Delivery of Sprint – 4

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In this Sprint, we have built a ML model for project using Gradient boosting Algorithm and compare the accuracy of each model.

Model and Comparison Screenshot:

In [56]:
```
from sklearn.ensemble import GradientBoostingRegressor

xg = GradientBoostingRegressor()

xg.fit(x_train, y_train)

print("Predicted Amount:",xg.predict([[0,50000,42000,200000,60,0,3000,0,1,0,1,0,1,1,0]]))
```

```
Predicted Amount: [133185.90245476]
```

In [57]:
```
print("Random forest Accuracy:",r2_score(y_test,rf.predict(x_test)))

print("Decision Tree Accuracy",r2_score(y_test,regressor.predict(x_test)))

print("KNN Accuracy:",r2_score(y_test,knn.predict(x_test)))

print("XGboost Accuracy:",r2_score(y_test,xg.predict(x_test)))
```

```
Random forest Accuracy: 0.8201031194388251
Decision Tree Accuracy 0.8784230271667762
KNN Accuracy: 0.678718208574209
XGboost Accuracy: 0.8565868979070638
```