

Week 2

Applicable VLOs or EEs for This Week's Case Study

1. Evaluate system requirements and implement multi-tiered (client, server, and database) web applications to meet client requirements.
2. Design, model, implement, maintain, and query databases using an enterprise-level relational database management system (DBMS) to satisfy end-user specifications.
3. Deploy software applications for devices using multiple operating systems.
4. Evaluate and integrate security features into the client and database application tiers to secure against system threats.
5. Integrate software applications for teams to collaborate and control the outcomes of a project.

EES 1.1 Communicate clearly, concisely, and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience. (T, A,)

EES 2.3 Execute mathematical operations accurately. (T, A,)

EES 3.4 Apply a systematic approach to solve problems. (T, A,)

EES 6.10 Manage the use of time and other resources to complete projects. (T, A,)

This Week's Detailed Case Study Information

Dot.Com has been hired by Safe Food Handling Canada to take their award-winning curriculum and to develop an online software platform that educates Canadians on their curriculum. The platform they are looking to use will be delivered on Mobile devices and must integrate interactive video lessons, assessment, and grading systems and provide a robust user experience.

Your first day on the job has you meet your supervisor, Mr. Steven Strong, who has been with the company since the first day the company came into existence. Steven was best friends with the founders; however, he didn't have any money to invest in shares in the company when it first launched. Many in the company believe that Steven resents the founders' success, believing that they should have done more to include him in the company.

Regardless, Steven seems fairly pleasant and very focused on the client's needs:

"Our client wants an engaging platform that they can use to sell their curriculum online and through mobile devices. Safe food handling has been a course offered to Canadians who wish to be certified to prove they understand the dangers involved in working in Canada's kitchens. We will build their

Program Name: COMPUTER SOFTWARE AND APPLICATION DEVELOPMENT

Project Code: CSAC

program from the ground up over the coming weeks. You will not use any third-party platforms; we can build this ourselves," Steven says.

The increase in online platforms that provide a cut-and-paste design style has grown significantly. Websites such as Wordpress.com, passion.io, and more have disrupted the industry by enabling anyone to develop a mobile application; however, these platforms have significant limits and offer little protection for consumer data.

Steven suggests that you use this week to get set up. Your team will make all major decisions for the development. Still, he would prefer you to use a program such as GitHub to monitor your programming efforts and to be able to work together on the development of this project for your client.

The client has provided the following criteria for this project:

- Must be available on all platforms, specifically having the ability to use on iOS and Android smartphones
- Must store user data in a central location that is secure from hackers
- User data must connect to the course structure to be able to assess the users progress - it is important that the platform provide assessment opportunities as students will require to meet certain criteria to move be certified
- The user experience is paramount to the success of the project
- Video's and images must be housed within the program database and cannot be stored on third-party platforms such as Vimeo or YouTube
- There must be functions for the user to create a profile, set and reset their passwords
- The program must integrate with Stripe for payment for the curriculum
- Bonus - users can interact within a chat function or message board
- Bonus - user-generated content can be shared

Steven will guide the development of this program over the coming weeks. Your team will need to start by researching the tools you will need to install and download to create the program. Setting yourself up for success is crucial. Spend this week setting up for success by establishing internal processes that can be followed, allowing each of you to work together on the coming week's developments. Download and install any software you feel is necessary to build this program. Get ready because Steven has high expectations of you.

WIL PROJECT

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DEVELOPMENT

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Deliverables for This Week's Case Study

Your tasks this week include:

- Research various programs you will need to develop a program that meets the client's needs
- You will need to work together through development each week so be sure to use a program such as GitHub to save your repositories
- Establish internal development protocols so that you can follow proper development and documentation procedures
- Each week during your time with the WIL Project you will be required to make certain assumptions to complete your work. Be prepared to defend your assumptions to your supervisor