

# Data Visualization - Individual Assignment

May 2024

The Eurovision Song Contest is a beloved annual international music competition that brings together countries from Europe and, in some cases, beyond. It's a colourful and eclectic celebration of music, culture, and spectacle that has been captivating audiences since 1956.

Here's how it works: Each participating country selects one musical act to represent them in the competition. These acts perform original songs live on stage during Eurovision week, which typically takes place in May. The performances are broadcast to millions of viewers across the globe. First, the countries will go through different rounds of semi-finals. The best acts from the semi-finals will advance to the finals, resulting in around 20 to 26 acts in the finals.

After all the performances, viewers from each participating country (except their own) vote for their favourite songs through a combination of telephone, SMS, and, more recently, online voting. These are called televotes. Additionally, a professional jury in each country also casts their votes. So each country awards two sets of points: one set from the public vote and another from the jury vote. The top ten countries from each vote receive points, with twelve points going to the country receiving the most votes, ten points to the second, and then descending to one point for the country in tenth place. These points are then combined, and the country with the highest total score wins the Eurovision Song Contest.

***This video*** has a short explanation on Eurovision, if you are curious to learn more. Are you curious about this year's entries? ***Here*** is a short roundup of all 37 contending countries!

On Canvas you can find a .zip file with two datasets. **During this individual assignment, you will use the contestant dataset! Only for the bonus of assignment 4, you will also use the votes dataset.** You can find an explanation of the dataset on the last page of this document.

*Make sure that all your visualizations contain titles, clear axes titles and values, legends, annotations and explanatory text (wherever needed), allowing it to do easy comparisons and gain some clear insights.*

## Assignment 1

Please choose the country you are from, or a country you like, and look at the place they have ended during the finals. Create a visualization showing the distribution of the places the country has ended up in during the finals. We are **not** looking for a line graph for this assignment.

## Assignment 2

The point system with a distinction between the televotes and jury votes has only been implemented since 2016. Before 2016, televotes were only used in case of a tie. It is always interesting to see the difference between televoting

and jury votes of the finals. Please compare the televotes and jury votes of the finals per country and examine the correlation. Use a dropdown filter for your visualisation to filter out only the years between 2016 and 2023. Use one of the visualizations learned during the course so far.

### Assignment 3

Now that we can see a difference in televotes and jury votes, it is interesting how they relate to where they ended up during the finals. Recreate or duplicate the visualization of assignment 2, but now also show where the country ended during the finals as a third variable. Select an appropriate visual encoding that would indicate the final rank of each country at the finals. Again, use a dropdown filter to filter out only the years between 2016 and 2023, for your visualization.

### Assignment 4

Now you have practised making visualizations for one, two, and three variables. Using the contestant dataset, create a visualization for this dataset using at least two variables. Use a graph/visualization type different from the ones used in assignments 1, 2 or 3.

**Bonus points:**

Include in your visualization the votes dataset. Use the *votes* and *contestant* datasets to create an interesting visualization using at least two variables.

### Assignment 5

Create a short story on your findings during the previous 4 assignments using a Tableau Story. Was there something you noticed when looking at your visualizations?

## Assessment criteria

Exercise	Minimal requirements	Points
Assignment 1	A visualization* addressing the Assignment 1	15
Assignment 2	A visualization* addressing the Assignment 2	15
Assignment 3	A visualization* addressing the Assignment 3	25
Assignment 4	A visualization* addressing the Assignment 4	25
Bonus Assignment 4	In case you respected the combination of the twodatasets	10
Assignment 5	<p>The story should contain 200 to 400 words and should describe and reflect on the 4 visualizations developed. The findings described should be backed and supported by the visualizations and the message they reveal.</p> <p>Your data story should explain for the visualization of Assignment 3, how many points are needed for televoting and jury voting for a country to win, based on your observations.</p>	10
<b>Total points</b>		100

\* Each visualization should follow the principles of good practices in visualizations, as presented during Lectures #1 and #2 of the DataViz course.

**There will be a penalty of 5 points for any visualization that does not contain titles, clear axes titles and values, legends, annotations and explanatory text (wherever needed), allowing it to do easy comparisons and gain some clear insights.**

## Contestant

column	description
year	contest year
to.country_id	country id of contestant
to.country	country name of contestant
performer	artist
song	title of the contestant's song
sf_num	participated in semi-final 1, 2 or 0 (from 2004-2008 there was only one semi-final)
running_final	order in the broadcast of the contest's final
running_sf	order in the broadcast of the contest's semi-final
place_final	place in the final
points_final	points in the final
place_sf	place in the semi-final
points_sf	points in the semi-final
points_tele_final	televoting points in the contest's final
points_jury_final	juryvoting points in the contest's final
points_tele_sf	televoting points in the contest's semi-final
points_jury_sf	juryvoting points in the contest's semi-final
lyrics	lyrics of the song
youtube_url	url to video on YouTube

## Votes

column	description
year	contest year
round	final, semi-final
from.country_id	country id of the country giving points
to.country_id	country id of the country receiving points
points	number of points given