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Privacy and Anonymity

Computer technology has become a necessary component of modern everyday life. Computer technology carries out its processes using computer software. People who use software for data transfer expect the process to be fast and reliable but most importantly safe. Users need to be certain that data they input into computer software systems that get transmitted through the internet is secure. Privacy refers to restricting unauthorized access to user data; meaning all people with the ability to view the data should be able to and everyone else cannot. Also, those who view the data should handle it responsibly. Privacy and anonymity are vital to computer technology. Users would not trust computer systems if their information were not being kept private. Anonymity is important to keep users who submitted data confidential when it is not necessary to know who submitted it. This also shows the importance of privacy. As more people begin to use computer technology and it becomes more prominent in the future, the issue of privacy of user data will continuously become more important.

The concern of businesses is to make sure their users are content with their processes. If users do not trust the computer systems with their information, they will probably use another service. One way to keep the trust of users is to be transparent about data practices. People should know why their data is being collected and what security measures are in place to protect their data. Clear communication is a good way to build trust with users (Borner). Users

should also have the ability to access, modify and delete their data as needed (Borner). This will also build trust. It is important that users are confident that their data is kept private for them to trust computer systems. Clear communication is a good way of ensuring trust. It is also important that computer professionals ensure they handle data responsibly and respect privacy. They have access to user information for professional reasons and should not violate the rights of individuals or groups. They must make sure that the information they gather for a specified purpose is not used for any other reason without the person's consent (Code of Ethics).

Anonymity describes conditions where a person's identity remains unknown or anonymous. Anonymization is essential to use today because it finds a balance between sharing data and protecting users' privacy. The idea behind anonymous data collection is that it cannot be linked to an individual. Anonymous data collection enhances data security, facilitates data sharing, and reduces costs. Anonymous data cannot be recognized so there is a low security risk. Because the data has a low risk of security problems, it does not need expensive security protocols to protect it. Data can also be shared to researchers, analysts, and other companies because the data is not as tightly protected as it would be if it was linked to individuals. Data anonymity is crucial to computer technology and the business world and has several benefits (GeeksforGeeks). Data anonymity is vital in medical research, healthcare, insurance claims, and financial data analysis. These are some of the industries where it is imperative that sensitive user data is kept anonymous and personal information is protected for safety reasons.

Computer systems are becoming increasingly vital for businesses and individuals to function from day to day. The emphasis on computer professionals acting responsibly with user data and for data to be encrypted and inaccessible by third parties will remain as important as the technology itself. When customers shop online or submit sensitive information to forms for applications they must sign up for, they want to be sure their data is safe. Data should be kept

anonymous if it is unnecessary for individuals to be identified and this will allow more people to have authorized access to view it and make it more useful overall. Anonymous data is also more secure. There are currently laws in place to help ensure data is kept private. The Data Privacy Act governs how personally identifiable information is collected and used by federal agencies. The Health Insurance Portability and Accountability Act (HIPAA) monitors how healthcare information flows and certifies that confidential health care information is properly handled by healthcare providers. There is also the Children's Online Privacy Protection Act (COPPA) which regulates the collection of personal information of children under 13 (Welekwe). These regulations are valuable to the users of computer systems in America because they aid in keeping user data private and protect their rights. Data that is not kept private could result in personal activity monitoring which violates user privacy rights. New computer technology and computer systems will continue to be developed, and current systems will continue to be maintained. With this the future will bring more privacy laws as the need for protection increases especially as it relates to protecting children's data, and consumers will become more aware of their privacy rights.

The importance of privacy in computer technology is obvious. It is highlighted by viewing the importance of users trusting the computer systems of services they use and by viewing the importance of computing professionals to properly handle user information and be trustworthy. Anonymity is also of importance and can clearly be seen through users submitting confidential forms and data where it is unnecessary to tie an identity to it. In fields like healthcare, finance, and insurance, it is especially important to keep user data confidential. Government agencies also must uphold data privacy as there are laws in place to protect users of computer technology. Information that is not kept private can cause harm to individuals as well as organizations. The issue of ensuring user data is safe will continue to grow as the demand for computer technology continues to expand.

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