

INTRODUCTION TO PROGRAMMING FOR WEB DEVELOPMENT

COURSE 4

Collaboration and Version Control with GitHub

This course is one in a series of six from A&D Tutoring that, taken together, are designed to give students having *no prior experience of modern computer programming or Web technologies* the threshold knowledge and skills needed to succeed at advanced formal training in software and Web development. The first three courses in the series develop a core of computer programming (using the Python and JavaScript languages) and Web coding (using HTML, CSS, and JavaScript), which this and the two remaining courses build upon.

Description

[GitHub.com](https://github.com) is an internet hosting service that caters specifically to software developers. It uses its own, custom-made software (called Git) to store, share, solicit feature requests, fix bugs, and track changes in programs at all stages of completion for individual and team projects of every description. The site is the world's largest host of source code, with over 200 million repositories in more than 80 million developer accounts. In this course, you will become familiar with version control practices in software development by using Git and GitHub in projects with Python, HTML, CSS, and JavaScript. Duration is 40 hours of instructor contact time.

Upon successful completion of this course, you will be able to:

- execute Git commands in shells and through browsers on GitHub.com;
- create, publish, update, share, delete, and otherwise manipulate code repositories through the GitHub Desktop app and/or shells and/or Visual Studio Code;
- publish and maintain a website using GitHub Pages;
- contribute to open-source software projects, or start your own;
- use GitHub.com in the development of a shared or collaborative Python project;
- use GitHub.com in the development of a shared or collaborative webpage (HTML+CSS+JavaScript) project.

Prerequisites

- Courses 1, 2, and 3 of this series, or comparable prior experience in programming with Python (or a similar language) and coding for the Web with HTML, CSS, and JavaScript.
- All-round familiarity with the Microsoft Windows operating system, command-line interfaces (e.g., PowerShell or Command Prompt), basic text editors, and Visual Studio Code.