

1 TypeScript Basics

Facebook has become an incredibly popular app. As its popularity grew, so did the demand for new features. React was Facebook's answer to help more people work on the codebase and deliver features quicker. React worked so well for Facebook that they eventually open sourced it. Today, React is a mature library for building component-based frontends that is extremely popular and has a massive community and ecosystem.

TypeScript is also a popular, mature library maintained by a big company – namely, Microsoft. It allows users to add strong types to their JavaScript code, helping them to be more productive, particularly in large code bases.

This book will teach you how you can use both of these awesome libraries to build robust frontends that are easy to maintain. The first couple of chapters in the book focus solely on TypeScript. You'll then start to learn about React and how you can compose robust frontends using Typescript components with strong typing.

In this chapter, we'll cover TypeScript's relationship to JavaScript and the benefits it brings. A basic understanding of JavaScript is therefore required. We'll also cover the basics of TypeScript that you'll commonly use when writing code for the browser.

You'll come to understand the need to use TypeScript for building a frontend and the sort of projects for which TypeScript really shines. You will also see how to transpile your TypeScript code into JavaScript so that it can run in a browser. Last but not least, you'll learn how you can perform additional checks on your TypeScript code to make it readable and maintainable.

By the end of the chapter, you'll be ready to start learning how you can use TypeScript for building frontends with React.