	Unsatisfactory	Emerging	Satisfactory	Excellent
Students identify the ethical problem(s) presented in the scenario	Students do not identify an ethical issue or incorrectly identify the ethical issues presented	Students identify the primary ethical issue, but do not identify the secondary ethical issues	Students identify the primary and any secondary ethical issues	Students identify the primary and any secondary ethical issues AND explain why these are ethical issues
Students identify the stakeholder(s) in the scenario	Students do not identify or incorrectly identify stakeholders	Students identify the most obvious stakeholders and correctly explain their positions on the issues	Students identify most of the stakeholders and correctly explain their positions on the issues	Students identify all of the stakeholders and correctly explain their positions on the issues
Students explain the potential biases in the data or algorithms used in the scenario	Students does not explain or incorrectly explain biases that would result from using the data/algorithm	Students explain that data and algorithms have their own biases, but not what the biases would be for the data/algorithms in this problem	Students explain some of the biases resulting from using these data/algorithms	Students explain the all of the biases resulting from using these data/algorithms
Students anticipates ethical or fairness problems that may arise when the algorithm is deployed	Students does not explain or identify any external, social settings with which the algorithm may be deployed, or does not identify any problems that may arise.	Students identify some social settings in which the algorithm may be deployed, but do not anticipate how the algorithm may produce unintended or unfair results in such settings.	Students identify the likely social settings in which the algorithm may be used, and anticipate some ways in which it may produce unintended or unfair results in those settings.	Students identify all social settings in which the algorithm may be used, anticipate how it may produce unintended or unfair results, and offer mitigation strategies.
Students describe the impact(s) of their proposed solution	Students does not describe the impact of their solution	Students describe the result(s) of their solution, but without explaining how stakeholders will be affected	Students describe the result(s) of their solution and how stakeholders will be affected	Students describe the result(s) of their solution, how stakeholders will be affected, and ways to minimize or negate any negative effects
Students describe and compare other possible solutions with	Students do not describe other possible solutions	Students describe other possible solutions, but do not discuss why these other	Students describe other possible solutions and explain the strengths and	Students describe other possible solutions, describe the impacts each would have on the

their proposed solution		solutions are not as good	weaknesses of each solution	stakeholders, and explain why they selected their solution based the ethical and performance tradeoffs