Introduction

Bill Sourer was a young programmer who was assigned to develop an online quiz for a pharmaceutical company. The quiz was designed to recommend a specific medication based on the user's symptoms, misleading patients into believing it was the best treatment for them. Later on, Sourour learned that a young woman who had taken the medication died by suicide, prompting him to reflect on the ethical implications of his work, especially after finding out his sister was using the very drug he was building the site for. While he was following orders from his employer and doing his job, his participation in deceptive coding practices contributed to a morally troubling outcome. In this Case Analysis, I will argue that the ethics of care shows us that writing code for the quiz was morally wrong because it disregarded the interdependent relationships between developers and users, prioritizing corporate interests over patient safety. Sourour should have acted differently by questioning the deceptive nature of the quiz and advocating for transparency in the software development.

Code of Ethics Section

The case of Bill Sourour points out significant ethical concerns, particularly when analyzed through the lens of professional code of ethics. The ACM, IEEE, and NSPE Code of Ethics all emphasize the responsibility of professionals to prioritize human well-being, avoiding harm, and maintaining integrity in their work. Sourour's role in developing a misleading pharmaceutical quiz targeted at young women raises ethical red flags when measures against these principles.

- **(1.1) Contribute to society and human well-being:** Sourour's work did not contribute to public well-being. It facilitated deceptive marketing practices that prioritized corporate profits over patient safety.

- **(1.2) Avoid harm to others:** By enabling users to receive potentially misleading recommendations, Sourour's work indirectly contributed to harm.
- **(2.1) Strive to achieve the highest quality, effectiveness, and dignity in both the process and products of professional work:** The pharmaceutical quiz failed to meet these standards. Sourour's project manager raised concerns of the quiz at hand and things to consider as a user, but because he followed the requirements he didn't feel the need to revise.
- **(2.4) Accept and provide appropriate professional review:** Had Sourour gotten external feedback, the deceptive nature of the quiz might've been different.
- **(2.5) Give Comprehensive and thorough evaluations of computer systems and their impacts, including analysis of possible risks:** The quiz was not designed with a risk assessment in mind, ignoring the potential dangers of misleading users about medication.
- **(2.6) Honor contracts, agreements, and assigned responsibilities:** While fulfilling an employer's request is important, Sourour has a responsibility to request a change in any assignment he felt could not be completed or defined.
- **(3.1) Articulate social responsibilities of members of an organizational unit and encourage full acceptance of those responsibilities:** Sourour had an ethical duty to advocate for transparency and public safety within his team and organization.
- **(3.4) Ensure that users and those affected by a system have their needs clearly articulated during the assessment and design of requirements:** The system design process should have included an ethical review ensuring the quiz met genuine medical needs rather than misleading users.

The IEEE Code of Ethics further reinforces the responsibility of professionals to act in the public's best interest. The first principle to, "hold paramount the safety, health, and welfare of the public, to strive to comply with ethical design and sustainable development practices, to protect the privacy of others, and to disclose promptly factors that might endanger the public or the environment," is directly relevant to Sourour's case. The nature of the quiz provided for the client put users at risk, violating the fundamental obligation of prioritizing public welfare. Had these principles been followed, the system would have been designed with more transparency, taking into account patient safety.

The NSPE Code of Ethics outlines the duty of engineers to prioritize public safety. The NSPE Code mandates that professionals issue public statements in an objective and truthful manner. The failure to disclose the quiz's predetermined outcomes compromised public trust and put users at risk. NSPE requires that technical statements be based on factual knowledge and free from undisclosed conflict of interest. For Sourour, the pharmaceutical company's influence dictated the quiz's recommendations without informing users of this bias, violating ethical standards of transparency. There's a broader responsibility of professionals in the technical field to ensure their work does not mislead or endanger the public, even when doing so under employer directives.

From the perspective of ethics of care, Sourour's situation highlights the moral tension between professional obligation and personal responsibility. The ethics of care emphasizes the importance of relationships, interdependence, and moral responsiveness to those affected by one's actions, suggesting that ethical decision-making should not be solely rule-based but should consider the well-being of individuals affected by technological and professional as outlined in the ACM, IEEE, and NSPE codes of ethics. Had Sourour approached his work with this

perspective from the beginning, he might have questioned the implications of the quiz's design earlier and taken steps to prevent harm.

Armstrong Section

In Mary Beth Armstrong's article, Confidentiality: A Comparison Across the Professions of Medicine, Engineering and Accounting, she talks about professionals having an active duty determined by an examination of the weight of prima facie duties. There are four requirements for justified infringements of a prima facie principle as mentioned by Armstrong:

1. The moral objective must have a realistic chance of success.
2. The infringement must be necessary because no morally preferable alternatives exist.
3. The infringement must be minimized as much as possible while still achieving the goal.
4. The agent must actively work to mitigate any negative effects of infringement.

Applying this framework to Bill Sourour's case, did Sourour's actions have a justifiable moral goal? Were there better, more ethical alternatives? Did he take the least harmful route, or was there a more ethical way to comply with his job duties? Did he try to mitigate the harm or simply comply without question?

Sourour's role in creating a misleading pharmaceutical quiz fails to meet Armstrong's criteria for justified ethical infringement. The primary goal of his work was not rooted in a morally justified objective but rather in corporate interests. The quiz was designed to drive sales rather than ensure the well-being of users, meaning there was no legitimate ethical justification for misleading patients. The infringement of deceiving users into thinking they needed a specific medication wasn't necessary, as there were morally preferable alternatives. Complying with the assignment, Sourour could have designed an educational tool that provided objective, medically accurate information rather than manipulating users into a predetermined outcome.

Armstrong brings up a relevant case that illustrates the duty to prevent harm in Tarasoff v. Regents of University of California. In this case, Prosenjit Proddar spoke with the Berkeley school therapist, Dr. Moore, that he intended to kill Tatiana Tarasoff. Dr. Moore notified campus police when Proddar purchased a gun and stopped attending therapy. After briefly questioning him, they released him. Two months later, Proddar killed Tarasoff. The court ruled that professionals have a duty to protect potential victims, even when doing so conflicts with obligations such as confidentiality. This case emphasizes that when faced with a conflict between ethical principles, the duty to prevent harm takes precedence. Sourour's situation is comparable in that he was aware that the software he was developing could mislead users. He too faced conflicting ethical duties between loyalty to his employer and getting a check, versus the duty to avoid harming the public. Like the professionals in Tarasoff v Regents of University of California, he had a responsibility to act in a way that protected those who could be negatively affected by his work.

In the engineering profession, Armstrong brings up the AAES Public Policy Perspectives: Ethical Standards, which reinforces the priority of public welfare, explaining that engineers must balance their contributions to technical projects with an awareness of potential consequences within their work. Across professional disciplines, it is widely recognized that the duty to public safety, health, and welfare takes precedence over conflicting prima facie duties. In Sourour's case, his ethical obligation to avoid misleading vulnerable individuals should've outweighed his duty to his employer.

Using ethics of care, Sourour's failure to critically assess the ethical implications of the pharmaceutical quiz demonstrates a disregard for the well-being of users. Ethics of care highlights the importance of nurturing relationships, considering the needs of those affected by

one's actions, and ensuring that harm is minimized. Sourour's primary responsibility should have been to care for the individuals who would rely on the quiz for medical guidance. Rather than blindly following his employer's direction, Sourour should have recognized that his role involved not just technical expertise, but also a moral obligation to protect the health and safety of the public. The ethical approach would have been to question the loopholes within the nature of the quiz, raise concerns within his organization, and advocate for a design that prioritized user safety. In this way, Sourour's action could have aligned more closely with the core values of care and wider connections, protecting the vulnerable individuals who depended on the tool.

Conclusion

In conclusion, Bill Sourour's actions in creating a misleading pharmaceutical quiz leading to the death of a user were ethically problematic, primarily because he failed to prioritize the public welfare over corporate interests. Using the multiple Code of Ethics, Armstrong's framework for prima facie duties, and the ethics of care perspective, I contended that Sourour had a moral obligation to to consider the potential harm his work could cause and should have taken steps to mitigate that harm. The duty to protect the well-being of vulnerable individuals should have outweighed his loyalty to his employer's goals, and he should have questioned the ramifications of his work instead of complying blindly with the mentality of just completing a task.

One potential objection to this argument could be the notion that Sourour's actions were driven by external pressures, such as job security and company directives, which complicate his ability to act solely based on ethical considerations. Professionals, particularly in corporate settings, may feel limited by the power dynamics and organizational constraints that often prioritize profits and doing your job over ethical values. It's important to acknowledge these

limitations while recognizing that professionals are expected to navigate these challenges with ethical integrity.