BFI RSU Data Engineer recruitment, August/September 2024

Pre-interview technical task

Background

Responsibilities of the Data Engineer role within the BFI's Research and Statistics Unit include:

- reviewing and improving current processes.
- integrating new sources of information with our existing data assets.
- deploying new tools and approaches to further enhance the unique screen sector insights that BFI provides.
- building reproducible pipelines for analysis and reporting.

This task provides applicants with the opportunity to demonstrate their **coding ability**, **understanding of data**, **creative thinking**, and overall approach to **developing data products**.

Task description

Each week, BFI publishes weekend box office figures in Excel format for the top 15 films released in the UK plus other UK films on release and other new releases.

For this task, we want you to create a small-scale demo of an enhancement to this weekly box office release. You could, for example, consider **one** of the following ideas:

- Develop an approach to gather and link relevant external data to this dataset.
- Provide data users with a way to explore title-level data for different time points and periods.
- Link data so that users can understand key trends and make informative comparisons.
- Overhaul the reporting format to make it more engaging and accessible.

Please use one (or more) of the published spreadsheets that can be found at https://www.bfi.org.uk/industry-data-insights/weekend-box-office-figures. Simulated data may also be used alongside real data in order to fully demonstrate your idea. We do not expect you to spend more than a couple of hours on this task.

Your demo should be reproducible. We strongly recommend that source code and documentation is uploaded to a GitHub repository, along with necessary instructions and files to get the code running locally or in a cloud-based environment (e.g. GitHub Codespaces). We strongly prefer you to code in either Python or R.

In your documentation, please provide a bullet-point summary of:

- Your idea.
- How it works.
- How it was built.
- What value it adds.
- How you would develop it further.

Please send a link to your public GitHub repo to brian.tarran@bfi.org.uk and john.sandow@bfi.org.uk by midday, 2 September 2024. If you prefer to share your work via a private GitHub repo, please add @brtarran and @jdsandow as collaborators.