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Explore Task; Written Responses

2a) Provide information on your computing innovation and computational artifact. Name the computing innovation that is represented by your computational artifact. Describe the computing innovation intended purpose and function. Describe how your computational artifact illustrates, represents or explains the computing innovation intended purpose, its function or its effect. (Approximately 100 words)

My innovation is cloud computing, which allows for the delivery of computing services, data, software, and storage over the Internet, referred to as “The Cloud”. Several different types of cloud computing exist; public, private, and hybrid. Public are operated and owned by a third-party cloud service provides. Private clouds are used exclusively by one single organization and business. Hybrid clouds, combined public and private cloud benefits, allowing data to be transferred across private and public clouds, giving business greater flexibility and security. Cloud computing is used for numerous different reasons, such as protecting, storing and recovering mass-scale data at a cost efficient price by transferring data over the internet to a cloud storage system, accessible from anywhere.

2b) Describe your development process, explicitly identifying the computing tools and techniques you used to create your artifact. Your description must be detailed enough so that a person unfamiliar with those tools and techniques will understand your process. (Approximately 100 words)

I used Google Docs to create my artifact. I used captioned images in order to explain my images. I found my images using Google to find simple, relevant images to represent aspects within cloud computing. I used arrows in order to create a flowchart to explain the process and components used in cloud computing. Within the arrows I explained the steps taken in between each image.

2c) Explain at least one beneficial effect and at least one harmful effect the computing innovation has had, or has the potential to have, on society, economy, or culture. (Approximately 250 words)

One beneficial effect of cloud computing is the money that will be saved through cloud computing, and its ability to store and transfer large amounts of data and applications in a very cost effective way. Many companies and the public alike would greatly benefit from the financial benefits that have been created under cloud computing. One harmful impact is increased

security risks for company and personal data stored over the cloud. Although security is a main concern for cloud providers, many issues are still present. Relying on data being safely transmitted over several networks can result in more risks, opposed to saving and transferring data across physical copies.

2d) Using specific details, describe: The data your innovation uses. How the innovation consumes (as input), produces (as output), and/or transforms data. At least one data storage concern, data privacy concern, or data security concern directly related to the computing innovation. (Approximately 250 words)

Cloud computing is operated by the cloud provider or third-party service providers or private businesses. Using phones and computers as an example, data and information is uploaded to the cloud using third-party apps such as Dropbox, otherwise, most of the data is synced automatically with the cloud. The files then arrive at a control data server, owned and controlled by the cloud hosting company. The files are then stored across many machines within the cloud across many different copies, all of which are easily retrieved from any device anywhere. Security is one of the largest concerns for businesses who use cloud services. Although access to public storage is locked behind a login, many business are still hesitant to store and transfer important data in fear of loss or theft. Additions in data encryption and improvements to security overall within public cloud services have mitigated many concerns. Public key encryptions are used in order to keep the data safe.

2e) For each online source, include the permanent URL. Identify the author, title, source, the date you retrieved the source, and, if possible, the date the reference was written or posted. For each print source, include the author, title of excerpt/article and magazine or book, page number(s), publisher, and date of publication.

1. (https://searchcloudcomputing.techtarget.com/definition/cloud-computing) Margaret Rouse, “Cloud Computing”, December 16, 2012.
2. (https://azure.microsoft.com/en-us/overview/what-is-cloud-computing/) Microsoft Azure, “What is Cloud Computing?”, May 12, 2014.
3. (https://www.infoworld.com/article/2683784/cloud-computing/what-is-cloud-computing.html) Eric Knorr, “Everything you need to know now; Cloud Computing”, October 2, 2018