FIT5147: DATA VISUALIZATION PROJECT 5 SHEET DESIGN METHODOLOGY

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Introduction

- Application of the 5SD methodology for the DVP.
- Dataset is multi-variate and mix of different types of data.
- Primary focus on presenting the distinction between the winners and other teams.

[SHEET-1] INITIAL DESIGN

Page No.: Date: YOUVA

* Problem Statement: Analyzing Navi's major winning runs undefeated, w.r.t previous major winners and other competitors.

Data Available: → Kills / Deaths / Assists
→ Economy
→ Trading
→ Opening duels
→ Aggression
→ Multi kills
→ Entry

Interface: R/D3.js/HTML.

Considerations: Important to add clear difference between team performance.

Visualizations:

* Bar plot (grouped / Stacked) (1)
* Radar chart (2)
* Pie chart (3)
* Line graphs (4)
* Sankey Diagrams (5)
* Density chart (6)
* Scatter plot (7)
* Box plot (8)
* Heat maps (9)
* Tree map (10)
* Bubble plots (11)
* 3D area plot. (12)

Presentation:

(3), (5), (8), (12), (9), (10), → Cannot be used freely as they are context specific. and not useful for micro analysis.

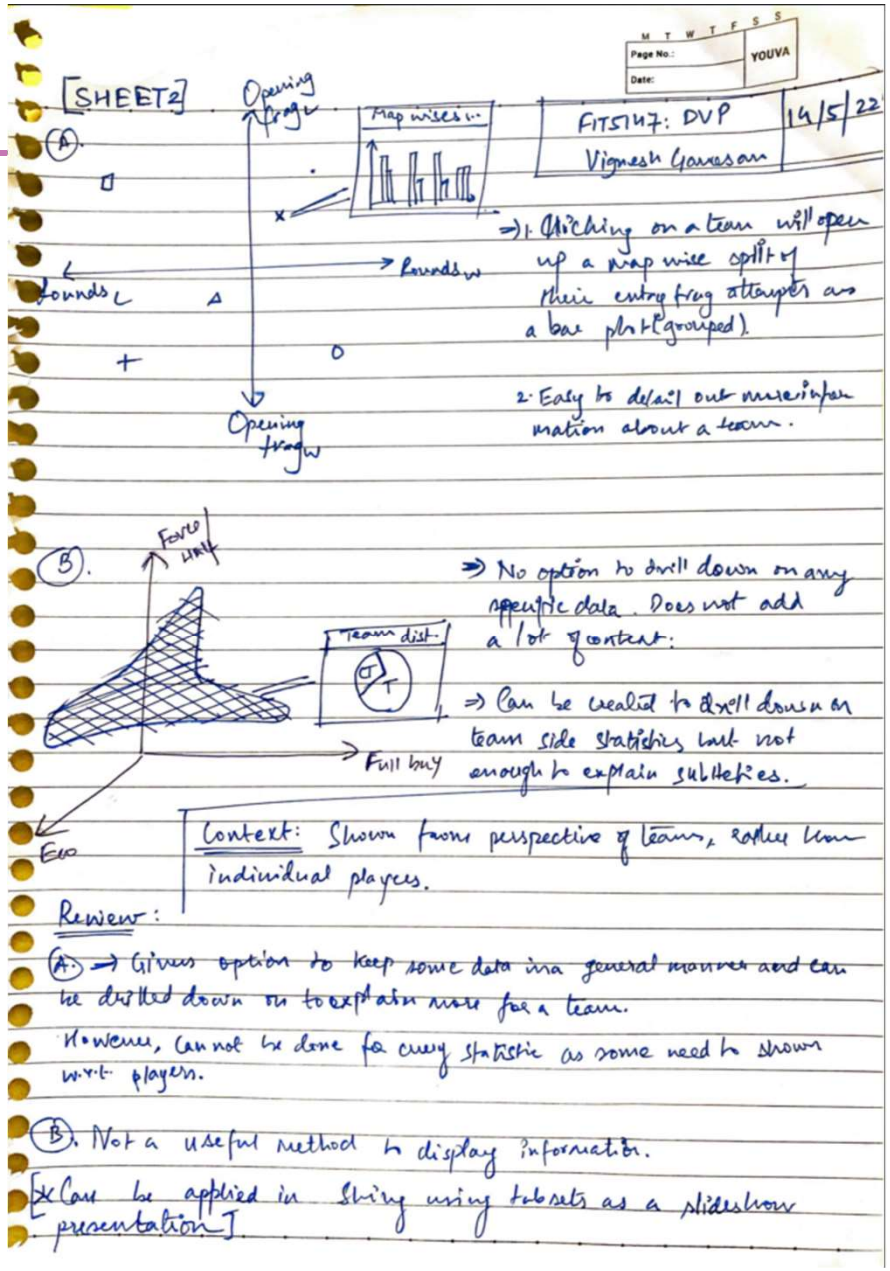
Mix + Match + Filter: → Data being used here is categorical + ordinal.

(1) + (4) :— Can be used to plot grouped variables + Changes over time.

(7) (6) :— Grouping of data after clustering can be done to show similarity.

(2) :— Ordinal data can be grouped for 1 team and used as a whole comparison plot for another/multiple teams.

(11) :— Can be used but not expensive on its own to outline inferences.


[SHEET 2]
Opening frags
Map wise split
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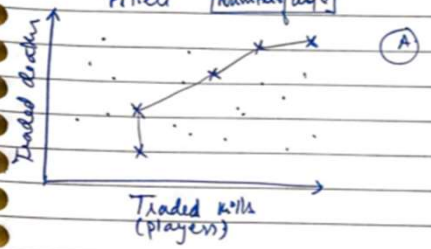
Rounds won
Rounds lost
Opening frags
1. Clicking on a team will open up a map wise split of their entry frag attempts as a bar plot (grouped).
2. Easy to detail out more information about a team.
(B).
Force Limit
Team dist.
Full buy
Eco
⇒ No option to drill down on any specific data. Does not add a lot of content.
⇒ Can be useful to drill down on team side statistics, but not enough to explain subtleties.
Context: Shown from perspective of teams, rather than individual players.
Review:
(A). → Gives option to keep some data in a general manner and can be drilled down on to explain more for a team.
However, can not be done for every statistic as some need to shown w.r.t. players.
(B). Not a useful method to display information.
[* Can be applied in Shiny using tabsets as a slideshow presentation]

[SHEET- 3]

Filter [Summary tab]



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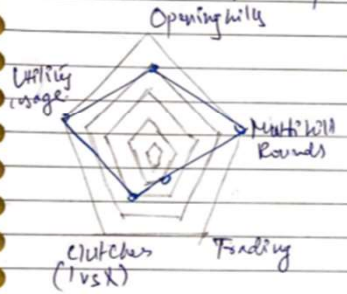
Context:
From perspective of players but not useful for showing team performance.

- Clicking on player links node to other players as well and displays team statistics like win/loss/etc.
- Filter will allow for comparison against top/bottom players.



B. • Allows player vs player comparison of critical statistics.

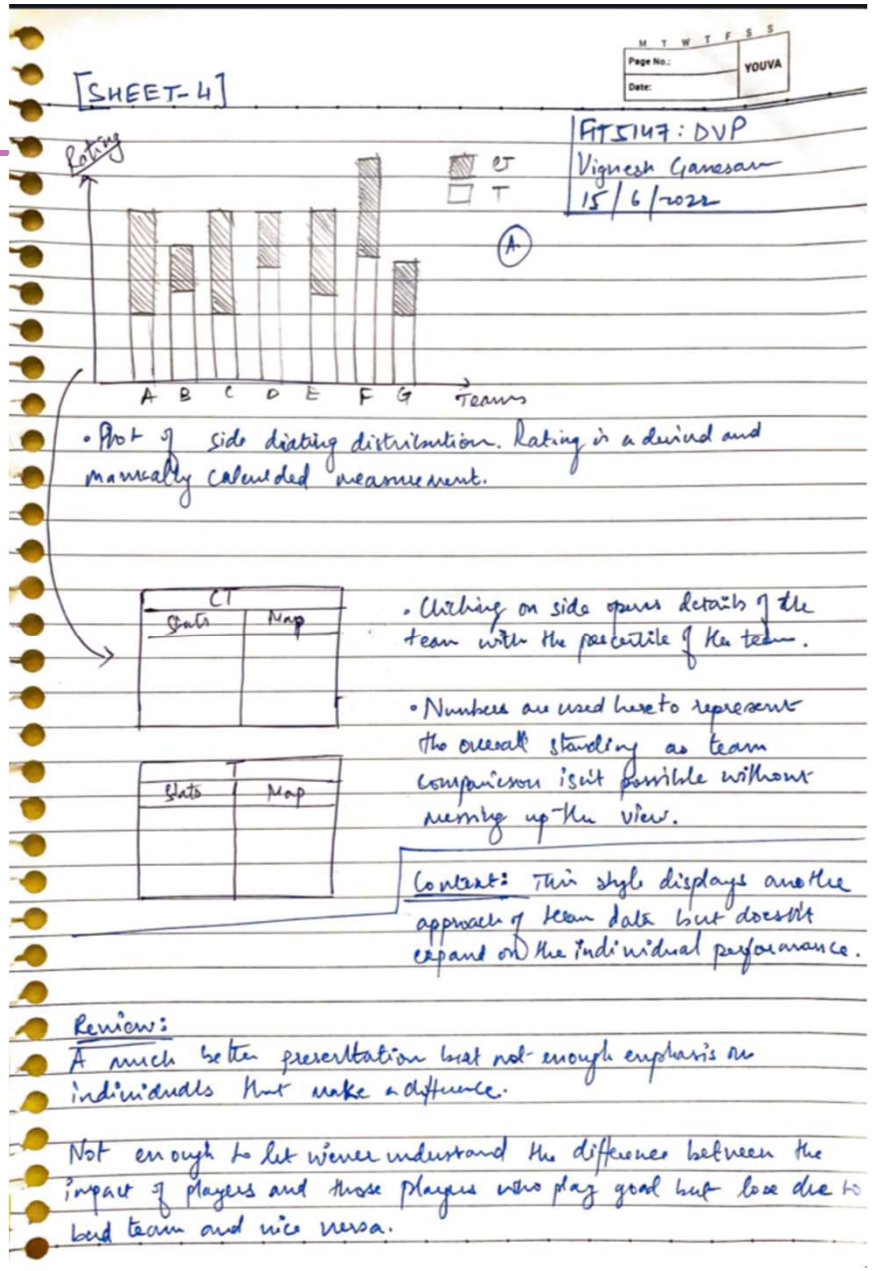
Player details
Team Name :
Position :
Year :
Teammates

Review:

A. Allows for representation of player performance w.r.t other players and even players from other teams.
But, team related statistics are hard to display without congesting screen.

B. Useful for individual comparison but not enough for multiple players.
Side bar is also not enough to cover team metrics such as map distribution, pistol conversions, economy, etc.

SHEET 4



[SHEET-4]

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Rating

CT
T

A B C D E F G Teams

- Plot of side dialing distribution. Rating is a derived and manually calculated measurement.

CT	
Stats	Map

- Clicking on side opens details of the team with the percentile of the team.

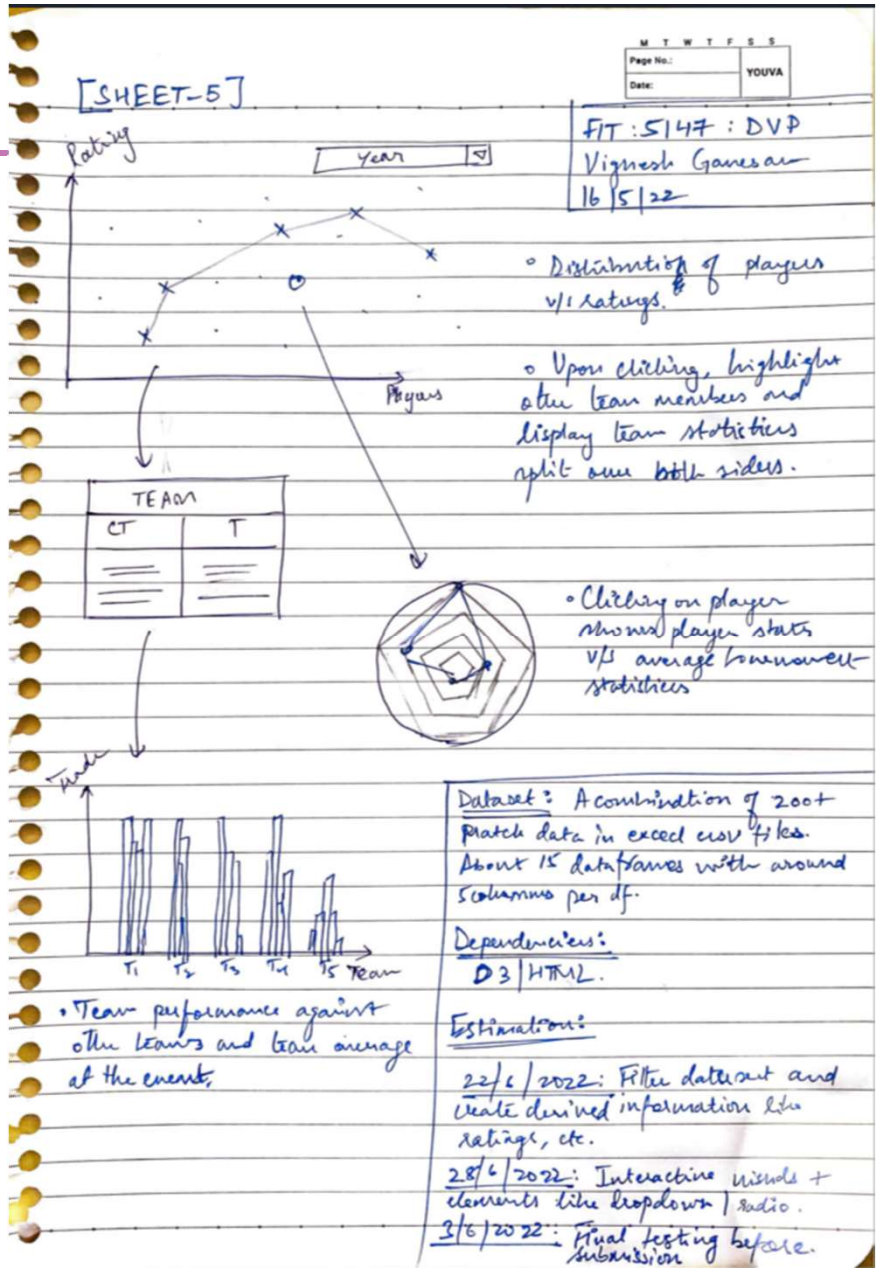
T	
Stats	Map

- Numbers are used here to represent the overall standing as team comparison isn't possible without messing up the view.

Context: This style displays another approach of team data but doesn't expand on the individual performance.

Review:
A much better presentation but not enough emphasis on individuals that make a difference.

Not enough to let viewer understand the difference between the impact of players and those players who play good but lose due to bad team and vice versa.



[SHEET-5]

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Rating

Year

Players

- Distribution of players v/s ratings.
- Upon clicking, highlight other team members and display team statistics split over both sides.

TEAM

CT	T

- Clicking on player showed player stats v/s average tournament statistics

Rounds

T_1 T_2 T_3 T_4 T_5 Team

- Team performance against other teams and team average at the events.

Dataset: A combination of 200+ match data in excel csv files. About 15 dataframes with around 5 columns per df.

Dependencies:
D3 | HTML.

Estimations:

22/6/2022: Filter dataset and create derived information like ratings, etc.

28/6/2022: Interactive visuals + elements like dropdown | radio.

3/6/2022: Final testing before submission.

END