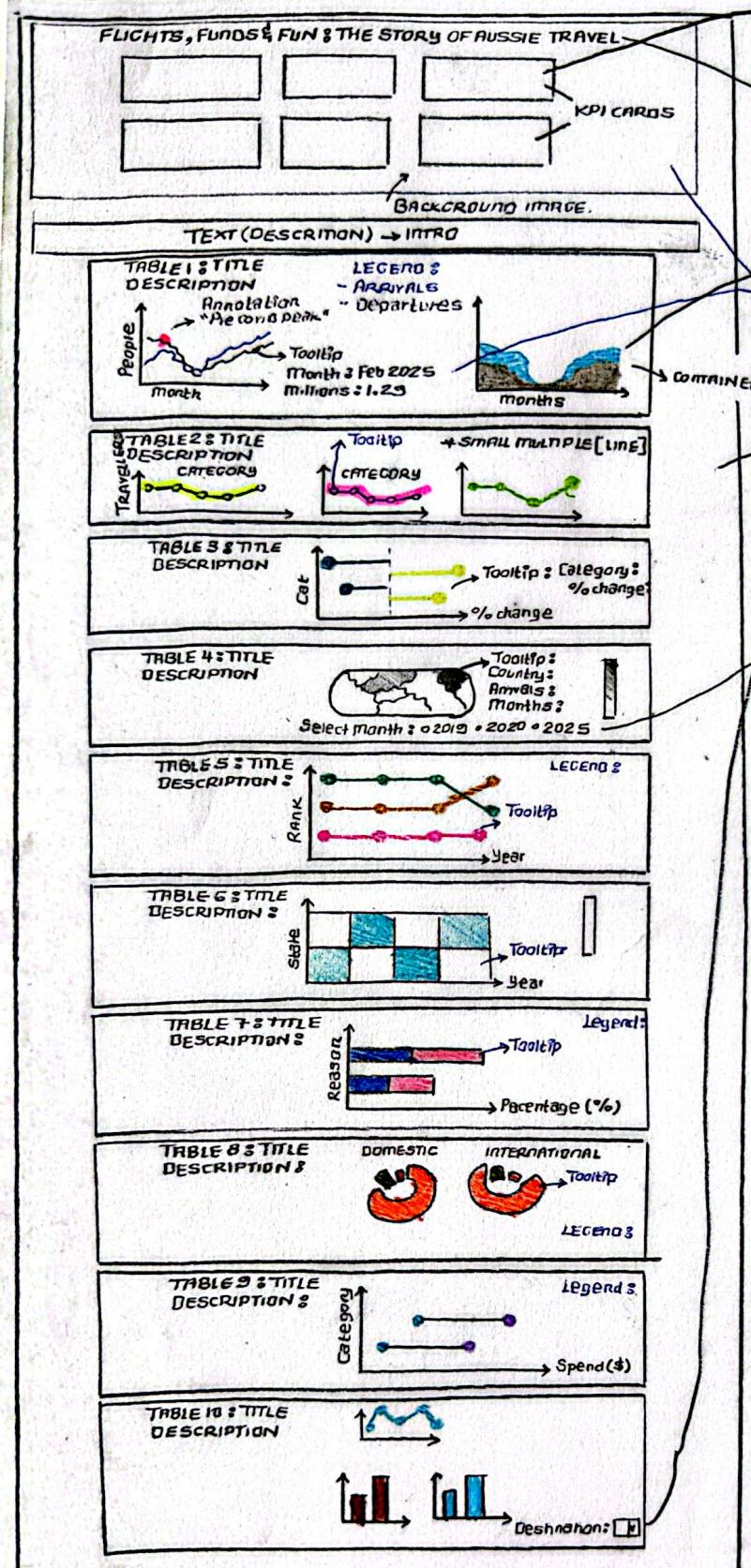
#### Pros :

- Storytelling
- wide range of charts used.
- Interactive

### Part/ Focus :

All graphs are important, as they play their own individual part in providing information.

If any is not included, the purpose of the visualization will not be achieved.



#### Pros And Cons

**Pros :**  
→ Visualisation is easy to follow.  
→ Interactive.  
→ Vertical (Top-Down) layout → best for storytelling.  
→ Background image makes the visualisation feel alive and relevant.  
→ KPI cards → instantly understandable and interactive.  
→ no repeated colours. → No repeated type of chart.

#### Cons :

→ Charts may be too compact.  
→ must take note.  
→ Is there data online that has this breakdown?

#### Part / Focus

All the graphs are important as they are required to structure the visualisation.  
Missing graphs → may lead to missing important info.

Author 3  
Resources:  
image:  
Sources Link:

FIVE DESIGN SHEETS & SHEET 5  
NAME : GURVINDER SINGH  
DATE : 10/10/2025  
TITLE : FINAL DESIGN SHEET  
DESCRIPTION : FIT 3179 DVZ

## Components And OPERATIONS

**FLIGHTS, FUNDS & FUN & THE STORY OF RUSSIE TRAVEL**

TEXT (DESCRIPTION) → INTRO

TABLE 1 : TITLE DESCRIPTION

TABLE 2 : TITLE DESCRIPTION

TABLE 3 : TITLE DESCRIPTION

TABLE 4 : TITLE DESCRIPTION

TABLE 5 : TITLE DESCRIPTION

TABLE 6 : DESCRIPTION

TABLE 7 : DESCRIPTION

TABLE 8 : DESCRIPTION

TABLE 9 : DESCRIPTION

TABLE 10 : DESCRIPTION

KPI CARD = see through box

Background Image

Tooltips & Include for all graphs.  
Example :

Brush to Zoom

\*LEGENDS & COLOUR LEGENDS  
Annotations :

Month : Dec 2019 Millions : 1.29

Re-Covid Peak

Button selection  
Example : oJun 2019 oJun 2025

Beige background oJun 2019 oJun 2025

Dropdown Selection

COLD COAST  
MILDMRA  
NEWCASTLE  
PERTH  
SYDNEY  
TOWNSVILLE

Click

Open the option.

### DETAILS :

DEPENDENCY : PUBLIC SERVERS/WEBSITES AND PROGRAMMING PLATFORMS TO CLEAN DATA

ESTIMATED TIME : AT LEAST 2 DAYS TO FIND DATA TO BUILD EACH 100M AND 4 DAYS TO FINALISE DESIGNS AND GENERATE CODES.

- ↳ 1 DAY → RESEARCH FOR DATA
- ↳ 1 DAY → CONCLUDE RESEARCH
- ↳ 1 DAY → LINE CHART + SMALL-MULTIPLES
- ↳ 1 DAY → DUMBBELL + BUMP + HEATMAP
- ↳ 1 DAY → STACKED BAR + RADIAL CHART + LOLLIPOP CHART
- ↳ 1 DAY → MAP AND LINE/BARCHART FINALIZATION OF ALL CHARTS.

\*CSV FILES FOR DATA TO GENERATE HTML<sup>3</sup> IN VS, VEGALITE.

Author :  
Resources :  
Image :  
Sources Link :