

Write about the ethical and professional responsibilities in building the application you are making. Discuss the impact of engineering solutions in global, economic, environmental, and societal contexts.

When it comes to designing and building the application ChatMail in a setting where multiple team members are involved, there are a lot of ethical and professional responsibilities that are required within the process of the project. One of the ethical responsibilities in developing the ChatMail application is establishing a strong and efficient method of communication between team members. By doing so, we were able to address each others' needs and concerns when it comes to establishing a proper meeting schedule, distributing workload equally, and making decisions. As a result, we were also able to fulfill the professional responsibilities of accomplishing small tasks (milestones), validating and checking each other's work progress, and ensuring that the application is functioning properly. By following the professional responsibilities, we are able to finish up a product that fulfills the requirements demanded by the prompt of the project.

Engineering solutions impact global, economic, environmental, and social contexts. For example, a single engineering solution, such as the development of ChatMail (or any emailing service) can globally impact the efficiency of sending messages to others. Another engineering solution that can impact the world is the development of renewable energy, such as solar power, to help provide energy to areas that need it most. For economic impacts, engineering solutions will provide more career opportunities through industries and opening job positions. With the presence of an engineering solution, more people will be hired to perform various tasks such as design, maintain, organize, manage, test, etc. Engineering solutions can also impact environmental factors by developing designs that can reduce pollution. For example, the design of electrical cars help provide an alternative solution for customers who want to travel without producing any air pollutants. Finally, engineering solutions can impact social contexts by improving the people's daily experience with communication, health, transportation, and more. The design of phones, diagnostic machines, and railway systems are some of the few examples that help portray how engineering designs help improved society.