

In the early 2000s, Bill Sourour was tasked by his employer to write code for a website. The website was marketed as a general information site that provided information about various drugs. The code he was tasked with writing was a quiz that claimed to recommend a drug based on the answers given. He was tasked, however, with ensuring that, unless the user was allergic, the drug recommended to the user would always be the drug a client wanted to be marketed. Later on, he was informed the drug has a significant side effect of increasing the risk of suicide, and he was told of one such instance of the drug being linked to a young girl committing suicide. In this case analysis, I will argue that the ethics of care show us that the code was morally problematic because it did not show care towards the users of the website, and that Sourour should have done something differently because of a coder's obligation to care for those who will use the product of that code.

In order to better understand the ethical implications for coders and software engineers, we could consult the codes of ethics that influential organizations have adopted. The National Society of Professional Engineers (NSPE) is one such organization. Their first rule of practice within their code of ethics highlights the special relationship and responsibility engineers have with the public and those who will use the products of their labor. Rule of practice one is that engineers are to hold the safety, welfare, and health of the public paramount. Within this rule, the engineer's duty to their clients and employers is recognized. In cases where life is endangered and the engineer is overruled, they should then notify their employer, client, and any other authority that is appropriate. They should also not knowingly break the law or aid in the breaking of the law. Another tenet within the code of ethics that further outlines the relevant responsibilities of an engineer is professional obligation two. This obligation states that the engineer must at all times strive to serve the public good. They are to work for the advancement of the public good and are not to complete or sign projects that are not standard. If they do learn of such unprofessional conduct, and it is not stopped, they must withdraw immediately and notify the proper authorities. Obligation three extends this to include actions that merely deceive the public, ensuring that merely omitting facts could be construed as a breach of ethics. The IEEE's code of ethics is in harmony with most of the NSPE's code of ethics, as it shares many of the same tenets. Within the IEEE code of ethics, it similarly states to hold paramount public welfare, disclose danger to the public, and be honest with your claims. Both codes also highlight that conflicts of interest are to be avoided or disclosed to affected parties, whenever they do occur. The ACM, with its own code of ethics, concurs with the others but expounds further on a number of issues. For instance, the ramifications of a professional's actions are highlighted as being of important interest. It's stated that a safe environment is vital to human wellbeing. Therefore, a professional's actions must promote such an environment. All these tenets work exceptionally well within the framework of the ethics of care. It is constantly stressed how professionals are present within a broader web of relationships in a wider community. The members of these relationships are interconnected, with clients, employers, other professionals, and the public being interdependent on each other. Professionals do have obligations to others, but paramount is their requirement to care for the public that uses and interacts with their products and labor. This care is designed to create a safe environment that is vital for wellbeing and, ultimately, a mutually flourishing society and community. The actions of Sourour could then be juxtaposed with the expected behavior of a professional to see how his actions were unethical. Sourer did not seem to apply nearly enough care to those who interacted with the

products of his code. His work put others at risk, reduced their safety, and was a breach of both the many codes of ethics and the teachings of the ethics of care.

Mary Beth Armstrong goes more in depth into the nature of professional responsibilities in her work, *Professional Ethics*. Within the chapter on confidentiality, some of the intricacies of the responsibility professionals have to protect confidentiality are explored. This includes the potential contradictions and clashes of responsibility that could arise between the obligations to employers and to the public. When documenting the evolution of ethics for engineers, Armstrong points out that in the early 1900s, ethics codes outlined that first and foremost, engineers had a duty to their employers and clients. Within 70 years, however, the ethics codes evolved to include a simultaneous duty to both the public and to employers and clients. Armstrong then recounts a relevant case of engineers who broke professional confidentiality for the sake of public wellbeing. They raised concerns through internal channels but were ignored. With little to no options left, they lodged formal complaints with the relevant authorities. These complaints were used by their employer to fire them, but they were ultimately vindicated, albeit out of work. Armstrong uses this example to highlight the point that engineering professionals are more likely than others to eschew professional confidentiality to protect the public good. It seems that this suggests that engineers consider their obligations to the public to be a higher duty than to their employer. I feel as if this lines up with the ethics of care very well. The public, who interacts with and uses the products of the engineer, depends on the products to have care put into them. Likewise, the engineers depend on the public for a number of other things as well. It is a mutual interdependence, that, if implemented with care, leads to mutual flourishing. While the employer and engineer also share a relationship that requires care for mutual flourishing, there is a more complex element at play. If an employer or client ignores concerns or saddles a professional with a task that burdens them with a duty to act against the public interest, then they are not acting with care in their relationship as an employer. This changes the nature of the relationship and is part of why, in this case, the professional owes a greater duty to the public than in many other cases. Souror was a software engineer saddled with such a case. The client or employer did not show care when they tasked him with creating a product that would work against the public good. In that case, Souror should have attempted to lodge internal concerns if possible. This way, he shows care towards his employer, which they will hopefully reciprocate. If they ignore him or meet him with hostility, then Souror would be obligated to show care towards the public by going to a higher authority, such as a regulation board or governmental institution, in order to protect public wellbeing. This would satisfy Souror's obligation to care for the public and those that use the products Souror makes. While this would be a difficult decision, and could even lead to harm done to him, it would be an ethical one.

In conclusion, Souror did not behave ethically. He did not show proper care for those he was obligated to care for. Numerous notable codes of ethics allow us to understand this ethical obligation, including those from the IEEE and NSPE. Armstrong's analysis further explains that obligation. While Souror would have a duty to his employers, he would also have a higher one to care for the wellbeing of the public. Armstrong showcased how this ethically balancing act leaned even more towards the public's well-being when it came to engineers. This ethical quandary, however, is one that does not stop at Souror's case. Likely, this same issue is brought up hundreds of times every day, from accountants to the service industry, and to engineers as well. This obligation to care for public wellbeing seems difficult to fulfill, but a more ethical and

mutually flourishing society could be crafted if those faced with this ethical quandary behaved ethically.