

# CEGEP VANIER COLLEGE

## CENTRE FOR CONTINUING EDUCATION

### Cybersecurity

#### 420- 950-VA

Teacher: Samir Chebbine

Project Guideline

Feb 05, 2025

#### Cybersecurity Web App Project

You will execute all phases of System Development Life Cycle SDLC phases individually to implement a secure Web application project of your own choice. The system to be implemented must include elements of cybersecurity. You will plan, analyze, design and implement a system accessing a given database. You must hand in all the following deliverable documents at regular intervals at the end of every progress stage:

- Implementing secure HTTP communication on port 443, you need to enable HTTPS (Hypertext Transfer Protocol Secure) on your web server by creating an SSL certificate (as done in class) to use port 443, essentially encrypting data transmitted between your website and users' browsers.
- Using SQL database with certain vulnerabilities (SQL injection,) and show version of your application where you have taken security measures to fix them
- Include Login process where passwords are stored in database in secure hashed format.
- Implement two steps authentication validation (sending code to mobile phone or email)
- All Server-side business processes must use secure HTTP communication on port 443 to encrypt data transmitted between your website and users' browsers.
- Include discussion of a given cybersecurity topic and tool of your own choice.
- Provide Deliverable Documents as stated in System analysis Agile Method.

#### **Project presentation:**

A demo must be given and a 10-minute presentation to the class at regular intervals at the end of every progress covering the project's main functionality and any interesting things you learned during its development. The project progress is due on given dates according to the plan stated below.

#### **1. Project State of Progress to submit Feb 19, 2025, Mar 12, 2025 and Apr 02, 2025**

Send appropriate **Deliverable Documents** related to your project, appropriate screen shots, and implementation code for each deliverable.

- Deliverable I on **(Feb 19, 2025)** to be uploaded on Omnivox. (30% of Project to be delivered applying first round of all phases SDLC agile method)
- Deliverable II on **(Mar 12, 2025)** to be uploaded on Omnivox. (30% of Project applying second round of SDLC agile method)
- These are preliminary steps toward the Project final submission due on **Apr 02, 2025**. (Last round of SDLC agile method 20% of Project)