Homework Assignment – Data visualisation with spreadsheet

Report by Riina Kikkas

Task 1: Genre Distribution

I created a pie chart to visualize how many films belong to each genre. I used the count of each genre from my dataset and calculated their percentage share.

Task 2: Average Box Office Revenue by Genre

I calculated the average box office revenue (adjusted for inflation) for each genre using spreadsheet formulas. Then, I created a bar chart to compare the results.

Task 3: Average IMDb Rating by Genre

I used the average IMDb rating for each genre to create a horizontal bar chart.

Task 4: Statistics (Box Plots)

I created box plots to show the distribution of release years, box office revenue, and IMDb ratings. This allowed me to see the spread and detect outliers.

Task 5: Top 10 Films by Box Office Revenue

I selected the ten films with the highest box office revenue and visualized them in a bubble chart. The x-axis shows the release year, y-axis shows IMDb rating, and bubble size represents revenue.

Task 6: Top 10 Films by IMDb Rating

I sorted the dataset by IMDb rating and selected the top 10 titles. I used a bubble chart to display them by year and rating.

Task 7: Box Office vs. IMDb Rating

I plotted a scatter chart comparing box office revenue with IMDb ratings to explore correlation.

Task 8: Box Office vs. Year

I created a scatter chart showing box office revenue by release year.

Task 9: Rank Change (Inflation Adjustment)

I compared film rankings before and after adjusting for inflation using a query formula. Then, I visualized the rank changes in a bar chart.