## Digital Ethics: Navigating Moral Dilemmas in the Tech Age

#### Introduction

In software development, the ethical implications of code can sometimes be overlooked, significantly when overshadowed by business objectives and tight deadlines. Bill Sourour's poignant article, "The Code I'm Still Ashamed Of," brings to the forefront the moral dilemmas developers face and the profound consequences that can arise from seemingly innocuous tasks. Sourour recounts his experience as a fledgling developer, where he was commissioned to design a website for a pharmaceutical company. On the surface, it appeared to be a straightforward task: create a quiz for teenage girls to gauge if they required a specific drug. However, beneath this facade lay a more sinister objective. The quiz was manipulated to invariably recommend the drug, irrespective of the answers submitted by the user. The ramifications of this deceitful code were grave, with the drug's potential side effects leading to tragic outcomes, including the heartwrenching case of a young girl's suicide. This incident serves as a stark testament to the weight of ethical responsibility borne by coders. In this Case Analysis, I will delve into the moral intricacies of this situation, arguing from a Deontology/Kantianism perspective. I posit that the creation of the code was morally reprehensible due to its inherent deception of users for monetary gain. Furthermore, I will contend that Sourour should have taken a different course of action, placing ethical considerations at the forefront, even if it meant challenging the directives he was given.

## **Analysis using Codes of Ethics**

In professional ethics, various organizations have established codes to guide the actions and decisions of their members. The Association for Computing Machinery (ACM), for instance, emphasizes the paramount importance of honesty in all professional endeavors. Their code mandates that professionals should not only be truthful but also actively avoid causing harm, whether direct or indirect, to users. Similarly, the Institute of Electrical and Electronics Engineers (IEEE) has a code that underscores the public's welfare. It dictates that professionals, in all their undertakings, should prioritize the safety, health, and overall well-being of the public. This commitment to public welfare is also echoed in the National Society of Professional Engineers (NSPE) code. Engineers, as per the NSPE, have a duty to always act in ways that safeguard and benefit the public, ensuring their actions neither harm nor mislead those they serve.

Bill Sourour's involvement in creating the pharmaceutical quiz presents a clear ethical dilemma. The quiz, while seemingly innocuous, was designed with a hidden agenda: to invariably suggest a particular drug to its users, regardless of the answers they provided. This act of intentional deception stands in stark contrast to the ACM's foundational principle of honesty. By creating a tool that misleadingly endorsed a drug without a genuine, unbiased evaluation, the very essence of the quiz undermined the core principles of both the IEEE and the NSPE. These codes, which emphasize the paramount importance of public safety and well-being, were blatantly disregarded. The quiz did not serve to inform or aid its users but rather to push a product, potentially compromising the health and safety of those who trusted its recommendations.

Deontology, rooted in the philosophy of Immanuel Kant, evaluates actions based on their adherence to established moral rules and duties rather than their eventual outcomes. When applying this ethical framework to Sourour's decision to create the pharmaceutical quiz, we encounter clear moral discrepancies. The act of intentionally programming a quiz to deceive its users by always recommending a drug regardless of the input, is inherently wrong within the deontological framework. Such deception violates the fundamental duty of honesty and transparency, especially crucial when the well-being of individuals is at stake. Even if the quiz had not led to any adverse consequences, the mere act of crafting it with deceptive intent stands as a breach of the moral obligations emphasized by Kantian ethics.

In the broader context of the tech industry, these ethical codes serve as a compass, guiding professionals through the complex maze of moral dilemmas they often encounter. The rapid pace of technological advancement, coupled with the immense influence and reach of digital platforms, amplifies the consequences of ethical missteps. As in Sourour's case, a simple piece of code can have far-reaching implications, affecting the lives of countless individuals. It's not just about writing functional code; it's about understanding the societal impact and potential harm that code can inflict. This underscores the importance of these ethical codes. They are not mere guidelines but essential frameworks that ensure the tech industry serves the greater good. Adhering to these codes not only protects the public but also enhances the credibility and trustworthiness of the profession.

# **Analysis using Armstrong**

Mary Beth Armstrong's work, "Confidentiality: A Comparison Across the Professions of Medicine, Engineering, and Accounting," delves deep into the ethical obligations that

professionals across various fields bear, especially concerning confidentiality. Armstrong underscores the sanctity of information entrusted to professionals and the moral duty they have to protect it. In the medical profession, for instance, patient-doctor confidentiality is a cornerstone. Doctors are ethically and legally bound to safeguard patient information, revealing it only under specific circumstances where harm might be imminent.

In the engineering domain, professionals often have access to sensitive data, be it related to infrastructure projects, proprietary technologies, or user data. Just as with doctors, engineers have an ethical duty to protect this information, ensuring it doesn't fall into the wrong hands or get used maliciously. The field of accounting, too, is rife with confidential financial data.

Accountants, entrusted with intimate details about an individual's or company's financial health, must act with the utmost integrity, ensuring that this information remains secure and is used solely for its intended purpose.

Armstrong's exploration serves as a reminder that, irrespective of the profession, there exists a universal ethical duty to protect and respect the confidentiality of information. This duty is not just about adhering to professional standards but also about upholding the trust that clients and the public place in professionals.

When we dissect Sourour's involvement with the pharmaceutical quiz through the lens of these ethical standards, the depth of the moral quandary becomes even more pronounced. The quiz, presented as a tool to aid teenage girls in making informed health decisions, was, in reality, a veiled marketing ploy. By being designed to invariably suggest a specific drug, regardless of the user's genuine responses, it became a tool of deception rather than assistance.

This act stands in stark opposition to the ACM's foundational principle of honesty.

Professionals, as per the ACM's guidelines, are expected to provide truthful information, ensuring that users can make informed decisions. In this case, the quiz did the exact opposite, misleading users into believing they needed a drug that might not have been suitable for them.

Furthermore, the IEEE and the NSPE both emphasize the importance of public safety and well-being. By pushing a drug without a genuine and honest assessment of its necessity, the quiz potentially jeopardized the health of its users. This is especially concerning given the potential side effects associated with pharmaceuticals. The act of promoting a drug without a proper evaluation is not just misleading but can also be dangerous, putting the health and safety of users at risk.

In essence, while Sourour might have been following a business directive or fulfilling a client's request, the creation of the quiz clearly violated multiple ethical codes. The quiz did not serve its purported purpose of aiding users but instead became a tool for pushing a product, potentially at the expense of user health and safety.

Deontology, deeply rooted in the philosophical teachings of Immanuel Kant, offers a unique lens through which we can assess ethical actions. Unlike consequentialist theories, which judge actions based on their outcomes, deontological ethics focuses on the inherent morality of the actions themselves, irrespective of their results. It posits that there are certain moral duties and rules that should always be adhered to, and actions should be evaluated based on their alignment with these duties.

When we apply this deontological framework to Sourour's decision to create the pharmaceutical quiz, several moral concerns arise. Firstly, the act of intentionally programming a quiz to deceive its users is a clear violation of the duty of honesty. In Kantian ethics, honesty isn't just a virtue; it's a moral obligation. Deceiving users, especially in a context where their health is at stake, is inherently wrong, regardless of the potential benefits or profits that might be gained.

Furthermore, Kantian ethics emphasizes the principle of treating individuals as ends in themselves rather than as means to an end. By designing the quiz to recommend a drug invariably, the users were essentially treated as mere tools for profit rather than as autonomous individuals deserving of respect and truthful information. This instrumentalization of users for business gains stands in direct opposition to Kantian principles.

In essence, from a deontological perspective, the very act of crafting the quiz with deceptive intent, even without considering its tragic consequences, is morally reprehensible. It's not just about the potential harm caused, but about the violation of fundamental moral duties that every individual, especially professionals, should uphold.

#### **Conclusion**

In reflecting upon the ethical dimensions of Sourour's actions and the broader implications for the tech industry, it becomes evident that ethical considerations must be at the forefront of every professional decision. The creation of the misleading pharmaceutical quiz serves as a poignant reminder of the profound impact that seemingly innocuous pieces of code can have on individuals and society at large.

From a deontological standpoint, the act of deception, especially when it concerns matters of health and well-being, is inherently problematic. While business pressures and directives can be compelling, they should never overshadow the moral obligations that professionals bear. Every piece of code, every application, and every digital tool carries with it an ethical weight, and professionals must be acutely aware of this responsibility.

Some might argue in defense of Sourour, positing that he was merely following orders or that the onus of blame lies primarily with the pharmaceutical company. However, such arguments, while offering some mitigation, do not absolve individuals of personal responsibility. In the realm of professional ethics, each individual must grapple with moral dilemmas and make decisions that align with ethical standards, even if it means challenging directives or facing professional repercussions.

Furthermore, this case underscores the importance of continuous ethical education and reflection within the tech industry. As technology continues to evolve and permeate every facet of our lives, the ethical challenges will only become more complex. Professionals must be equipped, not just with technical skills, but with a robust moral compass to navigate these challenges.

In conclusion, while the case of the pharmaceutical quiz is a somber one, it offers invaluable lessons. It's a call to action for professionals everywhere to prioritize ethics, to engage in continuous moral reflection, and to always strive for the greater good, even in the face of professional or financial pressures. The integrity of our actions defines not only our professional reputation but also the broader impact we have on society. As we move forward, let this case

serve as a reminder of the weight of our ethical responsibilities and the profound difference we can make when we choose the path of moral righteousness.