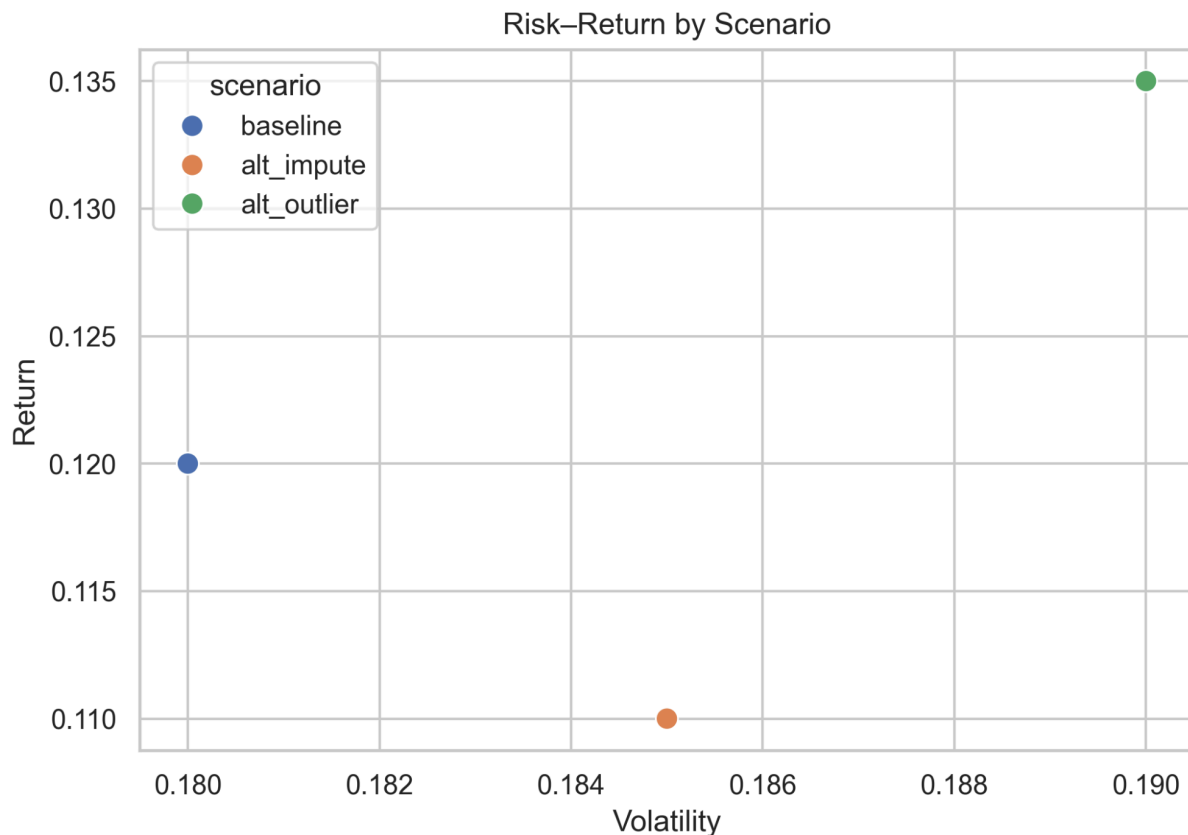


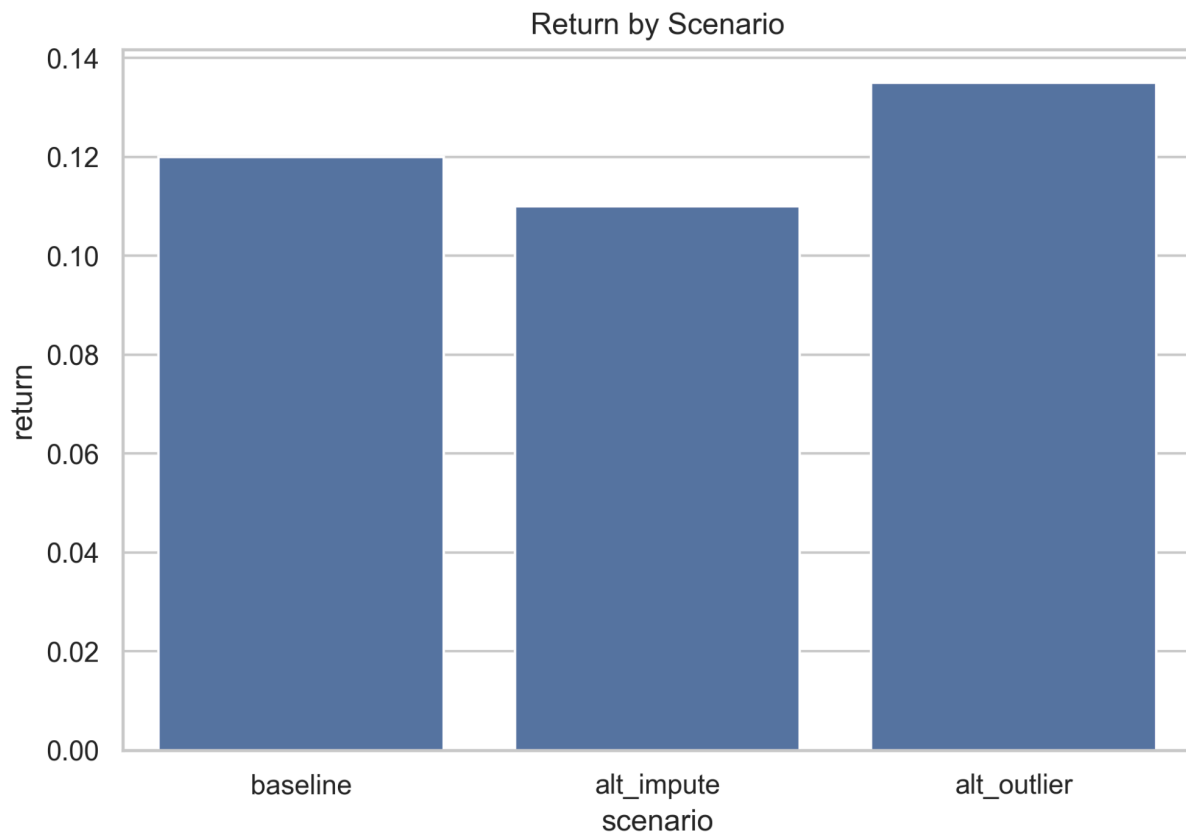
Executive Summary

This project provides an illustration of three portfolio scenarios, which include the baseline, the alt_impute, and the alt_outlier case. The baseline scenario provides a balanced profile with a 12% return and the lowest volatility. The alt_impute scenario underperforms in both return and volatility. The alt_outlier offers the highest return but also the highest volatility, which makes it a high risk high reward portfolio.

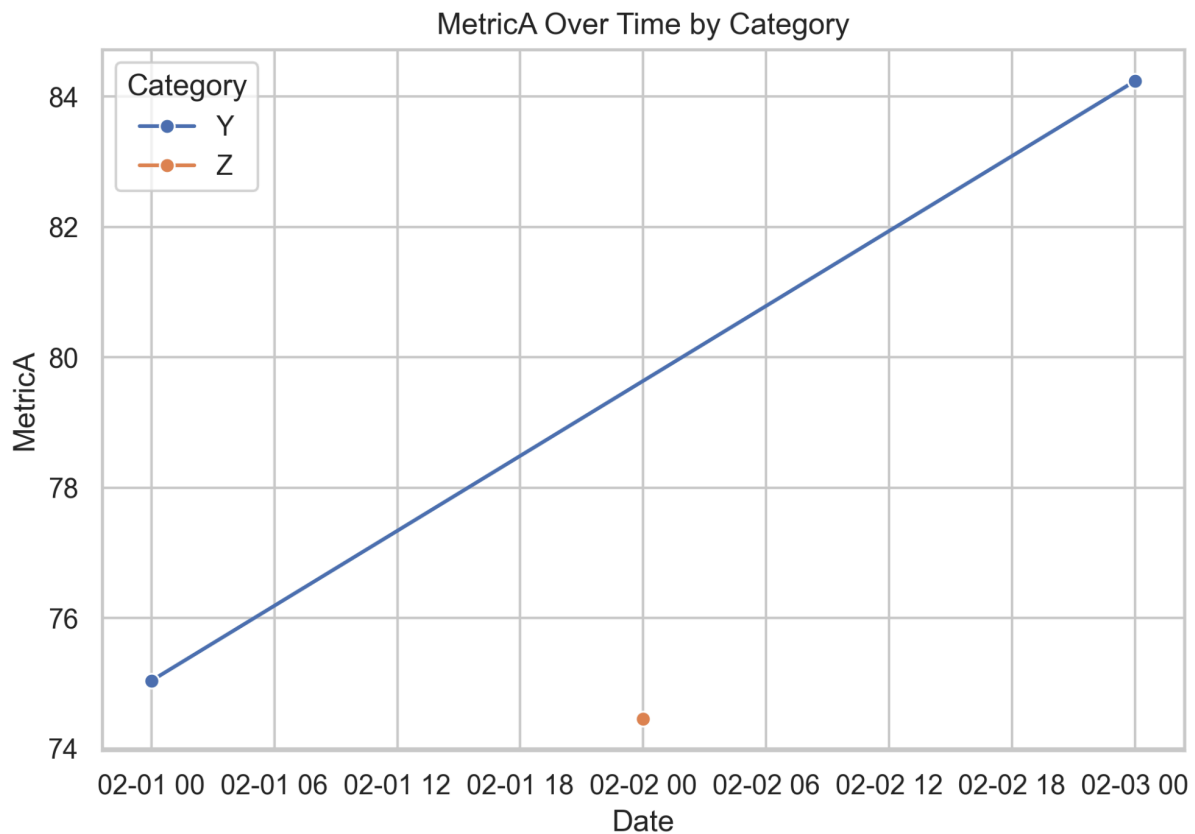
Charts with Assumptions & Risks



This plot shows the risk-return tradeoff of the three scenarios. Among them, alt_outlier is the most risky and offers the highest return. The baseline offers both higher return and lower volatility compared to alt_impute, which makes it a more favorable choice if return and volatility are the only factors considered. The assumption is that past return and volatility are representative of the future, and the risk is that they are not. There are also only three models, which is a small sample size.



This plot compares the return of the three models. It shows alt_outlier as the best model because it provides the best return. It assumes return to be the sole indicator when choosing a model, which is usually not the case in the real world. Since there is no risk measure in it, stakeholders should use it with caution and consider using it in combination with other visualizations.



The plot shows two categories, which are assigned randomly. It shows category Y grows along with time being evaluated by MetricA. It shows a positive signal based on MetricA. However, it assumes MetricA to be the sole indicator in consideration, which lacks theoretical foundation.

Sensitivity summary

The baseline return stays at 0.12 while the alt_outlier case shows high sensitivity toward changes in the input, and its return shifts between 0.1 and 0.14. The baseline case is relatively insensitive to change in the input.

Decision Implication

While there is no single best portfolio (highest return with lowest risk), two portfolios stand out. The baseline model offers a balanced return and risk, and the alt_outlier portfolio offers high return at high risk.