## **Churn Data Quality Report**

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## **Data Issues**

Column	IssueType	Details
EstimatedSalary	Anomaly	10 extreme outliers

## **General Data Quality Summary**

missing\_values: {'RowNumber': 0, 'CustomerId': 0, 'Surname': 0, 'CreditScore': 0, 'Geography': 0, 'Gender': 0, 'Age': 0, 'Tenure': 0, 'Balance': 0, 'NumOfProducts': 0, 'HasCrCard': 0, 'IsActiveMember': 0, 'EstimatedSalary': 0, 'Exited': 0}

duplicate rows: 0

data\_types: {'RowNumber': 'int64', 'CustomerId': 'int64', 'Surname': 'object', 'CreditScore': 'int64', 'Geography': 'object', 'Gender': 'object', 'Age': 'int64', 'Tenure': 'int64', 'Balance': 'float64', 'NumOfProducts': 'int64', 'HasCrCard': 'int64', 'IsActiveMember': 'int64', 'EstimatedSalary': 'float64', 'Exited': 'int64'}

numeric summary: {'RowNumber': {'count': 10000.0, 'mean': 5000.5, 'std': 2886.8956799071675, 'min': 1.0, '25%': 2500.75, '50%': 5000.5, '75%': 7500.25, 'max': 10000.0}, 'Customerld': {'count': 10000.0, 'mean': 15690940.5694, 'std': 71936.18612274883, 'min': 15565701.0, '25%': 15628528.25, '50%': 15690738.0, '75%': 15753233.75, 'max': 15815690.0}, 'CreditScore': {'count': 10000.0, 'mean': 650.5288, 'std': 96.65329873613061, 'min': 350.0, '25%': 584.0, '50%': 652.0, '75%': 718.0, 'max': 850.0}, 'Age': {'count': 10000.0, 'mean': 38.9218, 'std': 10.487806451704591, 'min': 18.0, '25%': 32.0, '50%': 37.0, '75%': 44.0, 'max': 92.0}, 'Tenure': {'count': 10000.0, 'mean': 5.0128, 'std': 2.892174377049708, 'min': 0.0, '25%': 3.0, '50%': 5.0, '75%': 7.0, 'max': 10.0}, 'Balance': {'count': 10000.0, 'mean': 76485.889288, 'std': 62397.40520238623, 'min': 0.0, '25%': 0.0, '50%': 97198.54000000001, '75%': 127644.24, 'max': 250898.09}, 'NumOfProducts': {'count': 10000.0, 'mean': 1.5302, 'std': 0.5816543579989936, 'min': 1.0, '25%': 1.0, '50%': 1.0, '75%': 2.0, 'max': 4.0}, 'HasCrCard': {'count': 10000.0, 'mean': 0.7055, 'std': 0.45584046447514237, 'min': 0.0, '25%': 0.0, '50%': 1.0, '75%': 1.0, 'max': 1.0}, 'IsActiveMember': {'count': 10000.0, 'mean': 0.5151, 'std': 0.4997969284589202, 'min': 0.0, '25%': 0.0, '50%': 1.0, '75%': 1.0, 'max': 1.0}, 'EstimatedSalary': {'count': 10000.0, 'mean': 100090.239881, 'std': 57510.49281769822, 'min': 11.58, '25%': 51002.11, '50%': 100193.915, '75%': 149388.2475, 'max': 199992.48}, 'Exited': {'count': 10000.0, 'mean': 0.2037, 'std': 0.40276858399484955, 'min': 0.0, '25%': 0.0, '50%': 0.0, '75%': 0.0, 'max': 1.0}}