CYBER SECURITY MOOC

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Cyber Security: Fundamental Business Risk

Senior Project Section Y01 Fall 2018 CO

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# Midterm Term

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| Accomplishments for This Reporting Period (8/26-10/13) |
| System Review Requirements  Create a summary and overview for the system I’m designing.  Identification of the objectives and goals of the business process.   * Identified Features and Functions of Requirements * Assessment of Requirements Functionality   Consider alternative solutions for the system   * Identified possible upgrade. * Identified recommended course of action. * Identified elements of system that can reused. * Make or Buy Analysis  |  | | --- | | Requirements Gathering for the system: Stakeholders, Features, Functions, Priorities and created Traceability Matrix for requirements (CSCI) |  |  | | --- | | Identified Scope, Purpose, and Need and proposed system.  Identified potential expansion and upgrades.  Created WBS  Created Gannt Chart  Identified Tasks  Created Risk Analysis  Added Priorities to CSCI (see: Preliminary Design Review Documentation)  Drafted a mockup of proposed system design w/menu identified  Drafted Coursework: Unit 1 Overview, Unit 2 Overview, Unit 3 Overview, Unit 4 Overview. Quiz 1, Quiz 2, Quiz 3, Quiz 4, Quiz 5, Quiz 6, Quiz 7, Quiz 8, Quiz 9, Quiz 10, Quiz 11, Quiz 12, Quiz 13.  Converted coursework drafts into forms for quizzes.  Uploaded coursework  Created organized modules.  Begin drafting Test Readiness Review  Quality Management Plan  Quality Assurance Processes  Quality Control Processes  Quality Measurement and Reporting  **Accomplishments Planned but Not Completed This Reporting Period:** |   Software Test Plan  Software Test Description  Software Test Report  Bug Tracking  **Root Cause of Variances**: Original Project schedule skipped many steps and was disorganized. I should already be working on the Test Readiness Review; however, I am a week behind. PROJECT PERFORMANCE REPORT SECTION 1  | **Impact to Upcoming Milestones or Project Due Date**: pushed the schedule back one week. | | --- |   **Planned Corrective or Preventive Action**: Project is still on course to be completed. My preventive action is to schedule more time to work on the project. I have cleared my weekend and scheduled more time during the week to work on my project to get it back on the original schedule. Doing so will for up one week for review and correction of any missed steps.  **Root Cause of Variances**: must reschedule Test Readiness Review and provide user survey’s for feedback.  **Summary of Upcoming Tasks**  Software Test Plan  Software Test Description  User Stories  Software Test Report  Bug Tracking  Quality Management Plan  Quality Assurance Processes  Quality Control Processes  Quality Measurement and Reporting  Hardware/Software Requirements  Communication Resources  Design/Build Constraints  Risk/Criticalities  Contingency Plan  Factors of Acceptance  User Manuals  Maintenance Plan  Installation Plan  Transition Plan  Training Plan  Evaluation Plan PROJECT PERFORMANCE REPORT SECTION 2 **Planned Corrective or Preventive Action**  I created a preventative maintenance schedule  **Accomplishments Planned for Next Reporting Period**  Completed Test Readiness Review Tasks  Completed Specification Readiness Review Tasks  Complete Implementation Readiness Review Tasks  Final Review with primary stakeholder PROJECT PERFORMANCE REPORT SECTION 3  | New Risks Identified | | --- | | Risk | | Insufficient Time for Stakeholders to Submit Feedback  Mobile compatibility issues with web shell design  Quiz form marking correct answers incorrect |   **Issues**   |  | | --- | | Issue | | **My original scope may have been to wide. The course will require more expansions and upgrades than originally planned.** |   **Comments**   |  | | --- | | **The project has been more challenging than I expected. Going in I expected creating the coursework to represent the most time-consuming activity – it wasn’t.**  **The Preliminary Design Review was by far the most challenging. Putting together a schedule and an outline for the work breakdown presented a challenge because when I put together my proposal, I mistakenly planned it backwards.**  **I wrote in my project proposal that I would have to course content designed by the end of September. The problem I ran into is I skipped many steps. Without the System Requirements Review It couldn’t be properly designed. First, I had to list the requirements. After that I had to breakdown the feature and function of every requirement.**  **The next stage was the preliminary design review, in that phase I had create a new schedule for the project – WBS and Gantt Chart included – and study Google Classroom to identify any obvious risks. Furthermore, I had to update my CSCI from the System Requirements Review to include priorities.**  **Currently, I’m back on schedule. The next month has my complete the second half on the project which consists of the Test Readiness Review, Software Specification Review, and Implementation Readiness Review** | |

# Final Report | Section Half of Project

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| Accomplishments for This Reporting Period (10/14-11/25) |
| For the second half of the project I had to pick up where I left off in the first half. While the quizzes had been created, they weren’t programmed yet. I had to go ack through each quiz and program the correct answers in. Furthermore, I had to add points to the quizzes, and change the settings for each.      After completing all the backend functions for the quizzes, I created additional coursework. The additional coursework was 14 more quizzes for expanding what students learn in the course. Once again, I had to create a quiz using Google Docs, convert the DOCS to forms, programs the answers, and finally, add them to the classroom.  **Completed the Test Readiness Review**  Software Test Plan    Software Test Plan  Software Test Description  Software Test Report -- the software test report involved my checking every aspect of the Google classroom and the course website. I had to make certain that every part of the course worked the way it should. For instance, do the quiz provide the correct answer. Or, do the quiz form integrate correctly with the classroom. I had to read through every document, making certain there weren’t any errors.    C:\Users\terre\Pictures\qz.JPG  Bug Tracking  Quality Management Plan -- this plan was used for identifying the goals and objectives of QA-QC  Quality Assurance Processes  Quality Control Processes    Quality Measurement and Reporting  **Completed Software Specification Review**  Hardware/Software Requirements  Communication Resources  Design/Build Constraints  Risk/Criticalities  Contingency Plan  Factors of Acceptance      **Created Implementation Review**  Maintenance Plan  Installation Plan  Transition Plan  Training Plan  Evaluation Plan    Google Classroom User Manual -- I created two user manuals. Both are for the primary stakeholder (Dr. Hayden). The first explains how to operate the Google classroom. The technical document explains how to create modules, rearrange the course, create quizzes, and how to add students to the course.    Web Shell User Manual -- the second manual explains how to operate the web shell. The document provides the login method for accessing the we shell via GitHub.    Finished the course website.    I create and added a technical document called “PRIVACY, TERMS, AND COOKIES” -- [click here](https://cybersecuritymooc.github.io/pages/policy.html) to view the live webpage.  I added a contact form and email to the course website using the free service. When users request access to the course, a email with the student link “request” will be sent to the [moocsignup@gmail.com](mailto:moocsignup@gmail.com)      Created a verified certificate.    Create an end of course survey form    Created a course banner using photoshop    Created the Cap Stone Project. The Cap Stone Project serves as a bonus course. Students who complete the project will end up designing their own. I created a web shell template for them to use. Student will not need any prior experience in we design.      Moreover, I created the technical documentation to assist students. The document explains how to add their completed work to the web shell and explains how to host their website for free.     |  | | --- | |  |  |  | | --- | | **Accomplishments Planned but Not Completed This Reporting Period:**  The surveys had to reassigned to a different goal. Initially, I planned to use them during the Test Readiness Review. However, after reading up on Human Computer Interaction, I realized that I should just add it to the end of the course. Students will be able to provide feedback after completing the course describing how it can be improved. |   **Root Cause of Variances**:  The root cause of the above variance goes back to mistakes I made planning the course. I failed to take into account that I should have completed interviews and user stories during the System Readiness Review. Those user stores could have been used to develop use cases representing system levels. I could have than tested the functionality from the viewpoint of end-users through the use of surveys. PROJECT PERFORMANCE REPORT SECTION 4  |  | | --- |   **Planned Corrective or Preventive Action**:  While this is only a senior project, I plan on working with Dr. Hayden in the future to redesign the course. I will once again use the System Development Core process for updating the course.  **Root Cause of Variances**: PROJECT PERFORMANCE REPORT SECTION 5  | New Risks Identified | | --- | | Risk | | Course will not be integrated into Dr. Hayden’s future coursework. To fix this issue I should update the course by redesigning it. This will require me to create another project proposal and correct past actions. |   **Issues**   |  | | --- | | Issue | | **Users must you a Google email address to access the course.** |   **Final Comments**   |  | | --- | | **This project focuses specially on creating a Cyber Security Massive Open Online Course using the System Development Core Model. There are three main phases -- acquisition, integration, and implementation.**  **Putting the entire project together I used a model called S-Dip which I learned taking the WBIT course System Acquisition. The previously mentioned three phases are incorporated into six stages:**   * **System Requirement Review** * **Preliminary Design Review** * **Critical Design Review** * **Test Readiness Review** * **System Specification Review** * **Implementation Readiness Review**   **The System Requirement Review is where I identified system stakeholders -- Dr. Hayden and Terrence Donerson are primary stakeholders, while future learners are secondary stakeholders. In this stage I listed the features and functions and provided traceability. Traceability is used to provide a smooth transition between future stages and documents.**  **During the Preliminary Design Review (PDR), I created a statement of work, a work breakdown structure, a Gantt chart, a course outline. The primary goal in this phase was scheduling and task assignment**  **During the Critical Design Review, I verified the PDR and create course prototypes.**  **During the Test Readiness Review I reviewed the create course from top to bottom, making certain that every feature and function of the course matched the system proposal and operated correctly.**  **During the System Specification Review I made a create documentation of the physical and logical components of the system. It was during this phase that I identified and allocated the hardware, software, communication links (provided by Gmail) and operating system that were used for creating the course.**  **During Implementation Readiness Review I created documentation explaining how I installed the course. I.e. how I uploaded materials and scheduled the course. I even added an extra stage called evaluation where I measure the success of my Implementation Readiness Review.**  **After completing my S-Dip, I took some time to reflect on mistakes I made while creating this course. I should have taken the consideration of end-users into consideration while completing the System Requirements Review. Furthermore, I should have involved the primary stakeholder (Dr. Hayden) in more activity. Having the full support of primary stakeholders is essential to creating a successful course. Without it, the project is more likely to fail or not be fully accepted. Dr. Hayden mentioned that he might integrate this course into future coursework, I should gotten a more detailed account of what his expectations were prior to designing the course.** | |
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