Disciplines

Technology, Information Technology



Similarities between System Engineering and Software Development Processes Similarities between System Engineering and Software Development Processes

System engineering an engineering field, majors on how to manage and design complex engineering and software development. It has the following processes, problem definition, value system design, system synthesis, system analysis, and optimization, decision making and planning for action (Sage, 1992).

Software development process which is also referred to as software development life cycle (SDLC) is a structure that dictates the developmental process of a software product. The process includes six phases that need to be followed. These are requirement gathering and analysis, design, implementation or coding, testing, deployment and finally maintenance. Web development uses system development process.

The phases in both software development process and system engineering have some similarities in that they are sequential. These process/phases have to be followed step by step. System engineering is taken to be the first process in the software development life cycle. This is where the requirements of the larger system where the software will be functioning under are considered (Mishra, 2011).

Security systems can use the SecSDLC (security system development life cycle) which happens to follow the same methodology as the commonly known SDLC (system development life cycle). Both do consist of the same phases but SecSDLC involves the identification of specific threats as well as the risks that they represent (Charles K., 2013).

An example of a services that uses cloud computing is the Amazon Elastic Compute Cloud (EC2). This system allows for the renting of virtual computers on which to run personal computer applications.

References

Charles Kellep (2013). Security System Development Life Cycle (SecSDLC)

Article Retrieved April 14, 2014: http://www. securityorb.

com/2013/09/security-system-development-life-cycle-secsdlc/

Mishra J., Mohanty, A. (2011). Software Engineering, Pearson Education India,

Sage A. P. (1992). System Engineering, Volume 6 of Wiley series in systems engineering and management. Wiley series in systems engineering, Technology & Engineering Wiley inter-science publication, John Wiley & Sons.