Blue Mountain Resort Recommendations

Blue Mountain ski resort located in Montana has one of the highest vertical drops in the market, which resulted to be an important variable in various models done to estimate ticket value. Both of the models had the same dominant features in common:

- FastQuads
- Runs
- Snow Making_ac
- vertical_drop

```
vertical_drop          10.767857
Snow Making_ac          6.290074
total_chairs            5.794156
fastQuads               5.745626
Runs                    5.370555
LongestRun_mi           0.181814
trams                  -4.142024
SkiableTerrain_ac      -5.249780
dtype: float64
```

The models used to estimate this ticket price were Lineal Regression and Random Forest Regressor, which resulted in very similar predictions, with only 1$ difference in the estimated price.

Linear regression model estimated ticket price: + 10.5$
Random Forest Regressor model estimated ticket price: +9.5$

The difference in the modeling is due to a lower cross-validation mean absolute error and less variability in the Random Forest Regressor. It is also recommended if further analysis in this subject is needed to use less data due to the fact that the essential set of data for this analysis is around 40-50 observations.

Recommended ticket price is to **increment** the original ticket price by a range in between of 9.5$ - 10.5$.