Bias Detection Report

COMPAS Dataset Bias Detection Report

Dataset Analyzed: COMPAS.csv

Features Examined: `Sex_Code_Text`, `Ethnic_Code_Text`

Bias Types Detected: Distribution and Correlation Biases

Tools Used: Chi-Square Test for Distribution and Correlation Bias, Bar Chart, Stacked Bar Chart

Values Obtained:

- Distribution Bias - Chi-Square Statistic: 10425.16, P-Value: 0.0

- Correlation Bias - Chi-Square Statistic: 219.46, P-Value: 5.00e-43

Interpretation:

- **Distribution Bias:** The `Sex_Code_Text` feature exhibits extreme distribution bias.

- **Correlation Bias:** There is a significant correlation bias between `Sex_Code_Text` and `Ethnic_Code_Text`.

Recommendations:

- Address the extreme bias in gender distribution if applicable.

- Consider the significant correlation between gender and ethnicity in relevant analyses.

Bar Chart of Sex_Code_Text