Fairness in the context of identifying age-related conditions is crucial to ensure that data processing, exploration, modeling, and analysis do not introduce biases or discrimination based on age. Age-related conditions may affect different age groups disproportionately, and it is essential to handle data in a way that is unbiased and respects the rights and dignity of individuals. Here’s how fairness was incorporated in our project:

* Data Preprocessing: By anonymizing features, any direct association between sensitive attributes (such as age, gender, race, etc.) and specific conditions is removed. This can help reduce the potential for biased decision-making based on sensitive attributes. However, anonymization doesn’t ensure there were not biases when the data was collected. In addition, we had to deal with a feature that contained categorical data, so one-hot encoding was used which also helps avoid bias.
* Data Exploration: We examined the distribution of age-related variables to understand any potential imbalances in the data. If the dataset contains disproportionate representation of specific age groups, it could lead to biased models. We also explored the data to identify potential outliers or errors that may impact the accuracy of the analysis.
* Data Modeling: We made sure to implement fairness-aware algorithms and techniques to account for fairness concerns during the model training process. These algorithms aim to minimize disparities between different groups’ predictions and outcomes.
* Data Analysis: When we do analyze the results of the model, we will be mindful of the potential implications of the findings. The interpretations and conclusions drawn from the analysis will be unbiased, and we will avoid stereotyping or stigmatizing any group. As of right now, we have only identified how accurate a model is at making predictions based on data.

Researchers should report their findings transparently, disclose any potential limitations or biases in the data, model, or analysis. Overall, fairness should be a guiding principle throughout the entire process of identifying age-related conditions or any experiment. By promoting fairness, we can enhance the quality and reliability of our work and contribute to more equitable outcomes for people.