

# IDEAS:

## Chess demographics

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Page 1 - Ideas.

### Demographics

- Gender
- Age
- Number

### World

- Distribution of demographics
- Compare with performance

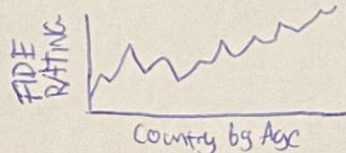
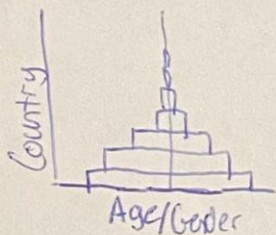
### Performance

- FIDE Ranks
- # Titles
- # GMs & WGMs

### data sets:

#### Countries

- Avg FIDE Rating
  - # Players
  - # Female Players
  - Avg Age
  - Titles distribution
  - Lat/Long
- > % Women
- By Gender



Map by Centroid

### Choropleth map, by Metric

FIDE Rating



1	C1	~
2	C2	~
3	C3	~
4	C4	~
5	C5	~

### FILTER

Combine #Players & #Female Players = % Women

Combine #Female Players & Title distribution = Dist by gender

Don't need 2 maps, Combine choropleth & centroid maps.

Add 3rd axis to bar graphs to show %

### Categorise

#### Demographic

Map (By Age or Players)  
Gender Pyramid  
Titles by gender

#### Performance

Map (by rating)  
Total titles ladder  
Bar chart of title distributions

### Combine & Refine

Map: By Colour: 2 Metrics  
US Centroid



### Graph in Graph

1	Russia	GM WGM
2	Germany	WGM FIM
3	-	-



Colour by Metric:

FIDE Rating
% Women
# Players

Show Gender Centroids ☒

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Page 2 - Design 1



Focus on the highlighted

Focus

Operations

Metric: FIDE Rating/% Women/# Players

↳ Separate Colour Scales  
For visual distinction

Include (Optional) Centroids for  
further demographic information

Use tool tips for specific information  
on country / centroid.

- Modify map by percentile to see  
top/bottom countries  
↳ top/bottom by metric.

1. Metric drop-down:

- Displays new colour scale on  
map based on metric choice

2. Show centroids - checkbox

- Add or remove the additional  
demographic information.

3. Scale centroids - slider

Make centroids larger/smaller for vision

4. Show - % Percentile Countries - slider

Only display the top x% by metric.

Discussion

• Is the map useful? Yes! It can show  
up to 4 different demographic/performance  
metrics, with additional tooltip info.

• Is it engaging? With distinct colours  
& interactivity via operations it is  
engaging to explore the world.

• Good appearance? Needs to be well  
laid out & not cluttered. Needs bright  
or contrasting colours.

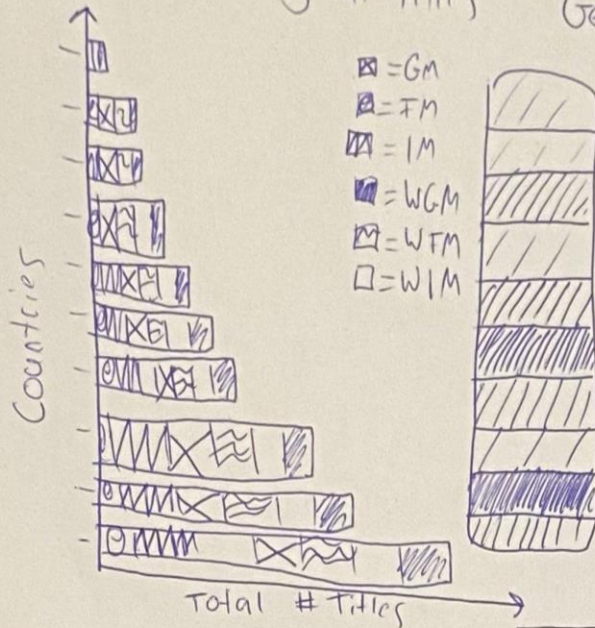




Goal is to focus on 1 of the 2 metrics, using # titles as a base comparison.	Focus	Operations Operations are used to help promote the focus here.
<p>↓</p> <p>⦿ Trend →</p> <p>Suggests a trend based on size &amp; metric.</p>	<p>Scale</p>	<ol style="list-style-type: none"> <li>1. Colour by metric. Drop-down menu - used to change colour scale to explore performance by some demographic.</li> <li>2. Highlight - checkboxes - Increases opacity &amp; creates a distinctive circle around each highlighted point. Also adds country name to the plot. Helps bring attention to each point.</li> <li>3. Tool tips. Hover to provide extra information on specific countries.</li> </ol>
<p>Highlighting by metric or titles</p> <p>Provides more info &amp; helps identify where trends converge.</p>	<p>Utilises scatter as best way to show trends for a large sample space.</p>	<p>Discussion</p> <ul style="list-style-type: none"> <li>Does the Interactions provide any useful information? yes, the help draw the users focus towards trends &amp; anomalies.</li> <li>Is this the best way to display this data? yes, the scatter is the best way to display overall trends with such a large group of data.</li> </ul>



## Top Countries by #Titles

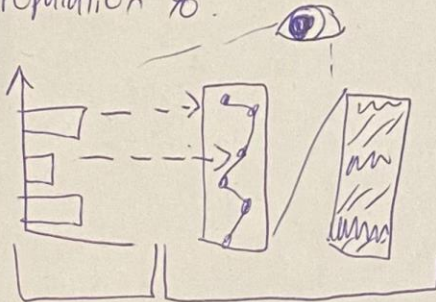


## Gender Demographic Pyramid



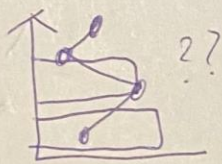
Edward.G 3247510  
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The focus here is a combined Gender + Performance graphic, where the performance of female players is highlighted against their relative Population %.



Separate Visuals

The separated visuals help promote this idea of performance vs demographic, other wise an overlay would be too cluttered



## Layout

### Operations

Show top:

5 Countries  
10 Countries



Allows for distinction between viewing detail vs viewing scale - showing few countries allows for detail at top, vs seeing the distribution of many countries.

Colour Metric:  $\frac{\% \text{ Women/Men}}{\# \text{ Male/Female Titles}} \times \text{Average Age}$

### Discussion

Why bar charts?

- Bar charts are a good way to show progress (also the pyramid). Especially when combined with the separated side visuals, they can convey progressive meaning through multiple data sets.
- Is colour used properly here? Yes, both bar chart & side vis use colour to differentiate between M/F & give a good performance val.



# Mapping the Chess World

Colour by Metric ☐ Metric

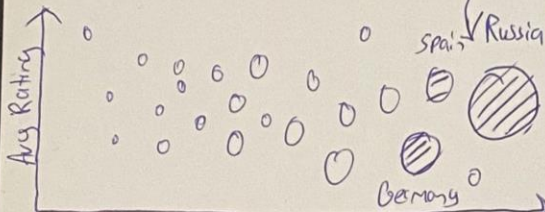
Show centroids ☒



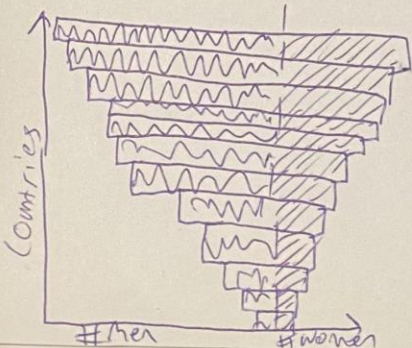
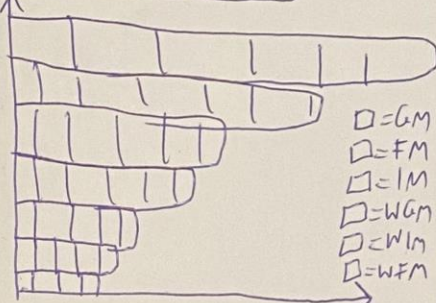
Min Percentile to show ☐

## Participation vs Performance

Colour by Metric ☐ Highlight Top 5 ☒



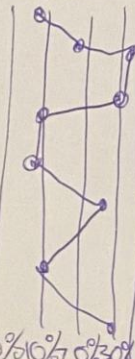
Show top ☐ 10/20/50 Countries



Colour Metric

□ = GM  
□ = FM  
□ = IM  
□ = WGM  
□ = WIM  
□ = WFM

% women



## Layout

## Focus

## Therefore is

Colours are a large focus, combining quantitative data with qualitative colours.

3rd Metric ☐ Blue ☐ Pink ☐ Allows for trend identification

Also using clear metrics for Performance:

○ centroid size ☐ Bar size ☐ Line Graph ☐

## Operations

All data is pre loaded into CSVs, some metrics calculated dynamically on selection. Change colour scale or performance metric

Drop down

Metric Menus

Metric ☐ Option 2 ☐ Option 3 ☐

Highlight Check boxes

☒

Help trend identification & provide more detail / insights into key data points.

## Detail

Time taken to build site: 30hrs.

Time to view: 2mins, clear layout.

Data sets acquired from free sources:

L Kaggle, Lichess, chess.com

- Scale for each metric dynamically updates, as do colours.
- Colours update dynamically to stand out & represent the data thematically
- Manually cleaned data set

The global chess landscape:

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21/10/25

Sheet 5.