Writing Professional Code

Modality: On Demand

Duration: 16 Hours

About this course

Programmers start their careers by learning how to code in a way that accomplishes the goal of their application but working as a professional coder requires them to code in a way that is in synergy with the rest of the organization. This course by Andrew Byrne, a coding expert, readies programmers to work in an environment where they work in tandem with an organization to create major applications with real world impact.

The course teaches coders the world of programming beyond writing your own code – it focuses on how professional developers need to manage changes, maintain databases, ensure quality control, and understand the methods than ensure data security. Students upload their code to GitHub portfolios and get feedback in the form of discussions as well as code reviews.

Taking this course will allow coders to understand real-world coding requirements and learn the skills and strategies professionals use. This includes updating code written by other people, making code readable and editable by others, using Git or other version control systems, and using OSS (Open Source Software) libraries.

Course Objective:

The objective of this course is to help coders learn how to:

- Work with professionally maintained code in version controls systems like Git
- Write readable code and using refactoring, documentation, naming conventions, and code comments
- Add to a current code base
- Be confident in their code through unit tests
- Receive and give constructive feedback in peer reviews
- Become a contributor to OSS (Open-Source Software) projects and repositories on GitHub
- Write code that is secure and ensures data privacy for users

Audience:

- Professional Developer

Prerequisite:

- Working knowledge of coding in C# is required

Course Outline:

Module 1 | Elements of Professional Code

- Introduction
- Setup
- Source Control with Git and GitHub
- Write it up with Markdown
- Module Assessment

Module 2 | Communicate With Code

- Introduction
- Consistency and Naming
- Code Refactoring
- Clean up Variables and Strings
- Simplify
- Final Updates

Module 3 | Code Confidently With Unit Tests

- Introduction
- Write Unit Tests with Xunit
- Make Your Codebase Testable

Module 4 | Final Exam

- Final Exam??