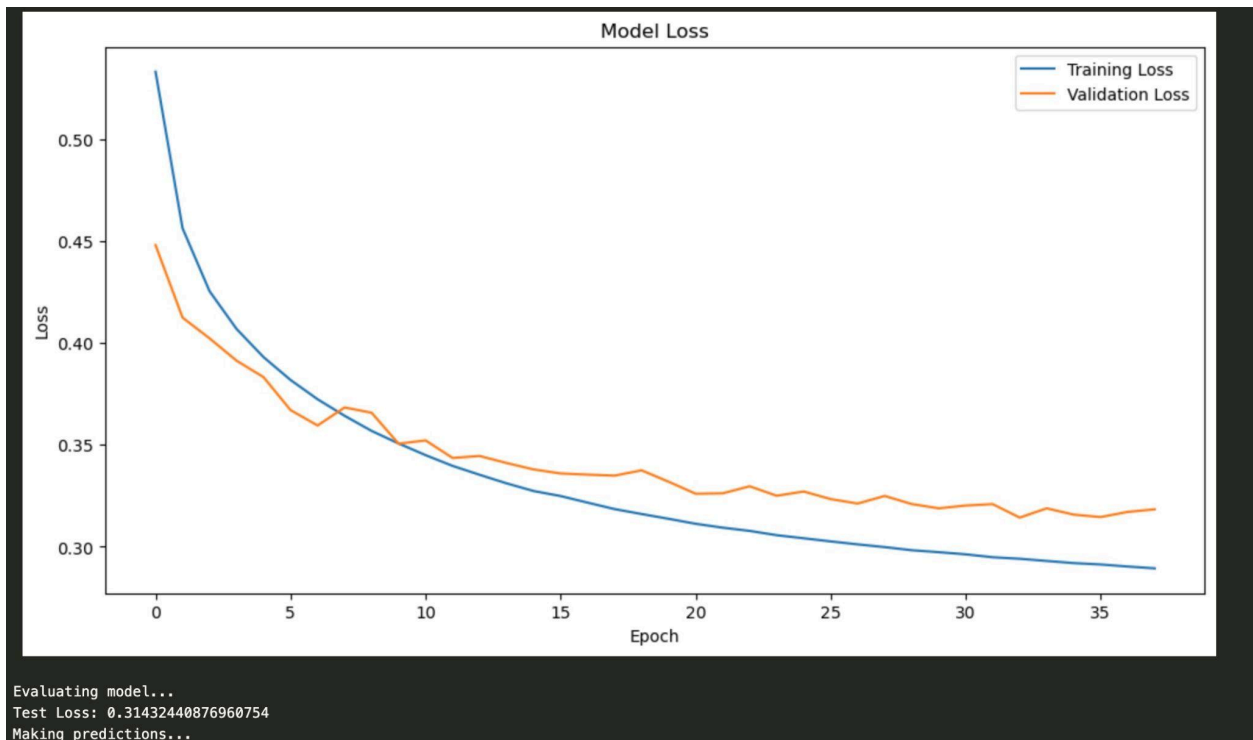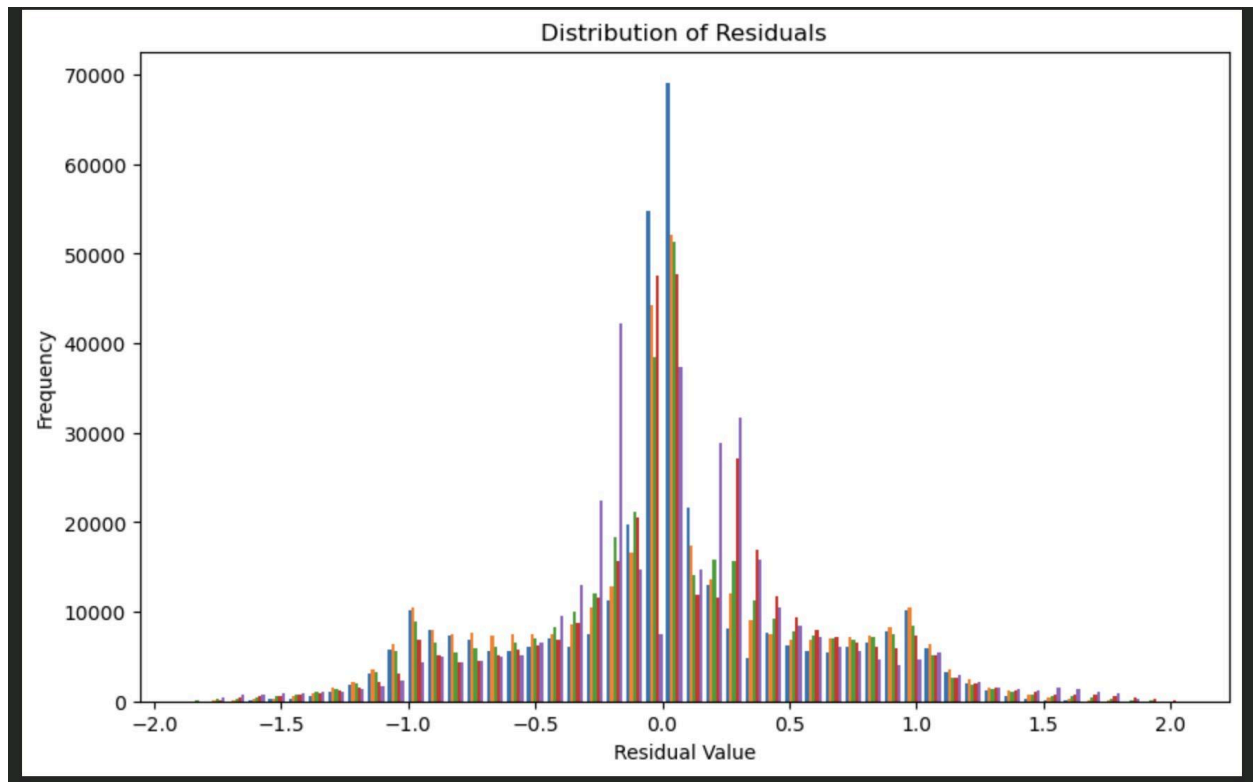# Model performance analysis and conclusion

After running the it for ~7 hours and a total of 36 epochs, the model was getting slightly better, however due to lack of computational power (I was running it in my M1 Pro, 16GB laptop) I was unfortunately unable to run it for longer tests.

This was the Model Loss graph after this run:

This was the Distribution of Residuals

The bell-shaped, almost symmetrical distrution shows that our model's error are balanced around over-predictions and under-predictions, which is a somewhat good thing (as far as errors go)

For a more quantitative assessments of the LOB model's performance:

```
Mean Squared Error: 0.31432432228817464
Root Mean Squared Error: 0.5606463433289962
Mean Absolute Error: 0.40758783347019073
R-squared Score: 0.385945378493023
```

Again, taking into accoun the size of the data and the lack of computational power that I had, I feel like my tiny model did ok!

The difficulty working with this financial dataset was the thing that challenged me the most during this project; which also was the thing that prompted me to begin with it.