A graph with blue bars

Description automatically generated

**Purpose:**

This bar graph reveals “audience engagement” across movie runtimes, measured by “average IMDB votes”. Standard runtimes (70–130 mins) draw steady interest, while extended lengths (130–200 mins) show rising engagement, likely due to richer storytelling. A striking peak at 200–210 mins depict high appeal for epic films, which resonate deeply with audiences. Insights from this graph can guide filmmakers on optimal runtimes to maximize reach, highlighting how runtime directly shapes a movie’s impact and viewer engagement.

**Justification:**

**Position & Length**:

In the bar graph, the “x-axis” represents “running time” binned into “10-minute intervals”, indicating the length of the movies. The “y-axis” shows the “average IMDB votes”, reflecting the level of viewer engagement for movies within each runtime category. This visualization helps illustrate how different movie lengths correlate with audience interest as measured by IMDB ratings.

**Colour:** The bars in the graph are coloured **sky blue**, providing a bright and visually appealing contrast against the white background. This colour choice enhances readability, making it easier to distinguish between different runtime intervals. We have kept the colour consistent since we are only working on 2 parameters that is running time and IMDB votes.

**Size**:

The varying heights of the bars in the graph indicate fluctuations in **average IMDB votes** across different **runtime intervals**. Taller bars represent higher viewer engagement, while shorter bars indicate lower average votes, revealing audience preferences for specific movie lengths. This variance not only highlights trends in viewer interest but also emphasizes the correlation between runtime and audience votes.

**Design trade-offs**:

The bar graph's cohesive use of sky blue enhances visual harmony, making it easy for viewers to focus on the data. Its larger size improves readability and allows for detailed labels, ensuring that the information is accessible and engaging.

**Interpret**:

The graph reveals significant trends in audience engagement based on film runtimes:

1. “Short Films (70-130 minutes)”: With less than 50,000 votes, these films may struggle for visibility and appeal, indicating that audiences prefer more substantial narratives.

2. “Moderate-Length Films (130-160 minutes)”: Receiving 50,000 to 100,000 votes, this range balances viewer commitment with narrative depth, attracting a larger audience.

3. “Long Films (160-200 minutes)”: The spike to over 100,000 votes suggests that epic or critically acclaimed films resonate strongly, likely due to ambitious storytelling.

4. “Blockbusters (200-210 minutes)”: A significant peak with over 350,000 votes indicates a strong preference for blockbuster films, reflecting broad marketing and viewer engagement.

5. “Extended Runtimes (220-230 minutes)”: Again seeing 50,000 to 100,000 votes, this suggests interest from dedicated fans but lower overall popularity compared to blockbuster films.

These insights highlight how runtime influences viewer engagement, informing production and marketing strategies.