

# Microsoft 365 - Programming for SharePoint Online I

Course code: SPO\_DEV\_1

For whom the course is intended This course is designed for developers who create solutions for SharePoint Online technology.

What the course will teach you Set up a development environment and use tools like Node.js, Yeoman, Gulp and more. Use Visual Studio Code and debug SPFx applications in SharePoint Online. Utilize SharePoint APIs as well as the M365 Graph API. Create a custom webpart, application extension, or full-page application for SharePoint Online. Customize the look and feel of user interface elements. Prerequisite knowledge Basic knowledge of web application development (HTML, CSS, JavaScript) ideally within the scope of the [HTMLCSS] and [INTJS] or [INTTS1] courses. Basic knowledge of the SharePoint Online platform - ideally within the scope of the [GOC222] course. Preparing for certification exams The primary goal of the course is not to prepare for certification exams, but to master the theoretical principles and practical skills necessary to work effectively with the product.

Teaching methods Expert lecture with practical demonstrations and exercises with the lecturer in the Microsoft 365 test Tenant.

Study materials Electronic presentations of the material covered, source code for all exercises and other sample projects including source code.

Course outline Day 1: Introduction to Technology An overview of development technologies for SharePoint. SharePoint REST API v1 and Graph API. Setting up the development environment. "Hey guys" webpart. App catalog and application deployment. Day 2: SharePoint Framework in detail PowerShell modules for SharePoint Online. CLI for M365. Visual Studio Code and useful extensions. Webpart project with web service calls, styles and localization. Day 3: Extensions Clarity Extension. JSON Formatting vs. SharePoint Field Customizer. Customizing the look and feel of applications using Application Customizers. Day 4: Fluent UI & React An introduction to React technology from a SharePoint Online perspective. Fluent UI. Other useful component libraries. Component structure for larger projects. Graph API in practice. Day 5: Complex Applications Configuration. List templates, Site templates and Assets Deployment. Debugging. Document Management System project.

## For whom the course is intended

This course is designed for developers who create solutions for SharePoint Online technology.

## What the course will teach you

- Set up a development environment and use tools like Node.js, Yeoman, Gulp and more.
- Use Visual Studio Code and debug SPFx applications in SharePoint Online.
- Utilize SharePoint APIs as well as the M365 Graph API.
- Create a custom webpart, application extension, or full-page application for SharePoint Online.
- Customize the look and feel of user interface elements.

## Prerequisite knowledge

- Basic knowledge of web application development (HTML, CSS, JavaScript) ideally within the scope of the [HTMLCSS] and [INTJS] or [INTTS1] courses.
- Basic knowledge of the SharePoint Online platform - ideally within the scope of the [GOC222] course.

## Preparing for certification exams

The primary goal of the course is not to prepare for certification exams, but to master the theoretical principles and practical skills necessary to work effectively with the product.

## Teaching methods

Expert lecture with practical demonstrations and exercises with the lecturer in the Microsoft 365 test Tenant.

## Study materials

Electronic presentations of the material covered, source code for all exercises and other sample projects including source code.

## Course outline

### GOPAS Praha

Kodaňská 1441/46  
101 00 Praha 10  
Tel.: +420 234 064 900-3  
[info@gopas.cz](mailto:info@gopas.cz)

### GOPAS Brno

Nové sady 996/25  
602 00 Brno  
Tel.: +420 542 422 111  
[info@gopas.cz](mailto:info@gopas.cz)

### GOPAS Bratislava

Dr. Vladimíra Clementisa 10  
Bratislava, 821 02  
Tel.: +421 248 282 701-2  
[info@gopas.sk](mailto:info@gopas.sk)



Copyright © 2020 GOPAS, a.s.,  
All rights reserved

# Microsoft 365 - Programming for SharePoint Online I

## Day 1: Introduction to Technology

- An overview of development technologies for SharePoint.
- SharePoint REST API v1 and Graph API.
- Setting up the development environment.
- "Hey guys" webpart.
- App catalog and application deployment.

## Day 2: SharePoint Framework in detail

- PowerShell modules for SharePoint Online.
- CLI for M365.
- Visual Studio Code and useful extensions.
- Webpart project with web service calls, styles and localization.

## Day 3: Extensions

- Clarity Extension.
- JSON Formatting vs. SharePoint Field Customizer.
- Customizing the look and feel of applications using Application Customizers.

## Day 4: Fluent UI & React

- An introduction to React technology from a SharePoint Online perspective.
- Fluent UI.
- Other useful component libraries.
- Component structure for larger projects.
- Graph API in practice.

## Day 5: Complex Applications

- Configuration.
- List templates, Site templates and Assets Deployment.
- Debugging.
- Document Management System project.

### GOPAS Praha

Kodaňská 1441/46  
101 00 Praha 10  
Tel.: +420 234 064 900-3  
[info@gopas.cz](mailto:info@gopas.cz)

### GOPAS Brno

Nové sady 996/25  
602 00 Brno  
Tel.: +420 542 422 111  
[info@gopas.cz](mailto:info@gopas.cz)

### GOPAS Bratislava

Dr. Vladimíra Clementisa 10  
Bratislava, 821 02  
Tel.: +421 248 282 701-2  
[info@gopas.sk](mailto:info@gopas.sk)



Copyright © 2020 GOPAS, a.s.,  
All rights reserved