

Final Submission Phase
Solution Performance Test

Date	09 November 2023
Team ID	SPSGP-600765
Project Name	Car purchase Prediction Using ML
Maximum Marks	15 Marks

Model Performance Testing:

S.No	Parameter	Values	Screenshot
1.	Summary	Total params: 83,88,60,800	<pre># Print the information print(f"Number of Estimators (Trees): {n_estimators}") print(f"Number of Features: {n_features}") print("Feature Importances:") print(f"Total Parameters: {total_params}") your_feature_names = ['UserID', 'Gender', 'Age', 'AnnualSalary'] for feature, importance in zip(your_feature_names, feature_importances): print(f"{feature}: {importance:.4f}")</pre> <pre>Number of Estimators (Trees): 100 Number of Features: 4 Feature Importances: Total Parameters: 838860800 UserID: 0.1224 Gender: 0.0162 Age: 0.4451 AnnualSalary: 0.4163</pre>

2.	Metrics	Confusion Matrix - , Accuray Score- & Classification Report	<pre># Use score method to get accuracy of model score = model2.score(X_test, Y_test) print("Accuracy using RFC: ",score) # classification report print(classification_report(Y_test,r_y_predict))</pre> <table><tr><td colspan="6">Accuracy using RFC: 0.9025</td></tr><tr><td></td><td>precision</td><td>recall</td><td>f1-score</td><td>support</td><td></td></tr><tr><td>0</td><td>0.95</td><td>0.89</td><td>0.92</td><td>246</td><td></td></tr><tr><td>1</td><td>0.84</td><td>0.93</td><td>0.88</td><td>154</td><td></td></tr><tr><td>accuracy</td><td></td><td></td><td>0.90</td><td>400</td><td></td></tr><tr><td>macro avg</td><td>0.89</td><td>0.91</td><td>0.90</td><td>400</td><td></td></tr><tr><td>weighted avg</td><td>0.91</td><td>0.90</td><td>0.90</td><td>400</td><td></td></tr></table> <pre># Use confusion matrix confusion_matrix(Y_test,r_y_predict)</pre> <table><tr><td>array([[218, 28],</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td> [11, 143]])</td><td></td><td></td><td></td><td></td><td></td></tr></table>	Accuracy using RFC: 0.9025							precision	recall	f1-score	support		0	0.95	0.89	0.92	246		1	0.84	0.93	0.88	154		accuracy			0.90	400		macro avg	0.89	0.91	0.90	400		weighted avg	0.91	0.90	0.90	400		array([[218, 28],						[11, 143]])					
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