Unit 4 Assignment: System Requirements

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Today’s era makes any major company need some sort of cloud computing and storage. One type of company that I would like to touch on is gaming companies. They use the cloud for not only their software but also their DLC (Downloadable Content). These types of companies tend to push out all types of software and content updates through the cloud so that users can access it easily. This is typically for bugs or anything in the game that is not working properly.

Another type would be streaming services, some services include Netflix, Hulu, and Spotify. When using their services, most people do not know that we go through the cloud just to watch these services. There is just so many possibilities of what the cloud can/ will eventually be able to do in years to come.

In order for these possibilities to happen there are certain system requirements that are needed to be met so that everything can run smoothly. Two types of system requirements are functional and nonfunctional. Functional requirements are what the hardware tells the system on what or how it will perform a certain task. Nonfunctional requirements are a little more flexible as they direct to the performance, reliability, and maintenance of the system. The first step of setting up a system that is going to be running, we are going to use a gaming streaming service as the example, off the cloud is to determine what the system needs to runs and how all these requirements work together.

The functionality or function of this service to provide users the ability to play any game at any time and wherever they want and allow them to save on the go without the chance of them losing their data or progress. The most important factor is the cost of setting it up and maintaining it. Other factors should be security risks, deployment techniques, and user experience. We also need to focus on what the development team and what they would need for workflow and structure for future proofing that would not hinder their performance down the road.

Functional requirements that our system would need are: ability to play anywhere and anytime, need to be able to transfer encrypted data from video games into the cloud to make is usable and playable, they will need some sort of input device to control their game such as mouse, keyboard, controller, etc.…, and the ability to save their content. Essentially these would eliminate the need for gaming consoles such as Nintendo switches and Xbox’s.

Now you can think of your nonfunctional requirements for you service. These nonfunctional requirements are not only important to you but also for the user. These are a couple of nonfunctional requirements that I would like as a gamer; Load times from the cloud host to the user (time it takes to boot up the game), need to be able to control the input delay of the controller (time it takes for the system to detect and perform the inputted action, the minimum frames per second, and dropped frames during cinematic scenes. The code for the game needs to be maintainable.

In conclusion you can see that it takes both functional and nonfunctional requirements to run cloud-based gaming system. These functions are what help they system to run smooth and would help keep the user and the developer happy. Although it would not run perfect until tested, but there’s always room for improvement as long as you follow the requirements and guidelines.

Resources:

(n.d.). Retrieved January 12, 2018, from <https://www.game-debate.com/search/games>

Goldsmith, R. (n.d.)

Differentiating between Functional and Nonfunctional Requirements. Retrieved January 12, 2018, from <http://searchsoftwarequality.techtarget.com/answer/Differentiating-between-Functional-and-Nonfunctional-Requirements>