
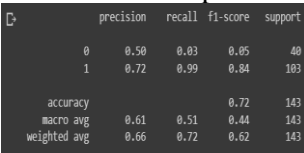




Project Development Phase Model Performance Test

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|---------------|---|
| Date | 10 November 2022 |
| Team ID | PNT2022TMID08131 |
| Project Name | Statistical Machine Learning Approaches to Liver Disease Prediction |
| 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 | <div>Classification Model: Supported Vector Machine Confusion Matrix - $[[1, 39], [1, 102]]$, Accuray Score- :0.7202797202797203 Classification Report –</div> <table><thead><tr><th></th><th>Precision</th><th>Recall</th><th>F1 - score</th><th>Support</th></tr></thead><tbody><tr><td>1</td><td>0.50</td><td>0.03</td><td>0.05</td><td>40</td></tr><tr><td>2</td><td>0.72</td><td>0.99</td><td>0.84</td><td>103</td></tr><tr><td>Accuracy</td><td></td><td></td><td>0.72</td><td>1143</td></tr><tr><td>Macro avg</td><td>0.61</td><td>0.51</td><td>0.44</td><td>143</td></tr><tr><td>Weighted avg</td><td>0.66</td><td>0.72</td><td>0.62</td><td>143</td></tr></tbody></table> | | Precision | Recall | F1 - score | Support | 1 | 0.50 | 0.03 | 0.05 | 40 | 2 | 0.72 | 0.99 | 0.84 | 103 | Accuracy | | | 0.72 | 1143 | Macro avg | 0.61 | 0.51 | 0.44 | 143 | Weighted avg | 0.66 | 0.72 | 0.62 | 143 | <div>Confusion matrix:</div>  <div>Accuracy Score & Classification Report:</div>  |
| | Precision | Recall | F1 - score | Support | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 0.50 | 0.03 | 0.05 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 0.72 | 0.99 | 0.84 | 103 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accuracy | | | 0.72 | 1143 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Macro avg | 0.61 | 0.51 | 0.44 | 143 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Weighted avg | 0.66 | 0.72 | 0.62 | 143 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. | Tune the Model | <div>Hyperparameter Tuning - 0.75 Validation Method – k-fold</div> | <div>Hyperparameter Tuning:</div>  <div>Validation Method:</div>  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |