**Week 2 Assignment: Architecture Design Process**

Shaun Hoadley

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Professor Amr Elchouemi

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**Architecture Design Process**

**Introduction**

The purpose of this paper is to select a system and apply an architecture design process to that system. While there are others, the design processes that we will choose from are Attribute-driven design (ADD) or Microsoft (MS) technique, Architecture-centric design method (ACDM), or Architecture development method (ADM). The system that I will be using for this paper is an e-commerce system. The design process that will be used for the e-commerce site is the attribute-driven design, or ADD, because the success of the store relies on the satisfaction of the customers and clients. According to Ingeno, attribute-driven design lends focus towards software quality attributes and can introduce them earlier in the design process (2018, pg. 283). Neill et al. states, “A system is considered successful if it meets stakeholder needs” (2017). Our team will design the architecture so that it will meet or exceed the needs of the stakeholders to make the system successful.

**Describe the System of Choice**

I am electing to get a start on the final paper with this assignment by choosing the ABC Online Store e-commerce system as the system of my focus. The CEO of Enterprise X has hired me to be the lead architect for the ABC Online Store e-commerce system. The CEO hopes to bring in business that is currently going to e-commerce competitors like Amazon and eBay. The e-commerce site will allow customers to purchase their items online and then choose to pick them up in-store or have them delivered. To further expand, the site will also enable third-party sales from trusted vendors.

**Activities and Artifacts for the Design Process**

The e-commerce site will allow customers to purchase items twenty-four hours a day. The customer can select options to pick up their order in-store during business hours or have it delivered. The e-commerce site should look good and be easy to use on all of the major browsers. The site should allow customers to create an account quickly and easily. Customer and vendor data should be kept securely. Products should be easily searched for, added to a cart, and purchased. Vendors need to have access to add, remove, and view the products they offer on the site.

**References**

Ingeno, J. (2018). *Software architect’s handbook: Become a successful software architect by implementing effective architecture concepts*. Retrieved from https://www.vitalsource.com/

Neill, C. J., Sangwan, R. S., & Kilicay-Ergin, N. H. (2017). A Prescriptive Approach to Quality-Focused System Architecture. IEEE Systems Journal, Systems Journal, IEEE, 11(4), 1994–2005. https://doi-org.proxy-library.ashford.edu/10.1109/JSYST.2015.2423259