

Cyber Security MOOC

Internship or Individual Project: Individual Project

Project Title: Cyber Security: Fundamental Business Risk

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Project Purpose

The purpose of this project is for applying the skills and knowledge from previous taken WebBSIT courses. Courses highlighted in this project development include:

- Systems Acquisition, Integration and Implementation
- Web Application Development
- Introduction to E-Commerce
- Introduction to Multimedia
- Technical Communication

Through applying the skills and knowledge from the listed courses, I will create a system (Cyber Security MOOC) designed to demonstrate my proficiency in multiple areas of Information Technology.

The System Being Created

What is the purpose of this system? The purpose of this system is to produce an educational product for students interested in learning about the fundamental Business Risk that is Cyber Security.

What does this system do? Streamline the process of sharing files between the instructor and the students.

How does it help is produce our product? The system provides learning modules containing coursework, discussions, and exams to meet the course learning objectives.

Does the system make money? The system offers a freemium business model. The course content is free; however, students can purchase a verified course completion certificate upon passing the course.

Does it support our customers? Yes, end-users will be identified, and user cases will be created.

Why does this system exist? To provide an open course that gives unlimited access to course learning materials.

Why am I building this system? The price of higher education is expensive. This system and others like it aim to provide competitive coursework at a free or reduced price.

What is being accomplished by creating this system? Provide an alternative to both traditional and online courses.

Project Description:

This is an individual student project for creating a Massive Online Open Course. The subject matter covered in the coursework is cyber security.

To host the materials for the course I will utilize Google's open online education- <https://edu.google.com/openonline/index.html>

The course (like the online courses taken at GSU) will have different modules. For each module assigned reading materials, assignments, exams, and discussion topics will be provided.

To design the course materials (and syllabus), I will take the lessons learned in Technical Communication and apply them to each document. where necessary.

In addition, there will be a final project on teaching students to design their own Cyder Security course. I will provide a website shell for the project.

Finally, I will design a course completion certificate.

Additional Project Information:

Is this system manual or automated? Manual

Assumptions and Risks:

Assumptions:

- Google Online Open Course is functioning correctly.
- Stakeholder requirements remain consistent.
- Milestone due date are meet.

Risks

Risk Category	Risk Description	Probability	Impact	Mitigation Strategy	Contingency
Project Management Risk	Scope creep such as additional functionalities not previously discussed.	Medium	Medium	<ul style="list-style-type: none"> • Verify with stakeholder final design in what they envision before development 	Add contract clause which enforces scope; plan for future growth
Technical Risk	Google Online Open Course is down.	Low	High	<ul style="list-style-type: none"> • Develop code similar to platform standards 	Use code that is organized and easy to follow in case of changes.
Organization Risk	Stakeholders requirements change.	Low	Low	<ul style="list-style-type: none"> • Begin a new project with a new scope 	Design module to be able to be

					expanded for future growth
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Work location: Remote

High-Level Requirements:

- Code with modern HTML5 tags to create web page structure.
- Designing page layout through relative positioning with CSS.
- Implementation of JavaScript to help develop interactive web app.
- Implement infrastructure for eCommerce in the form of PayPal.
- Banner Design
- Technical Communication
 - Syllabus
 - Final Project
 - Assignments
 - Exams
 - Quizzes
 - Mid-point
- Course Design
 - Modules
 - Discussion Boards
- System Review Requirement.
 - Business Process Summary
 - Identify objectives and goals
 - Consider alternatives
 - Proposed system identification
- Preliminary Design Review
 - Scope
 - WBS
 - Risk Analysis
- Critical Design Review
 - Inform stakeholder (Dr. W) of system mock up
- Test Readiness Review
 - Software Test Plan
 - Quality
 - Quality Assurance
 - Quality Control
- Software Specification Review
 - Requirements review
 - Contingency Plan
- Implementation Readiness Review
 - Planning
 - Maintenance Plan
 - Installation Plan
 - Transition Plan
 - Training Plan

- Evaluation Plan

Learning Objectives:

Will apply skills and knowledge from previous WebBSIT courses to design and implement a new system.

Learning Objective 1: Demonstrate proficiency in the foundation areas of Information Technology

I must demonstrate proficiency in all the previously mentioned courses found in the Project Purpose section. Proficiency will be demonstrated as follows:

- Systems Acquisition, Integration and Implementation (**Fundamentals for creating my MOOC system and providing necessary documentation**)
- Web Application Development (**Creating Website Shell**)
- Introduction to E-Commerce (**Optional Electronic Payment System for Certificate**)
- Introduction to Multimedia (**Cyber Security Graphic Design**)
- Technical Communication (i.e. **Understand audience and purpose while drafting documents for my MOOC coursework and course documents.**)

Learning Objective 2: Gain an overview of the cybersecurity landscape.

I will define and use key terms and concepts in the field of cybersecurity. Additionally, I will identify and distinguish threat actors and their motivations.

Learning Objective 3: Communicate about technical or specialized topics.

I will design documents that inform or instruct the end-users about the topic of cyber security. The documentation must be clear, concise, and meet project requirements. Through using technology, such as web page modules, I will provide instructions about how to design a course, regardless of how technical the task is or even if technology is used to create or distribute that communication.

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.

Learning Objective 5: Validate an understanding of the impact of eCommerce on my course business model and strategy.

As an option for completing the course I will offer a verified certification for a small fee. This model (freemium) is based on giving away some service for free to 99% of the customers, while relying on the other 1% of customers to pay for the verified certificate. For my system this model makes sense because of my low marginal cost (which is zero) to support those who choose to take my course.

Learning Objective 6: Explore all the different steps that go into planning and building an online course.

After completing this project, I will have learned how to create course modules that are interactive, engaging, and accessible. Furthermore, I will understand what goes into creating a finished course.

Tentative Summary Schedule of Milestones

Summary Milestones	Due Date
Front-End Web Development & Banner Design	8/30/18
Course Documents	9/8/18
SSR	9/18/18
PDR	9/28/18
CDR	10/10/18
TRR	10/20/18
SSR	11/1/18
IRR	11/14/18
MOOC Completion	11/15/18