

Practice Assignment 2

Building a Device Management Software

Requirement: Apply your knowledge of coding structure and Clean Code principles to build a **device management software** using .NET Core MVC with the following functionalities:

Main Features:

1. Device Category Management:

- Add, edit, delete device categories (e.g., Computer, Printer, Phone...).
- Display a list of device categories.

2. Device Management:

- Add, edit, delete devices.
- Each device must have the following information:
 - Device name
 - Device code
 - Device category
 - Status (In use, Broken, Under maintenance)
 - Date of entry
- Display a list of devices by category.

3. User Management:

- Add, edit, delete users (including employees who use devices).
- User information includes: Full name, email, phone number.

4. Search and Filter Data:

- Search devices by name or device code.
- Filter the device list by status or category.

Expected Outcomes:

- **UI Design:** Create a simple, user-friendly interface.
- **Validation:** Implement input validation when adding/editing devices and users.
- **Coding Standards:** Ensure that the code follows the coding structure and conventions learned in class, including proper naming conventions, code formatting, and separation of concerns.
- **Clean Code:** Apply Clean Code principles to make the code easy to read and maintain.
- **Report:** After completing the assignment, students must prepare a brief report (1-2 pages) describing the project structure, created classes, and how each feature was implemented.
- **Source Code:** Submit the source code in two ways: on Moodle and via a public GitHub link

Guidelines:

- .Net Core MVC slides: [Part 1](#), [Part 2](#)
- .Net Core MVC documentation from Microsoft: [Click here](#)