## BEFORE RUNNING THE APPLICATION...

In order to run the application, you MUST FIRST install the software requirements. In doing so, follow the steps indicated under the succeeding subsections.

#### The prerequisites

- Before anything else, make sure that you have the following:
  - Mkcert
    - Click this link to install Chocolatev
    - Run **choco install mkcert** on the terminal as an administrator
    - Follow up with this command: mkcert -install
  - Git and GitHub Desktop
    - This will be used in cloning the repository. As for its installation, kindly follow these:
      - For Git: Open this & Download
      - For GitHub Desktop: Open this
  - o Python
    - You may download the package in this <u>link</u> and follow the installation instructions via this guide.
  - Visual Studio Code
    - Because of its flexibility, it is recommended to use Visual Studio Code as the IDE for the project.
  - Devices for testing
    - Desktop with Google Chrome (Windows)
  - MySQL Workbench
    - You may download this in this <u>link</u> and follow the installation instructions

### Clone the GitHub repository

- Use the repository's URL for cloning:
  - o https://github.com/Kirito1456/SECWB
- Clone the repository via:
  - GitHub Desktop
    - Open GitHub Desktop
    - Click on 'File' -> 'Clone Repository'
    - Click the tab indicating 'URL'
    - Paste the URL on the first input field and select the path where you want to store the clone repository.

Creating Django Python Environment and Installing Django packages and dependencies

- While inside the folder, together with the project directory, open a terminal.
- Type and enter this command: py -m venv <name of env>
  - This will create a django environment
- Next, use this command <name of env>\scripts\activate to activate the environment
- Navigate inside the project folder where requirements.txt is located
  - Use the command: cd <path to folder>
- Install all dependencies using this command:
  - o pip install -r requirements.txt
    - This command will fetch and download the packages and dependencies. Take note that this step is crucial as most components of the system rely on these.

## **Creating Database Schema in MySQL Workbench**

- Launch MySQL Workbench on your computer.
- Connect to the Database Server:
  - In the MySQL Workbench main window, click on the database server connection you want to use or create a new connection if you haven't done so already.
- Navigate to the menu and select Server > Data Import.
- In the "Data Import/Restore" dialog, select the option "Import from Self-Contained File".
  - Click on the ... button to browse and select your .sql file containing the schema.
- Click on the "Start Import" button to begin the import process.
  - Once the import is complete, you should see a confirmation message indicating that the import was successful.
- To Verify the Imported Schema
  - Go back to the "Schemas" tab on the left pane.
  - Right-click on the schemas area and select "Refresh All" to refresh the list of schemas.
  - Expand the database schema you imported to verify that all tables and other objects have been imported correctly.

#### **Connect Database in the Source Code**

- Open Visual Studio Code and Open the folder containing the source code
- Navigate inside the project folder settings.py is located
- Open settings.py and scroll down under DATABASES
- Configure your mysql workbench database credentials

# HOW TO RUN THE APPLICATION...

### **Running the Application on HTTP**

- While running the django environment, navigate inside the project folder where the **manage.py** is located
- Type and run this command:
  - o python manage.py makemigrations
  - o python manage.py migrate
    - These commands will make sure that all necessary migrations are completed to run the application
  - o python manage.py createsuperuser
    - This command is for creating the admin user
  - Use this command to run the application: python manage.py runserver
- Open a web browser and go to http://127.0.0.1:8000/ to view the application.

#### **Running the Application on HTTPS**

- While running the django environment, navigate inside the project folder where the **manage.py** is located
- Generate your own certificate with this command:
  - o mkcert -cert-file cert.pem -key-file key.pem localhost 127.0.0.1
- Type and run this command:
  - o python manage.py makemigrations
  - o python manage.py migrate
    - These commands will make sure that all necessary migrations are completed to run the application
  - o python manage.py createsuperuser
    - This command is for creating the admin user
  - python manage.py runserver\_plus --cert-file cert.pem --key-file key.pem
    --insecure
    - Use this command to run the application
- Open a web browser and go to https://127.0.0.1:8000/ to view the application.

You're all set!