Islander Cyber Society CTF (I-CTF) Installation Guide

Overview

This guide will walk you through the installation process for the Islander Cyber Society's Capture The Flag (I-CTF) training application. The I-CTF platform is designed to be modular and accessible to college students of all skill levels, providing cybersecurity challenges in a structured learning environment.

Prerequisites

- A Windows computer (only current OS code has been tested on)
- Internet connection (for setup only)
- Basic familiarity with computers

Step 1: Download the I-CTF Code

- 1. Navigate to https://github.com/mtomme/ICS-CTF
- Click the green "Code" button and select "Download ZIP"
- 3. Once downloaded, extract the ZIP file to a location of your choice (e.g., Documents folder)
- 4. Make note of where you extracted the files as you'll need this location later

Step 2: Install Visual Studio Code

- 1. Go to https://code.visualstudio.com/
- Download the appropriate version for your operating system
- 3. Run the installer and follow the on-screen instructions
- 4. Launch Visual Studio Code once installation is complete

Step 3: Install Python 3.12

For Windows:

- 1. Open the Microsoft Store
- 2. Search for "Python 3.12"
- 3. Select "Python 3.12" from the results
- 4. Click "Get" or "Install" to download and install Python 3.12

Step 4: Open the I-CTF Project in Visual Studio Code

- 1. Open Visual Studio Code
- Click on "File" → "Open Folder"
- 3. Navigate to the location where you extracted the I-CTF code
- 4. Select the folder and click "Open"

Step 5: Install Required Dependencies

- 1. In Visual Studio Code, open the Terminal by clicking on "Terminal" → "New Terminal"
- 2. In the terminal, type the following command and press Enter: *pip install PyQt5*
- 3. Wait for the installation to complete (this may take a few seconds)

Step 6: Configure Python Interpreter (if needed)

If you encounter issues with Python or pip commands, you may need to select the correct Python interpreter:

- 1. Press Ctrl+Shift+P to open the command palette
- Type "Python: Select Interpreter" and select it from the dropdown
- 3. Choose the Microsoft Store Python 3.12 option (it should show the Microsoft Store version 3.12.x if you installed from there)

Step 7: Launch the Application

- 1. In the VS Code Explorer (left sidebar), find and open the main.py file
- 2. Click the "Run" button (triangle icon) in the top right of the editor, or right-click in the editor and select "Run Python File in Terminal" or press f5 while main.py is selected
- The I-CTF application should launch with a main window

Step 8: Configure the CTF Directory

- 1. When the application launches for the first time, you'll see a relatively blank screen
- 2. Go to "File" → "Add New CTF Directory"
- 3. Navigate to the I-CTF folder you downloaded and extracted from GitHub
- 4. Select the folder and click "Open"
- 5. You'll be prompted to accept and refresh the application
- 6. After refreshing, you should see modules appear on the main menu
- 7. Whenever the code is relaunched it will load up blank and will require the user to refresh the page in the same way step 7 required to be ready to use

Troubleshooting

Python installation issues:

Ensure you've installed Python 3.12 correctly and through the microsoft store

PyQt5 installation issues:

- If pip install PyQt5 fails, try: python -m pip install PyQt5
- If pip is not working make sure that the microsoft python version is selected as your interpreter first before trying again

Application doesn't launch:

- Try launching a second time and see if the issue persists
- Check the terminal for error messages
- Ensure all required files were downloaded correctly
- Verify you've selected the correct Python interpreter

Additional Information

- To reset your progress: Go to the "Edit" tab and select "Reset Progress"
- To check progress and accuracy: Go to the "Progress" tab

System Requirements

- Operating System: Windows 10/11
- RAM: 4GB minimum (8GB recommended)
- Disk Space: 50MB for application and dependencies
- Python 3.12 or newer

Support

If you encounter any issues during installation or while using the application, please report them at the <u>GitHub repository</u> or in the Islander Cyber Society Discord!

Enjoy Learning!

The Islander Cyber Society welcomes you to the world of cybersecurity training. Have fun exploring the different modules and challenges!