MOST MEANINGFUL LEARNING OBJECTIVE

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Most Meaningful Objective

Learning Objective 4: Develop a project management plan based on measurable objectives. I will provide a formal (and stakeholder approved) document to be used for managing the execution of the project. The documents will define how the project is scheduled (see: WBS).

Related Activities

The activity used to meet this objective was the creation of a System Development Implementation Plan, or S-Dip.

S-Dip is a method for system development that modifies the four stages of the System Development Life Cycle (SDLC) -- Planning, Analysis, Design, and Implementation – to include a fifth stage for evaluation. Moreover, those five stages are incorporated into six documents that answers the questions: 1) How should I design my system (MOOC)? 2) How should I build it?

Each of the six documents that have or will be produced serve as final assessments for validating the accuracy of the activities used to create my online course and verify the build for each phase of my project. Present in each of the six documents is a review establishing traceability between the six phases of the project and continuity along the SDLC.

The first document/stage was the System Requirement Review (SRR). In this document I identified system stakeholders (Dr. Wimmer and I), listed the features/functions of the system, and used a Computer Software Configuration Item to support traceability (CSCI). After using a Statement of Work (SOW) to validate the requirements for developing my project proposal, I entered my second project phase known as the Preliminary Design Review (PDR). The SOW was used to create a work breakdown structure defining everything that needed to be accomplished throughout the project timeline. I broke down the features of every requirement to the lowest visible functions, updated the CSCI from the SRR to include priorities, and identified risks. The WBS, updated CSCI, and SOW all served as traceability.

The next document produced was the Critical Design Review. This stage compromised the designing and building of a Google Classroom prototype that would be developed for stakeholder feedback. At the very least the mockup and course documents will be approved using end-user feedback from surveys. Traceability to the previous two stages was provided in the form of screenshots from the perspective of future users of the course. It is during this stage of the project that I developed greater clarity about the details of Google Classroom and how my finished system will operate in the end.

Currently I am in the Test Readiness Review phase of the project. During this stage, test cases will be developed for each level of the course: unit overviews, quizzes, cap stone project, midterm, and final. What makes this stage so important is it serves as my last chance to make reversions to the system without significant delay in the schedule for finishing my senior project. A test plan with descriptions and reports will be produced for traceability.

After I complete the test readiness review, the last two stages of the S-Dip will be the System Specification Review and Implementation Readiness Review. The former evaluates the

MOOC and course website for measuring my commitment to resources listed in the project proposal and SOW, while the later develops plans for transition and implementation.

Lessons Learned

The key lesson learned from this objective was that as a project manager it is essential that I select the best method for supporting my system development process.

To understand what goes into designing and building a system, I had to start with a basic development lifecycle and provide examples of ways it could be applied to my MOOC. Next, I focused on the development cycle for my project from a system view – detailing the processes needed to support the core activities of planning, analysis, design, and implementation.

The tools that support processes are called methods. You have Waterfall which is a belief that each stage of the SDLC is rigid – once you move on to the next stage there is no going back. Another method is incremental – a evolution of the waterfall method that argues against completing the stages of SDLC across an entire system, but across the entire SDLC. Another method is Agile. The agile philosophy is iterative and incremental, it works well with projects that must be developed fast. If a project manager is looking for a method that is more fast paced than Agile, they can use Scrum. Scrum has three steps to it: 1) what have you done? 2) what should be accomplished next? 3) Is there anything holding you back from moving on to what needs to be completed next?

Given that this is a fast-paced senior project I supported the Scrum method. Each week after completing my weekly time log, I wrote down what I needed to complete over the next week. Furthermore, if there was something keeping me from moving forward, I made note of that also. For instance, I wanted to send out surveys to end users, however before I could do that I had to complete some overlooked steps, one of which was completing the course web shell.

Scrum turned out not to be the best practice. I should have selected Waterfall. Unlike Scrum the Waterfall method is a more disciplined approach. The requirements for the MOOC, its goals, objectives, and circumstances for completing my project remained stable. As such, Waterfall would have been much better. Moreover, Waterfall works well when the project manager has little experience (Hyman, 2015). Using a fast-paced method when you must learn at the same time doesn't work well. I made many mistakes along the way from not taking more time during planning. One big mistake was falling to develop interviews and user stories during the SRR stage.

Moment of Reflection

Many system development projects are unsuccessful (Hyman, 2015). As such it is recommended that project managers acquaint themselves with studies documenting past failures. I was taught that lesson in both WBIT 3111 (Information Technology Project Management) and WBIT 4112 (Systems Acquisition, Integration and Implementation). What

made my experience with this learning objective so impactful is that it went hand and hand with everything I had previously been taught in those two courses. For instance, in both courses I became familiar with R. Ryan Nelson and Steven McConnell. In 2005, Nelson produced work that created “retrospectives” for learning from past project management failures. In 2001, McConnell wrote about nine classic mistakes that project managers make during planning. If I wanted to understand the landscape of project management and what it takes to be successful, I should have familiarized myself with their works prior to taking on this assignment.

As I looked over the past works of Nelson and McConnell, I recognized many mistakes I made during my project proposal and the planning stage. Two mistakes I made during planning that McConnell talks about are “Failing to Account for All Project Activities” and “Planning in Too Much Detail Too Soon” (McConnell, 2001). I failed to account for user stories and surveys during the SRR, and I planned to create a course banner before understanding the Google Classroom interface. When I entered the Test Readiness Review stage, I had to stop and account for end-users before moving forward. It wasn’t until after I created a banner for my course that I realized Google Classroom doesn’t support the function the way I had initially planned.

The goal of the WebBSIT program is to prepare us for real world matters. This learning objective allowed me to do something that I couldn’t get from both WBIT 3111 and 4112, a step by step project that takes me through the stages of SDLC, while providing examples I can learn from and use in my future work.

Resources:

Hyman, H. (2015). *Systems Acquisition, Integration and Implementation for Engineers and IT Professionals* (2nd ed.). Retrieved from http://www.sentiapublishing.com/computer-science/systems-acquisition-integration-and-implementation-for-engineers-and-it-professionals-2nd-edition-dr-harvey-hyman-ebook/McConnell, S. (2001, September).

Nine Deadly Sins of Project Planning. Retrieved from https://stevemcconnell.com/articles/nine-deadly-sins-of-project-planning/