# **Ekimetrics Summer Internship - Developer Take Home Task**

## **Understanding your clients' context**

Neon Films is a well-established film producer company that has been in the business for over 30 years. Despite their success, they have recently noticed a shift in the film industry towards a more data-driven approach. To remain competitive, they have decided to make a significant investment into digitalising their business, adopting technologies such as big data, AI, and machine learning to revolutionize their production process.

Neon Films believes that digitalizing their production process through disruptive technology will not only increase their competitiveness but also allow them to produce higher-quality films that resonate with audiences on a deeper level. With a renewed focus on innovation and technology, they are confident in their ability to maintain their position as a leading film producer company in the industry.

As a starting use case, Neon Films would like to analyse audience preferences and tailor their content to better suit the current climate.

### **Analysis**

- 1. Using Python library pytrends to access Google trends API, the <a href="OMDB API">OMDB API</a>, and the dataset provided, create a set of analyses that would go a long way towards answering the question "what are current/trending audiences' preferences in movies?"
- 2. To help you get started, you can try to answer the following questions:
- 3. For movies in the movies.xlsx file, released after 2006, with box office earnings available via the OMDB API:
- 4. Do the longer films gross more?
- 5. Is there a correlation between IMBD votes and ratings?
- 6. Is there a correlation between Google searches (up to and including a year after release) and IMBD rating?
- 7. Is there a correlation between Google searches (up to and including a year after release) and box office earnings?

#### Part 2

- 2. Ops: Operationalise your analysis in order to populate a database in an Excel file with historical data. The idea is that a data refresh will be scheduled to run automatically on a monthly basis.
- 3. Use cases roadmap: identify list of potential use cases, estimated impact, and estimated timeframe of implementation

#### **Contacts**

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