

Hackathon Intention Document

Title: Hackathon Intention: Analyzing Employee Attrition and Performance

Introduction: We are Anne Wolf and Shirel Amozieg. We're excited to participate in this hackathon focused on exploring employee attrition and performance, as we believe data-driven insights can lead to meaningful improvements in workplace culture.

Goals: Our primary goal is to conduct a thorough analysis of the "IBM HR Analytics Employee Attrition & Performance" dataset. We aim to uncover key patterns and correlations that help organizations understand the factors influencing employee turnover and performance. Additionally, if we have time, we will compare our findings with another dataset that examines job satisfaction and performance in remote work versus in-office work settings, to identify trends and differences between these work environments.

Project Idea: Our project will focus on identifying significant factors contributing to employee attrition and performance within a corporate setting. We plan to explore variables such as distance from home, job role, work-life balance, education level, managerial retention and job satisfaction. Key deliverables will include:

- A comprehensive report detailing our findings.
- Visualizations to illustrate the correlations between various factors.
- Insights comparing the impact of remote work versus in-office work on job satisfaction and performance.

Team Dynamics: We will leverage our complementary skills throughout the hackathon. Anne will focus on data analysis and visualization, while Shirel will preprocess the data and concentrate on interpreting the results in the context of HR practices. This collaboration will enable us to create a well-rounded project.

Learning Objectives: Through this hackathon, we aim to:

- Enhance our skills in data analysis and visualization tools (e.g., Python, pandas).
- Gain deeper insights into HR analytics and its practical applications in corporate environments.

Potential Challenges: We anticipate challenges in data cleaning and ensuring the accuracy of our analysis. To address this, we plan to dedicate time at the beginning of the hackathon for data preprocessing and validation.

Contribution to the Community: By analyzing these datasets, we hope to provide valuable insights that can help organizations foster a more engaging work environment. Our findings can serve as a foundation for developing initiatives aimed at improving employee retention and performance.

Conclusion: We are eager to dive into this project and collaborate effectively to uncover insights that can lead to impactful change in the corporate world. We look forward to sharing our findings with the hackathon community and contributing to the ongoing conversation about employee engagement.