


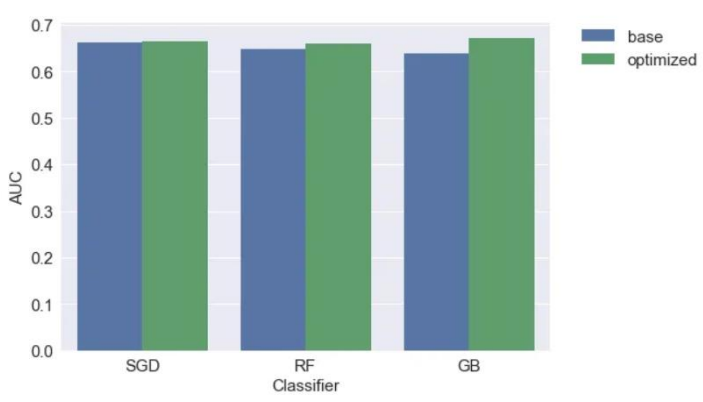
## Project Development Phase Model Performance Test

Date	1 November 2023
Team ID	Team-591884
Project Name	Hospital Readmission Prediction using ML
Maximum Marks	10 Marks

### Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Values	Screenshot
1.	Metrics	<b>Classification Model:</b> Confusion Matrix - , Accuray Score- & Classification Report -	<pre>y_pred = RF.predict(X_test)</pre> <pre>confusion_matrix(y_test,y_pred)</pre> <pre>array([[17769,   331],        [ 2157,    96]], dtype=int64)</pre> <pre>accuracy_score(y_test,y_pred)</pre> <pre>0.8777575787353216</pre> 

2.	Tune the Model	Hyperparameter Tuning - Validation Method -	 <p>A bar chart comparing the Area Under the Curve (AUC) scores for three classifiers: SGD, RF, and GB. The y-axis represents the AUC score, ranging from 0.0 to 0.7. The x-axis lists the classifiers. For each classifier, there are two bars: a blue bar for the 'base' model and a green bar for the 'optimized' model. The legend indicates that blue represents 'base' and green represents 'optimized'.</p> <table><tr><th>Classifier</th><th>base</th><th>optimized</th></tr><tr><td>SGD</td><td>0.66</td><td>0.67</td></tr><tr><td>RF</td><td>0.65</td><td>0.66</td></tr><tr><td>GB</td><td>0.64</td><td>0.67</td></tr></table>	Classifier	base	optimized	SGD	0.66	0.67	RF	0.65	0.66	GB	0.64	0.67
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