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?

Area of Responsibility	Definition	ACM Code of Ethics and Professional Conduct
Work of Competence	Deliver high quality, professional work on time	2.2 Perform high quality work and take responsibility for your work 2.6 Perform work in your knowledge field
Financial Responsibility	Deliver valuable, reasonably cost products	3.3 Manage the team and resources
Communication Honesty	Communicate the true state of the work clearly	1.3 Be honest and trustworthy 2.5 Evaluate the application functionality and their impacts
Health, Safety, Well-Being	Establish a safe, healthy work environment	1.2 Avoid harm 2.9 Create secure, but usable, systems 3.7 Take care of systems that are widely used
Property Ownership	Respect all aspects of clients and others	1.6 Respect Privacy 1.7 Honor confidentiality 2.8 Access authorized resources
Sustainability	Minimize impact on the environment	1.2 Avoid actions which result in negative consequences (unjustified damage to property, animals, humans, and the environment)
Social Responsibility	Deliver beneficial and useful products	1.1 Contribute to society, all people are stakeholders 3.1 Ensure that the public good is the main concern

5.2 PROJECT SPECIFIC PROFESSIONAL RESPONSIBILITY AREAS

For each of the professional responsibility area 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.

Work of Competence – High

Work competence plays a key role in our project as we, as a team, agreed to deliver an optimal product to the client based on some agreed upon requirements and guidelines. We are required and committed to have the technical knowledge and skills in order to understand the requirements of

the project, create new ideas/designs, and implement such ideas based on the predetermined expectations set forth by both parties(team and client).

Financial Responsibility – Medium

This responsibility applies to our project because the purpose of the project is to produce a product that enables users to find their documents more quickly, and it does so in a very straightforward fashion since it only requires the implementation of a search engine. By allowing users to find their documents more quickly, our software will cut down on the time that the users spend searching for documents and enable them to spend more time doing other tasks that will benefit the company.

Communication Honesty - High

Being transparent with our progress on the project is of high responsibility. Design decisions and functionality must be disclosed to show the reasoning behind them and their true state. The end product should function as we have claimed. In order for our project to succeed, we must fully utilize our resources such as our Faculty Advisor and Buildertrend contact. To avoid failure our team members will need to communicate honestly with each other as well.

Health, Safety, Well-Being - Low

Health, safety, and well-being does not apply in a very traditional sense to our project. Since our project is entirely based in software and does not interact with any physical objects, there is not any physical harm that can be caused by our project. However, it is important for us to make sure that our system takes fundamental security precautions (e.g. SQL injections) into consideration to ensure that our system is secure.

Property Ownership - High

Since we are developing a project for a company working in the industry, it is important to understand the boundaries that will be established and to honor those conditions. Documents such as NDA's will most likely be presented before us, and it will be important for everyone to understand the conditions of the contracts that we sign and the repercussions of breaking the contracts.

Sustainability - Low

Since our project is completely software and is not expected to be computationally intensive, the impact on the environment is low. The potential use of cloud platforms for storage and execution would increase the electricity requirements for the application. It's our responsibility to keep the amount of computation and storage required low for the application to function.

Social Responsibility - Medium

As professionals, we should always strive to make people (including users, customers, colleagues, and others affected directly or indirectly) and their experience our primary concern. It is important to find a balance between technical complexity and user experience such as in our project. We are to share information and knowledge acquired with clients and other stakeholders in an appropriate manner and maintain open channels of communication in order to deliver the optimal solution. Our team must also take into consideration social responsibilities when developing the product(user privacy, interactions, risks, and limitations).

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.

Communication honesty is very important to the success of our project and our team demonstrates a high level of proficiency in it. It'll be crucial to be transparent with the project's progress, and as such, we shall be consistently communicating with our advisor and the client. Besides, we need to be honest about what is attainable and what isn't. We have had regular meetings with our faculty advisor and kept him updated with our progress. Additionally, we have regularly communicated to and tried contacting our client (it's just a little delayed from their end). Overall, being honest in our communications would lead to better relations and a more attainable successful project.