

KOENIG SOLUTIONS · COURSE OUTLINE

Developing with the SharePoint Framework

Learn to build, configure and deploy SharePoint Framework web parts and extensions using TypeScript, REST APIs and Office UI Fabric.

5 Days

40 HOURS

14

MODULES

98

TOPICS

COURSE OVERVIEW

Developing with the SharePoint Framework certification validates proficiency in using SharePoint Framework (SPFx), a Page and web part model for building SharePoint experiences. It's leveraged by industries because it allows comprehensive SharePoint customization, ensuring seamless user experiences with familiar tools like React and TypeScript. This certification demonstrates you can create, deploy, and optimize SPFx solutions, including Client-side web parts, extensions, and third-party integrations. It emphasizes concepts such as the SPFx development environment setup, SharePoint REST APIs, and deployment to a CDN. By getting certified, developers validate their expertise, robust SPFx skills, and enthusiasm for staying current with evolving SharePoint technologies.

WHO THIS COURSE IS FOR

SharePoint developers aiming to enhance their skill set

IT professionals focused on collaborative business solutions

Individuals wishing to learn about SharePoint Framework (SPFx)

Companies seeking to improve their SharePoint customization

Front-end developers wanting to work with SharePoint

Team leaders managing SharePoint projects

Web developers interested in Microsoft technologies

PREREQUISITES

- HTML
- CSS
- JavaScript
- Basics of React

What You Will Learn

- Explain why the SharePoint Framework is used for customization
- Configure a development machine and Office 365 environment
- Build client-side web parts and configure their properties
- Apply TypeScript language features within SPFx projects
- Load SharePoint data using REST APIs and HTTP clients
- Integrate external libraries and frameworks into web parts
- Deploy SPFx solutions to a CDN and Microsoft Teams
- Develop SharePoint Framework extensions and consume Microsoft Graph APIs

COURSE SYLLABUS

14 Modules, 98 Topics

01

SharePoint Framework

TOPICS

Why SharePoint Framework? · Modern toolchain · The Future · More Info

02

Preparing Your Machine

TOPICS

Setup Office 365 · Software Installation

03

Modules

TOPICS

Creating a Project · Using Modules · CommonJSs · Important Modules

04

Framework Client Web Parts

TOPICS

What is a Client Web Part? · Creating a project · Exploring Project Contents · Running Your Project · Gulp tasks · Web Part Configuration

05

TypeScript

TOPICS

- What is TypeScript
- Usage
- Language
- Variables
- Functions
- Interfaces and Classes
- Promises and Async/Await
- Other Features
- Modules
- Summary

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Client Web Part Properties

TOPICS

Webpart Properties · Adding Properties · Using Properties · Preconfigured Entries · Dynamic Data · Custom Properties · Advanced Configuration

07

Loading SharePoint Data

TOPICS

- Page Context
- Web Services Overview
- REST and ODATA Fundamentals
- SharePoint REST API's
- AJAX
- Default Http Client
- Default SharePoint Http Client
- Checking the environment
- List Subscriptions

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Loading Libraries and/or Frameworks

TOPICS

Considerations · NPM Package · Loading from a URL · Loading A Local Copy · Loading jQuery and plugins · Component loader · Conclusion

09

Build and Deploy a Framework Solution

TOPICS

- Overview
- Bundling
- Packaging
- Deployment
- Site Specific App Catalog
- Deploying Assets
- Features
- Versioning
- Deploy to Microsoft Teams

10

SASS

TOPICS

- What is SASS?
- The Language
- Variables
- Types
- Comments
- Nested Rules and Properties
- Partials
- Extend
- Mixins
- Functions

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Office UI Fabric

TOPICS

What Is Office UI Fabric? · Office UI Fabric Versions · Fabric Core Styles · Example Uses · Fabric Components · Fabric JS · ngOfficeUIFabric · Fabric React

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Consuming AAD Secured API's

TOPICS

- Introduction to Microsoft Graph
- Microsoft Graph API
- Consuming the Microsoft Graph API
- Registering application in Azure AD
- API Permissions
- Consuming AAD protected API's
- Security Guidance
- Domain Isolated Web Part
- Security Control
- Summary

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SharePoint Framework Extensions

TOPICS

Extensions Overview · Creating Extensions · Application Customizers · Field Customizers · Command Sets · Extension Deployment

14

Dynamic Data

TOPICS

Introduction · Exposing data · Consuming data · Dynamic Data From Code · Advanced Configuration · Summary

NOTES

- Note: The text inside bullet points is not needed to be maintained within 40-50 words as per the typical formatting of bullet point information.

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training

Live Online Classes (ILO)

Fly-Me-A-Trainer (FMAT)

Flexi (Self-Paced)

1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

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