Samuel Bailey

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For the purposes of this assignment, assume that The Gaming Room will have 200 high-definition image files to choose from, each one approximately 8 megabytes in size.

**Memory Management**: Memory refers to what resources are required for transferring files and how the speed and performance of the system are impacted. In the context of the software, Draw It or Lose It, consider how the game application will need to render and display pictures at a fixed rapid rate to meet your client’s requirements. Consider the user’s experience and what is required to have the application run rapidly and effectively on all operating platforms. Address the following in your short paper:

* **What considerations and specific approaches would it take to ensure that memory is effectively managed in the software application, Draw It or Lose It?**

For memory management it is vital to have things load at a high speed to improve user experience. To have images load quickly RAM will have to be used instead of the hard drive of the computer or device. Obviously we cannot load all 200 pictures at once so we will need to build some sort of algorithm to know what pictures need to load based on what page the user is on or what the user is searching/doing on the application.

**Storage Management**: Storage refers to how files and permanent discs are stored. In this particular instance, a large library of images files is required for Draw It or Lose It. In the context of the game application, consider all aspects of the game that will need to be stored and address the following in your short paper:

* **What considerations and specific approaches would you take to determine how much storage is needed and how to manage storage for your client’s application, Draw It or Lose It?**

For this problem there is two solutions. Option one is to load pictures from the database into the RAM every time the application is ran. Another way is to store all the images into the hard drive of the computer that is using the application. This would be the primal solution since the images only equal out to about 1600 MBs. Storing locally on the computer will make images load even faster into the RAM vs loading from a database, this also allows for the application to be used offline for this portion.

**Comparison**: Now that you have identified the considerations and approaches, differentiate between memory and storage management. Address the following in your short paper:

* **What are the differences in how memory and storage are used in terms of the game application functionality?**

Memory is referring to the RAM of the game, the storage is the hard drive. When applications are running they are using some sort of RAM memory to load things in the game faster. If the game isn’t running then the information is stored in the hard drive. Computers have far less RAM than storage therefore it should be used with caution.

Overall the game will use both memory and storage and both are equally important to the game yet do very different things.