

## Engineering Ethics Report

**Project Title:** [ezamu.com](http://ezamu.com) - A High School Career & College Guidance Platform

### Team Members:

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## Identified Ethical Issues

For each identified ethical issue, provide the following information:

1.

1. **Issue:** Data Security and Privacy
2. **Category:** Safety and Health, Data Privacy and Security
3. **Potential Consequences:** Leaks of customer data and a loss of customer privacy would likely decrease the customer base. Since the site takes some private information like name, email, and credit card details, a breach of privacy in this information could lead to legal action from customers. Distrust from students and parents would not be easily fixed, especially in terms of such private data.
4. **Stakeholders Affected:** Owner: Moses Katakanya and company. Development team responsible for sections of the website.
5. **Impact:** High
6. **Relevant Professional Codes:** confidential, no matter the circumstances. As the IEEE agrees, holding information regarding the customer base means they hold trust in the company, which must return the show of trust. The IEEE also says that information that is collected must adhere to Data Security Standards.

2.

1. **Issue:** Appropriate Content
2. **Category:** Honesty and Integrity, Fairness and Justice
3. **Potential Consequences:** Some consequences of this issue include students and parents feeling like the information available is inappropriate for younger audiences, which would make them lose trust in the company. This would largely affect the customer base, as the information provided should be age appropriate and easy to understand.
4. **Stakeholders Affected:** Owner: Moses Katakanya and company. Development team responsible for particular sections of the website.
5. **Impact:** Medium

6. **Relevant Professional Codes:** The IEEE's standards ensure that information given should be appropriate to the age range that uses the product, in terms of its user-focused requirements and the use of common language. Therefore, information should be easily understood by all parties involved, without creating confusion.

3.

1. **Issue:** Unbiased and Fair Content Presentation
2. **Category:** Fairness and Justice
3. **Potential Consequences:** Having biased content displayed on the website, such as favoring a college or university over another and providing more information for one major compared to others could result in leading users astray from an outcome that truly benefits them. This in turn harms the integrity of the website, as well as potentially damaging the reputation of the company if this is found out and made public.
4. **Stakeholders Affected:** Owner: Moses Katakanya and company. Development team responsible for particular sections of the website.
5. **Impact:** Medium
6. **Relevant Professional Codes:** Having biased opinions on colleges and majors should not be represented in the results provided to the users. This directly conflicts with the IEEE Code of Ethics, particularly in Code 1.3 which states in part "to avoid real or perceived conflicts of interest whenever possible."

4.

1. **Issue:** Advertisement Transparency
2. **Category:** Fairness and Justice
3. **Potential Consequences:** Without properly vetting ads for their content and purpose, these advertisements can be disruptive and promote unhealthy items or services. This is a serious issue, as displaying these ads to impressionable kids can lead to serious repercussions both for the students and for the company.
4. **Stakeholders Affected:** Owner: Moses Katakanya and company. Development team responsible for displaying the ads on the website.
5. **Impact:** Low
6. **Relevant Professional Codes:** Haphazardly displaying advertisements can potentially breach the IEEE Code of Ethics as it may "endanger the public" without prior notice. This directly conflicts with Code 1.1, demonstrating the importance of verifying all ads that are presented on the website, if any are shown.

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## Strategies and Justifications

For each ethical issue identified above, provide the following:

1.

1. **Issue:** Data Security and Privacy
2. **Strategy:** Routine security monitoring and maintenance, local storage of data, constant upgrades to AI systems.
3. **Justification:** Having a schedule for security system updates will ensure that all the information about a user and the website itself is secure and up to date, minimizing the chance that a security breach will occur and harm both the user and the company.

2.

1. **Issue:** Appropriate Content
2. **Strategy:** Timely updates to the information provided, regular checks for inappropriate subjects or topics.
3. **Justification:** Managing the content that is presented on the platform is integral to providing the best possible service to the user, as it guarantees they are getting the best and newest content that is reliable and trustworthy.

3.

1. **Issue:** Unbiased and Fair Content Presentation
2. **Strategy:** Multiple reviews of the content being displayed by multiple developers.
3. **Justification:** Having multiple people review the subjects allows the content to be fairly judged by different perspectives, ridding of any potential bias.

4.

1. **Issue:** Advertisement Transparency
2. **Strategy:** Thorough vetting of advertisements, being extremely picky with what advertisements are selected to be displayed.
3. **Justification:** Having an extensive clearance on ads will ensure that unwanted imagery never appears on the website and will not reach the eyes of the user.

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## Conclusion

### Effectiveness of the Strategies:

Routinely checking in on all systems, as well as receiving feedback from user testing will allow us to confirm that these strategies are effective and producing the desired results. This guarantees that the website will maintain its high ethical standards without any danger of breaching any code within the Code of Ethics as outlined by the IEEE.