# Ethical Reflection - Task 3

In deploying the predictive model trained on the breast cancer dataset, potential biases may arise due to the dataset's demographic composition. If the dataset underrepresents specific groups—such as younger individuals, certain ethnicities, or underdiagnosed populations—the model may perform poorly for those cases. Furthermore, historical or systemic biases in diagnosis or data recording may carry forward into the predictions, affecting real-world decisions and trust in the model.  
  
To address these issues, tools like IBM AI Fairness 360 can be used to assess and mitigate bias. The toolkit provides algorithms to measure fairness metrics such as disparate impact and statistical parity, and applies bias mitigation techniques like reweighing or adversarial debiasing. By integrating such tools into the model development lifecycle, organizations can promote responsible AI use and ensure more equitable treatment across diverse patient groups.