Salifort Motors

Employee Retention Project

⟫ ISSUE / PROBLEM

Salifort Motors seeks to improve their employee retention rate and answer the question:

What factors contribute to the likelihood of an employee leaving the company?

⟫ RESPONSE

This project utilized Tree-Based Machine Learning and Logistic Regression model since the task involves categorical data. The goal is to predict whether an employee leaves the company, and the **Decision Tree Model** slightly outperformed the Random Forest Model. They both outperformed the Logistic Regression Model.

⟫ IMPACT

This model helps predict whether an employee will leave Salifort motors. These insights can help HR make decisions to improve employee retention.
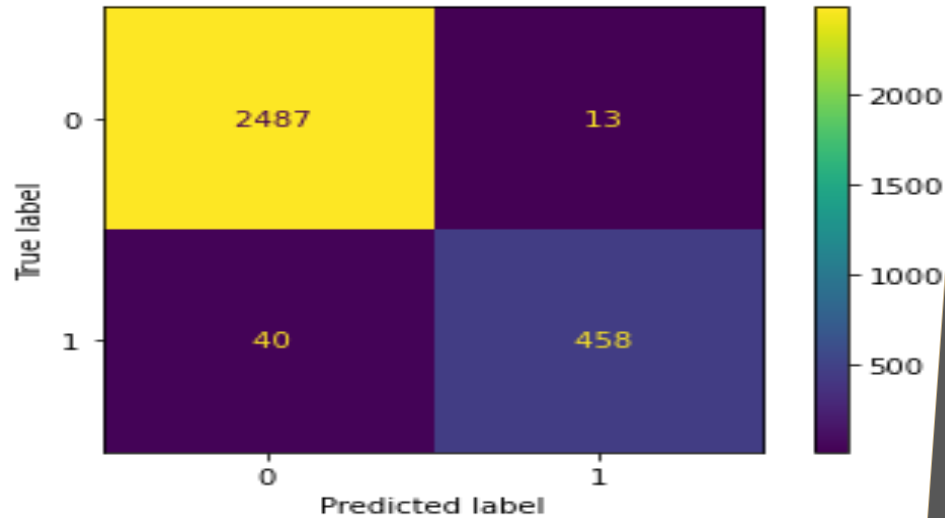
Confusion Matrix for the Decision Tree Model
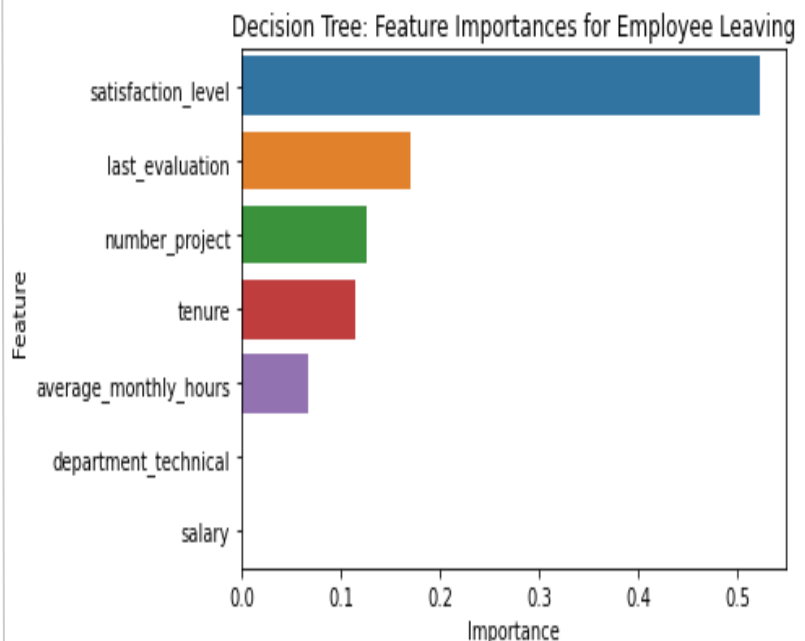
Feature importance diagram showing the most important features in predicting whether or not an employee will leave

⟫ KEY INSIGHTS

- Cap the number of projects that employees can work on.
- Consider promoting employees who have been with the company for at least four years, or conduct further investigation about why four-year tenured employees are so dissatisfied.
- Employees should be rewarded for working long hours.
- Hold company-wide and within-team discussions to understand and address the company work culture, across the board and in specific contexts.
- High evaluation scores should not be reserved for employees who work 200+ hours per month. Consider a proportionate scale for rewarding employees who contribute more/put in more effort.