Tableau Public Link:

https://public.tableau.com/app/profile/ruptosh/viz/FinalPresentation_16711338947960/Dashboard1#1

Design Choices:

For this project, the first design choice that I decided to go with was to show various movies with genre. This bar chart with what was stated in the project proposal. Furthermore, column graphs are a simple but effective way of showing changes over a period of time and worked well here. I also used other maps in order to show the relative scale of movies on some months compared to others in order to bring the audience's focus on certain months. The next design choice was the use of specific colors to depict different lines. For this, I used the color blind palette present in tableau in order to make sure that even color blind individuals that want to understand the visualizations were able to do so. Lastly, I tried to make the story and captions as readable as I could by increasing the font size where possible to make them pop out more. All these choices were made to ensure that as much relevant information as possible was provided to the stakeholders in an effective and concise manner.

Reflection:

In terms of changes, my plan to develop a story for this project did not change. I had originally set out to show how different factors such as humidity and temperature might be correlated and played a possible part in the movie quality. I had also set out to show to the stakeholders how air quality varied throughout the year and in what months the quality became considerably poor. All in all, my actual project was quite similar to what I had stated I would do in the proposal.

Executive Summary:

Movies and type of genre's popularity and various type of category are shown here. Thus, this project will seek to analyze how the air quality changes throughout the year for the city of world which is considered to be one of the most polluted cities in the world. The project will hope to paint a serious picture regarding the situation in order to inform relevant policymakers about the ongoing threat to the general public from poor air quality.

Why:

The main goal of this project is to provide an interactive visualization for the policymakers and the general public to interact with and draw inference from. Another goal is to analyze any patterns that may be occurring within the data and possibly attribute them to factors such as the choice, popularity levels and others. An intended outcome of this project is to create awareness among policymakers and the public regarding the increasing levels of poor quality in a bid to encourage them to take more steps to mitigate factors that play an important role in determining it.

Who:

Policymakers and the general public are the main stakeholders and audiences for this project. In relation to this data story, the **goals** of policymakers would be:

- Want a story that is clear and easy to understand along with containing all of the relevant points.
- Want to address the issue of air quality urgently to mitigate health risks in the present and future.
- Wants actionable visualizations that possibly provides recommendations based on the data.

Challenges and Needs:

- Policymakers are facing a race against time in a bid to mitigate the quality risks posed by poor story and thus, want to know it varies throughout the year in order to make concentrated efforts for its improvement.

Context:

- Likely to view the story in board rooms consisting of 30 to 40 people in big screens or laptops.

The **goals** for the public would be:

- Wants a story that is to the point, easy to understand and does not take much time to go through.
- Wants the issue of movie quality to be addressed as they are being directly affected by its
- impact.
  Wants data driven insights that can be used to pressure the government into making policies that mitigate factors that exacerbate the issue.

Challenges and needs:

- With a constant rise in people suffering from ailments directly being caused by poor air quality, the public want to understand how the quality may vary depending upon the season and take precautions such as wearing masks accordingly.

Context:

They Will likely view the visualization on a laptop/mobile phone or tablet. They will also be likely to view it as individuals.

What:

To move forward with this project, the data source selected was from the Purple Air, an organisation that makes air quality measurement sensors and also provide a free to use database. The data is from the first of December 2021 to the first of December 2022 and appears to be of good quality as Purple Air's sensors record relevant information twice from the environment for accuracy purposes. The data used is from sensors present in central Lahore and is updated on an daily basis.

How:

The findings of the analysis will be presented as a story on tableau. The story will made in a format that works both on laptops and phones, so that it is accessible for both stakeholders.

Challenges:

The dataset to be used contains a lot of numbers and will be a challenge to make convert into a visualization that conveys what the data is trying to say in a concise, clear and easy to understand manner. Unfortunately, data for previous years is not available as the sensors were only put to work in 2021. Hence, making a year by year comparison is not possible.