Build Applications with Cloudflare

Duration

3 days

Description

The Build Applications with Cloudflare training course is designed for computer programming professionals who wish to master building applications with Cloudflare. Participants will learn about various Cloudflare services that support application development and how to use Cloudflare's web-based management tools. The curriculum delves into managing application services such as domain registration, cloud storage, and email routing. It also provides hands-on experience in deploying serverless applications, hosting static websites, and utilizing workers to run code in the cloud. The course concludes with an exploration of Web3 technology through Cloudflare, preparing learners for the future of decentralized web applications.

Objectives

- Explore how to build applications with Cloudflare
- Learn about various Cloudflare services that support application development
- Use Cloudflare web-based management tools
- Manage application services such as domain registration, cloud storage, and email routing
- Deploy serverless applications
- Host static websites
- Utilize workers to run code in the cloud
- Employ Web3 technology through Cloudflare

Prerequisites

Students must have JavaScript/TypeScript programming experience. While Cloudflare supports other languages, the course uses Node.js and JavaScript/TypeScript.

Training Materials

All students receive comprehensive courseware covering all topics in the course. Students will access the courseware through GitHub. The courseware is a collection of documents and extensive code samples. Students practice the topics covered through challenging hands-on lab exercises.

Software Requirements

Students will need a free, personal GitHub account to access the courseware. Students will need a computer with a modern web browser, Visual Studio Code, and Node.js installed.

Outline

- Introduction
    - What is Cloudflare?
- Domain Registration
    - What are Domain Registration and Domain Registration Services?
    - Benefits of Cloudflare Registration
    - Manage Domain Names
    - Purchase a Domain Name
    - Transfer a Domain Name
- Serverless Applications
    - Workers
    - Email Routing
- Management Tools
    - Cloudflare Dashboard
    - Wrangler CLI
- Workers
    - What are Workers?
    - Workers Pricing Model
    - Supported Languages
    - Building Workers
    - Autoscaling
    - Generate static assets when needed
- Build Workers
    - Using Node.js
    - Coding Workings
    - Storing Key-Value Pairs
    - Queues
- Email Routing
    - Register a domain
    - Register destination email accounts
    - Setup email DNS
    - Reroute email from one destination to another

- Practical applications for development
- SaaS for Developers
- Storage
  - R2
  - Workers KV
  - Durable Objects
- Website Development
  - Pages
  - Stream
  - Images
- Web3 Gateways
  - What is Web3?
  - InterPlanetary File System
  - Interact with Ethereum Blockchain
- Conclusion