

5 Professionalism

This discussion is with respect to the paper titled “Contextualizing Professionalism in Capstone Projects Using the IDEALS Professional Responsibility Assessment”, *International Journal of Engineering Education* Vol. 28, No. 2, pp. 416–424, 2012

5.1 Areas of Responsibility

Pick one of IEEE, ACM, or SE code of ethics. Add a column to Table 1 from the paper corresponding to the society-specific code of ethics selected above. State how it addresses each of the areas of seven professional responsibilities in the table. Briefly describe each entry added to the table in your own words. How does the IEEE, ACM, or SE code of ethics differ from the NSPE version for each area?

Will be choosing IEEE code of ethics.

Area of responsibility	How IEEE addresses each area	How does the IEEE differ from NSPE
Work Competence	Perform with the goal to maintain and Improve technical competence and tasks with the proper qualification/experience	NSPE states that engineers should only perform services that are in their area of expertise. This is similar to IEEE as they both encourage only taking tasks that they are qualified in
Financial Responsibility	Reject any bribery in all possible forms	NSPE encourages to be faithful towards all employees and clients. This differs from IEEE as they specify money that could be obtained “the easy way”
Communication Honesty	Be honest and realistic in all claims/estimates based on data	NSPE encourages public statements to be objective and truthful. This is different from IEEE as they want claims that are backed up by evidence
Health, Safety, Well-being	Accept the responsibility to make decisions that provide safety, health, and welfare to the public. Anything that can endanger the public/environment must be communicated immediately	NSPE prioritizes the safety, health, and welfare of the public. This is similar to IEEE code of ethics
Property Ownership	Avoid injuring others and their property, reputation, and employment	NSPE encourages to be faithful towards all employees and clients. The difference is that NSPE’s description for Property Ownership is the same for Financial Responsibility. For IEEE, both are different and more descriptive as to what they expect
Sustainability	Disclose factors that can endanger the environment immediately	NSPE does not have a description towards this area. However, IEEE does – the NSPE glances over it by generally stating to “prioritize the safety, health, and welfare of the public”
Social Responsibility	Assist your colleagues in their own professional development and support/encourage them to follow the IEEE code of ethics as well	NSPE states that those who believe an individual are unethical or participating in illegal practices must present this information to a higher up

5.2 Project Specific Professional Responsibility Areas

For each of the professional responsibility areas in Table 1, discuss whether it applies in your project's professional context. Why yes or why not? How well is your team performing (High, Medium, Low, N/A) in each of the seven areas of professional responsibility, again in the context of your project. Justify.

Yes, all 7 professional responsibilities from Table 1 apply to the project's professional context. This is because in order to successfully complete our project (and any other project in the future), all members must have knowledge and consider all issues of ethics and professional responsibility. If not, then we can provide solutions that can impact the environment in a bad way. Engineers have several responsibilities and when they are performed irresponsibly/outside the code of ethics, more problems will arise.

Currently, our team is performing high in all 7 areas of professional responsibility. We have avoided several conflicts by communicating and being respectful towards one another. We also communicated any conflicts/concerns towards each other and also our client as well. Our team also created an environment that encourages criticism, questions, correcting errors, while also crediting those who deserve it. Although so far our team has been using this time to get to know each other and perform individual research to share for our project, there is no question that we as a team created a professional environment where we encourage each other to perform our best to create a successful Senior Design Project in the end.

5.3 Most Applicable Professional Responsibility Area

Identify one area of professional responsibility that is both important to your project, and for which your team has demonstrated a moderate or high level of proficiency in the context of your project. Briefly describe what this responsibility means to your project, the ways in which your team has demonstrated the responsibility in the project, and specific impacts to the project that you have observed.

One of the areas of professional responsibility that is important towards our project and that our team has demonstrated a high level of proficiency for is financial responsibility. This responsibility means to "deliver products and services of realizable value and at reasonable costs". What this means towards our project is that our product (pending but currently is Minecraft) will be utilized by FFA students. However, this product does have a cost – not only to design it but also provide this product to the students as well. This is something that we have been discussing/researching the past two weeks. This is important and vital towards our overall project because not only do we want to create a product to the best of its ability, but it is also budget friendly when it comes to actually being used. What we as a team observed from this is that not only do we need to think about ourselves and working on this project, but we also have to think about our targeted users.