

**Building Web Apps with HTMX**

**Course Number:** HTMX-100
**Duration:** 3 days

**Overview**

HTMX is a web technology that allows developers to access the power of modern web frameworks without writing JavaScript. HTMX uses HTML attributes and tags to add interactivity, lazy loading, web sockets, and more to web pages.

This HTMX course teaches attendees how to create rich and responsive web applications with HTMX. Students learn how to code HTMX and use it with their preferred web backend programming language. We can customize this course to use almost any language and framework, including:

* Python & Flask
* Python & Django
* C# & ASP.NET MVC
* JavaScript/TypeScript & Express
* Rust & Axum
* PHP & Laravel
* Go & templ
* Java & Spring Web

**Prerequisites**

All students must have the selected web backend programming language (Python, Rust, Go, C#, PHP, etc.) experience. Knowledge of HTML and CSS is helpful but not required. While HTMX helps programmers avoid JavaScript, knowledge of JavaScript is needed if optional custom JavaScript topics are included.

**Materials**

All HTMX training students receive comprehensive courseware covering all topics in the course. Courseware is distributed via GitHub in the form of documentation and extensive code samples.

**Software Needed on Each Student PC**

Students need a free, personal GitHub account to access the courseware and permission to install their backend programming language and Visual Studio Code on their computers. They also need permission to install packages for their backend programming language and Visual Studio Code Extensions. If students cannot configure a local environment, a cloud-based environment can be provided.

**Objectives**

* Understand the principles and benefits of HTMX
* Review HTML and CSS as needed throughout the course
* Apply a CSS framework such as Tailwind or Bootstrap to an HTMX application
* Use HTMX attributes and tags to enhance HTML
* Explore the HTMX extensions and plugins for common web features
* Implement common web functionalities such as AJAX and Forms
* Build a web application with HTMX and a selected backend framework
* Extend HTMX with custom JavaScript (optional)

**Outline**

* Introduction to HTMX
	+ What is HTMX and why use it?
	+ How HTMX works under the hood
	+ Setting up HTMX in your web project
	+ HTMX and the backend web application
* Building a Web Application with HTMX
	+ Choosing a backend framework that supports HTMX
	+ Designing a web application with HTMX in mind
	+ Implementing the frontend and backend logic with HTMX
	+ Testing and deploying the web application
* HTML
	+ Semantic Language of the Web
	+ Structure and Content of Web Pages
	+ Tag Syntax
	+ Versions and Standards