Netflix Dashboard Report

1. Introduction

This project is an interactive data dashboard built using Python, Dash, and Plotly to visualize and analyse trends in Netflix's content library. The goal was to uncover insights around genres, content types, release patterns, and geographic spread.

---

2. Dataset Overview

The dataset was sourced from a publicly available Netflix titles CSV file and includes:

- Title
- Type (Movie or TV Show)
- Release Year
- Genre (Listed_in)
- Country of Production
- Duration

---

3. Tools & Technologies Used

- **Python** – for backend data handling
- **Dash & Plotly** – for building the interactive dashboard
- **Pandas** – for data cleaning and manipulation
- **Jupyter Notebook** – for early analysis and testing

---

4. Features of the Dashboard

Interactive Filters

- Filter content by type (Movies or TV Shows)
- Filter by release year

Visualizations

- **Genre Distribution:** Bar chart showing the top genres on Netflix
- **Release Timeline:** Line chart showing number of titles released per year
- **Type Proportion:** Pie chart comparing the number of movies vs TV shows
- **Duration Trends:** Scatter plot of movie durations across years
- **Geographic Spread:** Choropleth map showing number of titles by country

---

5. Key Insights

- Netflix has consistently increased its content library since 2010.
- Drama and International content dominate the platform.
- Movies make up most of the titles, but TV Shows are growing.
- Most content comes from the United States, followed by India and the United Kingdom.
- Duration trends show a preference for movies under 100 minutes.

---

6. Challenges Faced

- Inconsistent country and genre formatting required extensive cleaning.
- Some entries were missing values for duration or country.
- Creating the geographic spread was quite difficult

---

7. Conclusion

This dashboard offers a high-level overview of Netflix's content strategy and global presence. It demonstrates skills in data visualization, storytelling through data, and building user-friendly tools with Python.