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Memory and Storage Management

The first thing to consider is that The Gaming Room’s application, Draw It or Lose It, will have 200 pictures, each roughly 8 megabytes in size. In total, this would be 1600 megabytes. Next thing to consider is the number of players that can participate and input information within an instance of a game. Another possible consideration is if there will be future addition of photos. With the listed above considerations, the best form of memory management would be Stack memory. Stack memory is a structure that allows for the storage of data that is continuously collected. Stack memory helps with the storage of different objects and files. Using this virtual memory will allow The Gaming Room to have more than enough memory for the application, as well as enough memory for future updates.

A cloud storage is the top of the list for storage management. Although it is more expensive, and must be within budget, it is not as expensive as an in-house server and the costs of maintenance. Another great reason for cloud storage is the ability to easily obtain more storage space. If Draw It or Lose It gets so big that they need some more room, simply purchase more space. This makes it very easy, and less expensive in the long run. And on top of being easy, the cloud storage will store data in a few different servers, allowing it to essentially manage itself.

The difference in how memory and storage are used in terms of the game application functionality is when the developer needs to make updates or changes to the game. They can use Stack memory to add new items on top of the stack or completely rearrange it. These changes will be physically stored in random access memory until it is saved, in which the data would the be sent to the cloud and saved permanently. On the storage side, it generally will come in on the end user, where their device will communicate with a cloud server, instead of files being stored on their device. This will allow less space to be taken up on the end user’s device, which will keep it fast and responsive.