

typescript react cheat sheet

Typescript React Cheat Sheet: Your Go-To Guide for Efficient Development

typescript react cheat sheet is an essential resource for developers looking to harness the power of TypeScript in their React projects. If you're transitioning from JavaScript to TypeScript or simply want to streamline your React development process, this guide covers the key concepts, tips, and practical examples to help you write cleaner, safer, and more maintainable code. Whether you're a beginner or an experienced developer, understanding how TypeScript works with React can boost your productivity and enhance your coding experience.

Why Use TypeScript with React?

Before diving into the specifics of the typescript react cheat sheet, it's worth highlighting why TypeScript has become the language of choice for many React developers. TypeScript, a statically typed superset of JavaScript, offers type safety and advanced tooling support which helps catch errors early during development instead of runtime. This reduces bugs and improves code readability, especially in larger codebases.

In React applications, where components often manage complex state and props, TypeScript's static typing can prevent common pitfalls such as passing incorrect prop types or misusing state variables. With autocomplete and intelligent refactoring tools, your development speed often improves, making TypeScript a valuable asset in modern React projects.

Getting Started with TypeScript in React

If you're new to TypeScript in React, setting up your environment correctly is the first step. Most React setups now support TypeScript out of the box, especially if you use Create React App with the TypeScript template:

```
```bash
npx create-react-app my-app --template typescript
```
```

This command scaffolds a React project configured with TypeScript, including the necessary `tsconfig.json` for compiler options.

File Extensions and Basic Syntax

In React projects using TypeScript, your component files typically end with ``.tsx`` instead of ``.jsx``. The ``.tsx`` extension allows you to write JSX with TypeScript type annotations seamlessly.

For example:

```
```tsx
import React from 'react';

interface GreetingProps {
 name: string;
}

const Greeting: React.FC = ({ name }) => {
 return
```

**Hello, {name}!**

```
;
};

export default Greeting;
```
```

This simple component demonstrates how to define an interface for props and use it to type the component's expected inputs.

Essential Typescript React Cheat Sheet Concepts

To get the most out of your typescript react cheat sheet, it's important to grasp these fundamental concepts:

Typing Props and State

One of the most common tasks is properly typing component props and state variables.

- ****Props****: Define an interface or type for your props and apply it to your function or class component.
- ****State****: For functional components using React hooks, type the state with generics in ``useState``.

Example with ``useState``:

```
```tsx
const [count, setCount] = React.useState(0);
```

```
...
```

This explicitly sets the state variable `count` to be a number, preventing you from accidentally setting it to incompatible types.

## Typing Event Handlers

Handling events in React can sometimes be tricky with TypeScript due to the variety of event types. Knowing the right event type improves code clarity and type safety.

```
```tsx
const handleClick = (event: React.MouseEvent) => {
  console.log(event.currentTarget);
};
```
```

Here, `React.MouseEvent` ensures that the event handler is typed for mouse clicks on a button element.

## Using React.FC and When to Avoid It

`React.FC` (or `React.FunctionComponent`) is a generic type provided by React for typing function components. It automatically types `children` and props, but some developers avoid it due to certain limitations, such as implicit `children` and potential issues with default props.

Example:

```
```tsx
const Button: React.FC<{ onClick: () => void }> = ({ onClick, children }) =>
(
  {children}
);
```
```

If you want more control, you can define the function component without `React.FC`:

```
```tsx
interface ButtonProps {
  onClick: () => void;
  children: React.ReactNode;
}

const Button = ({ onClick, children }: ButtonProps) => (
  {children}

```

```
);  
```
```

## Advanced Patterns in TypeScript React Cheat Sheet

For developers aiming to deepen their mastery, the typescript react cheat sheet includes some advanced patterns and tips that can elevate your code.

### Generics in Components

Using generics allows you to write flexible and reusable components.

```
```tsx  
interface ListProps {  
  items: T[];  
  renderItem: (item: T) => React.ReactNode;  
}  
  
function List({ items, renderItem }: ListProps) {  
  return  
    {items.map(renderItem)}  
;  
}  
```
```

Here, the component can accept any type of `items` array, making it highly reusable.

### Using `useRef` with TypeScript

Typing `useRef` can be confusing at first. It's important to specify the reference type or use `null` for initial value.

```
```tsx  
const inputRef = React.useRef(null);  
  
const focusInput = () => {  
  inputRef.current?.focus();  
};  
```
```

The `inputRef` is typed as a reference to an `HTMLInputElement`, allowing

safe access to DOM methods.

## Context API with TypeScript

Typing React Context is crucial to avoid errors when consuming values.

```
```\ntsx\ninterface AuthContextType {\n  user: string | null;\n  login: (username: string) => void;\n}\n\nconst AuthContext = React.createContext(undefined);\n\nconst useAuth = () => {\n  const context = React.useContext(AuthContext);\n  if (!context) {\n    throw new Error('useAuth must be used within AuthProvider');\n  }\n  return context;\n};\n```\n
```

This pattern ensures that consuming components get properly typed context values and helpful runtime checks.

Tips and Best Practices for Using TypeScript in React

Incorporating TypeScript into your React workflow is more than just typing syntax. Here are some practical tips to make your development smoother:

- **Start Small:** Gradually add types to your existing JavaScript codebase to avoid overwhelming changes.
- **Leverage Type Inference:** TypeScript often infers types automatically; only declare types explicitly when necessary.
- **Use Utility Types:** Types like `Partial``, `Pick``, and `Omit`` help manipulate and reuse types effectively.
- **Enable Strict Mode:** Activate strict compiler options in `tsconfig.json`` to catch more potential issues early.
- **Write Custom Hooks with Types:** Typing your custom hooks enhances

reusability and clarity.

Common Linting and Formatting Tools

Pairing TypeScript with ESLint and Prettier ensures consistent code style and catches errors before running the app. Many React starters come preconfigured, but you can customize rules to suit your team's needs.

Exploring Popular Libraries with TypeScript Support

The React ecosystem is vast, and many popular libraries provide TypeScript definitions out of the box:

- **React Router:** Typed hooks like `useParams` help you access route parameters safely.
- **Redux Toolkit:** Comes with excellent TypeScript support, making state management more predictable.
- **Formik and React Hook Form:** Both have TypeScript typings for robust form handling.

Using these libraries with TypeScript reduces guesswork and improves developer confidence.

Common Pitfalls to Avoid in TypeScript React Development

While TypeScript offers numerous advantages, beginners often stumble over a few common issues:

- **Overusing "any":** Resorting to `any` defeats the purpose of type safety. Try using `unknown` or more specific types instead.
- **Ignoring Null and Undefined:** TypeScript forces you to handle possible nulls, but sometimes developers bypass this with `!``. Use optional chaining or proper checks instead.

- **Improperly Typing Event Handlers:** Always use the correct React synthetic event types to avoid unexpected bugs.
- **Not Updating Types When Refactoring:** Keep your interfaces and types updated as your components evolve to prevent mismatches.

By staying mindful of these, your journey with TypeScript and React will be more enjoyable.

Diving into a typescript react cheat sheet not only equips you with syntax references but also shapes how you think about building robust React applications. As you continue exploring, you'll find that the blend of React's declarative UI and TypeScript's static typing creates a powerful synergy for crafting scalable, maintainable front-end solutions. Whether you're tweaking props, handling events, or designing complex components, mastering this cheat sheet can transform your everyday coding into a more confident and efficient experience.

Frequently Asked Questions

What is a TypeScript React cheat sheet?

A TypeScript React cheat sheet is a quick reference guide that summarizes the most important and commonly used TypeScript features and React patterns to help developers write type-safe React applications efficiently.

Why should I use TypeScript with React?

Using TypeScript with React helps catch errors early through static type checking, improves code readability and maintainability, and provides better tooling support such as autocomplete and refactoring.

What are the basic TypeScript types used in React components?

Common TypeScript types in React include: string, number, boolean, any, void, null, undefined, arrays (e.g., string[]), tuples, enums, and interfaces or types for defining props and state shapes.

How do I type React component props with TypeScript?

You define an interface or type for the props and then use it with the component. For example: ``interface Props { title: string; } const MyComponent: React.FC<Props> = ({ title }) => <h1>{title}</h1>``

How do I type React functional components with TypeScript?

You can type functional components using `React.FC` or by explicitly typing the props. For example: `const MyComponent: React.FC<Props> = (props) => { ... }` or `const MyComponent = (props: Props) => { ... }`.

How do I type useState hook in React with TypeScript?

You can specify the type explicitly or let TypeScript infer it. For example: `const [count, setCount] = useState<number>(0);` or `const [name, setName] = useState('');` where TypeScript infers the type as string.

How to type event handlers in React with TypeScript?

You type event handlers by specifying the event type, e.g., `React.ChangeEvent<HTMLInputElement>` for input change events. Example: `const handleChange = (e: React.ChangeEvent<HTMLInputElement>) => { ... }`.

What is the best way to type refs in React with TypeScript?

Use `React.useRef` with a generic type. For example: `const inputRef = useRef<HTMLInputElement>(null);` ensures the ref is typed to an `HTMLInputElement` or null initially.

How can I type React context with TypeScript?

Define an interface for the context value and use it with `React.createContext`. Provide a default value or `null` with a proper type assertion. For example: `const MyContext = React.createContext<MyContextType | null>(null);`.

Are there any popular TypeScript React cheat sheet resources?

Yes, popular resources include the official TypeScript and React documentation, GitHub repositories like "TypeScript-React-Starter", community cheat sheets on GitHub, and websites like devhints.io or Overreacted.io blog posts.

Additional Resources

Typescript React Cheat Sheet: A Professional Guide for Developers

typescript react cheat sheet serves as an essential resource for developers aiming to harness the combined power of TypeScript and React. As modern web applications demand both robustness and scalability, understanding how to effectively integrate TypeScript with React becomes indispensable. This cheat sheet not only accelerates the development process but also promotes best practices, reducing runtime errors and enhancing code maintainability.

In recent years, TypeScript has emerged as a popular superset of JavaScript, introducing static typing and advanced tooling support. When paired with React, a leading JavaScript library for building user interfaces, TypeScript helps developers write more predictable and self-documenting code. This article delves into the core elements of a TypeScript React cheat sheet, offering insights into key syntax, type declarations, component typing, hooks, and state management techniques that are crucial for efficient development workflows.

Understanding the Foundations: TypeScript and React Synergy

At the heart of the TypeScript React cheat sheet lies the fundamental understanding of how TypeScript complements React's component-based architecture. React's declarative nature benefits significantly from TypeScript's static typing, which prevents common bugs such as incorrect prop types or misused hooks. Developers transitioning from pure JavaScript to TypeScript within React projects often encounter challenges in typing components, props, and state. A comprehensive cheat sheet bridges this gap by providing ready references for common patterns and use cases.

TypeScript enforces type safety, which means components can explicitly specify the types of props they expect, making the interface contract between components clearer. This reduces the likelihood of runtime errors that are often difficult to debug in large-scale applications. Furthermore, TypeScript's integration with modern IDEs adds powerful autocompletion and refactoring tools that enhance developer productivity.

Typing Functional Components

One of the primary areas covered in any TypeScript React cheat sheet is the correct way to type functional components, which have largely replaced class components in recent React development. The recommended approach uses the ``React.FC`` (or ``React.FunctionComponent``) type, though its usage has sparked debate in the community.

```
```typescript
import React from 'react';
```

```
interface ButtonProps {
 label: string;
 onClick: () => void;
}

const Button: React.FC = ({ label, onClick }) => {
 return {label};
};
```

```

This pattern clearly defines the props interface and applies it to the component, ensuring that any usage of `Button` adheres to the specified types. However, some developers prefer to explicitly type the function parameters without using `React.FC` to avoid implicit children props and other quirks.

Props and State Typing

Another critical aspect is typing component props and state, especially when dealing with complex nested data or optional properties. The cheat sheet typically emphasizes the use of interface or type aliases to define prop structures, enhancing readability and reusability.

For example:

```
```typescript
interface UserProfileProps {
 userId: number;
 userName: string;
 isActive?: boolean; // optional prop
}

const UserProfile = ({ userId, userName, isActive = true }: UserProfileProps)
=> {
 // Component logic here
};
```

```

When it comes to state, React's `useState` hook can be typed explicitly to avoid unintended type coercion:

```
```typescript
const [count, setCount] = React.useState(0);
```

```

This explicit typing is crucial when the initial state is `null` or `undefined`, as TypeScript might infer a broader type otherwise.

Advanced Patterns: Hooks and Context with TypeScript

The synergy between TypeScript and React hooks unlocks the potential for more robust stateful logic and side effects handling. The cheat sheet often includes best practices for typing custom hooks, event handlers, and context providers.

Typing Event Handlers

React's synthetic events require precise typing to ensure handlers receive expected event objects. The cheat sheet outlines common event types such as `React.ChangeEvent` or `React.MouseEvent`.

Example:

```
```typescript
const handleInputChange = (event: React.ChangeEvent) => {
 console.log(event.target.value);
};
```
```

This level of specificity helps prevent errors like accessing non-existent properties and improves code clarity.

Custom Hooks

Developers frequently create custom hooks to encapsulate reusable logic. Typing these hooks correctly is vital for maintaining type safety across components.

```
```typescript
function useToggle(initialValue: boolean): [boolean, () => void] {
 const [value, setValue] = React.useState(initialValue);
 const toggleValue = () => setValue(!value);
 return [value, toggleValue];
}
```
```

This example clearly specifies the return type as a tuple, which aids in predictable usage throughout the codebase.

Context API with TypeScript

React's Context API allows components to share state without prop drilling. However, defining context types requires careful structuring to avoid runtime errors when context is uninitialized.

```
```typescript
interface AuthContextType {
 user: string | null;
 login: (username: string) => void;
 logout: () => void;
}

const AuthContext = React.createContext(undefined);

const AuthProvider: React.FC = ({ children }) => {
 const [user, setUser] = React.useState(null);

 const login = (username: string) => setUser(username);
 const logout = () => setUser(null);

 return (
 {children}
);
};
```
```

To safely consume context, the cheat sheet recommends custom hooks that assert context presence, minimizing null checks scattered across components.

Common Pitfalls and Best Practices

Despite its advantages, integrating TypeScript with React is not without challenges. The cheat sheet often highlights common pitfalls such as:

- **Overusing the any type:** While `any` can expedite development, it negates TypeScript's benefits by disabling type checking.
- **Implicit children props:** Using `React.FC` automatically includes an optional `children` prop, which may not be desired.
- **Incorrect hook typing:** Mismanagement of generic types in hooks like `useState` or `useReducer` can lead to subtle bugs.

Best practices encourage developers to:

1. Define explicit interfaces for props and state.
2. Use union and intersection types for flexible yet type-safe components.
3. Avoid unnecessary type assertions that may mask errors.
4. Leverage TypeScript's utility types such as ``Partial``, ``Pick``, and ``Record`` for advanced scenarios.

Comparing Class Components and Functional Components in TypeScript

While React's ecosystem is shifting towards functional components with hooks, legacy codebases still rely on class components. The cheat sheet provides side-by-side examples to help understand the differences in typing.

Class component example:

```
```typescript
interface CounterProps {
 initialCount: number;
}

interface CounterState {
 count: number;
}

class Counter extends React.Component {
 state: CounterState = { count: this.props.initialCount };

 increment = () => {
 this.setState({ count: this.state.count + 1 });
 };

 render() {
 return {this.state.count};
 }
}
```
```

Functional component with hooks:

```
```typescript
const Counter: React.FC<{ initialCount: number }> = ({ initialCount }) => {
```

```
const [count, setCount] = React.useState(initialCount);

const increment = () => setCount(count + 1);

return {count};
};
```
```

This comparison highlights the conciseness and clarity functional components bring, especially when paired with TypeScript's type inference capabilities.

Integrating TypeScript React Cheat Sheet into Development Workflow

To maximize productivity, developers often integrate a TypeScript React cheat sheet into their tooling ecosystem. Popular cheat sheets are available as printable PDFs, online documents, or IDE extensions, facilitating quick lookups during coding sessions.

Many cheat sheets also include:

- Code snippets for common React patterns typed with TypeScript.
- Guidelines for configuring `tsconfig.json` for React projects.
- Best practices for library typings, including popular UI frameworks like Material-UI or Ant Design.

By embedding these resources into daily routines, teams can standardize coding styles and minimize onboarding time for new developers.

The adoption of TypeScript within React projects continues to gain momentum, driven by the demand for scalable and maintainable codebases. A well-crafted TypeScript React cheat sheet acts as a catalyst, enabling developers to confidently write typed components, leverage hooks effectively, and avoid common pitfalls. As the ecosystem evolves, keeping abreast of typing patterns and best practices remains pivotal for professional React developers seeking to elevate their craft.

[Typescript React Cheat Sheet](#)

typescript react cheat sheet: Alice and Bob Learn Secure Coding Tanya Janca, 2025-01-10
Unlock the power of secure coding with this straightforward and approachable guide! Discover a

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typescript react cheat sheet: React Cookbook David Griffiths, Dawn Griffiths, 2021-08-11

React helps you create and work on an app in just a few minutes. But learning how to put all the pieces together is hard. How do you validate a form? Or implement a complex multistep user action without writing messy code? How do you test your code? Make it reusable? Wire it to a backend? Keep it easy to understand? The React Cookbook delivers answers fast. Many books teach you how to get started, understand the framework, or use a component library with React, but very few provide examples to help you solve particular problems. This easy-to-use cookbook includes the example code developers need to unravel the most common problems when using React, categorized by topic area and problem. You'll learn how to: Build a single-page application in React using a rich UI Create progressive web applications that users can install and work with offline Integrate with backend services such as REST and GraphQL Automatically test for accessibility problems in your application Secure applications with fingerprints and security tokens using WebAuthn Deal with bugs and avoid common functional and performance problems

typescript react cheat sheet: Building Large Scale Web Apps Addy Osmani, Hassan Djirdeh, 2024-04-15 Building Large Scale Web Apps is a toolkit for managing large-scale React applications. React as a library allows you to start building user interfaces quickly and easily. But how do things scale as an application grows? How do you ensure that your codebase remains manageable, your performance metrics stay on point, and your team continues to work cohesively as the project evolves? In this book, you'll uncover strategies that industry professionals use to build scalable, performant, and maintainable React applications, all without becoming overwhelmed by complexity.

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typescript react cheat sheet: iX Special Moderne Programmiersprachen iX - Redaktion, 2020-06-12 Als Reaktion auf neue Anforderungen und veränderte Hardware entstanden in den vergangenen Jahren viele neue Programmiersprachen, darunter solche wie Kotlin als neue Sprache für die Java Virtual Machine, Swift zur Programmierung von iOS- und macOS-Anwendungen, die C-Nachfolger Go und D oder die JavaScript-Weiterentwicklung TypeScript. Das iX Special 2020 stellt

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typescript react cheat sheet: Aurelia in Action Sean Hunter, 2018-07-24 Summary Aurelia in Action teaches you how to build fantastic single-page applications with the Aurelia framework. You'll learn about modern design practices and a modular architecture based on web components, perfect for hybrid web + mobile apps. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Try Aurelia, and you may not go back to your old web framework. Flexible and efficient, Aurelia enforces modern design practices and a modular architecture based on web components. It's perfect for hybrid web + mobile apps, with hot features like dynamic routes, pluggable pipelines, and APIs for nearly every flavor of JavaScript. About the Book Aurelia in Action teaches you how to build extraordinary web applications using the Aurelia framework. You'll immediately take advantage of key elements like web components and decorators when you start to explore the book's running example: a virtual bookshelf. As the app unfolds, you'll dig into templating and data binding the Aurelia way. To complete the project, you'll take on routing and HTTP, along with tuning, securing, and deploying your finished product. What's Inside Templating and data-binding Communication between components Server-side and SPA design techniques View composition About the Reader Written for developers comfortable with JavaScript and MVC-style web development. About the Author Sean Hunter is a web developer with nearly 10 years of experience. He's extremely passionate about all things Aurelia and has been working with the framework in production since the early beta days. Sean got a taste for teaching developers how to get started with Aurelia while visiting user groups across the UK, and he's been excited to expand on this teaching effort with this book. These days, Sean is working in a variety of web-development technologies with companies across Australia, and he blogs at <https://sean-hunter.io>. Table of Contents PART 1 - INTRODUCTION TO AURELIA Introducing Aurelia Building your first Aurelia application PART 2 - EXPLORING AURELIA View resources, custom elements, and custom attribute Aurelia templating and data bindin Value converters and binding behaviors Intercomponent communication Working with forms Working with HTTP Routing Authentication Dynamic composition Web Components and Aurelia Extending Aurelia Animation PART 3 - AURELIA IN THE REAL WORLD Testing Deploying Aurelia applications

typescript react cheat sheet: Single Page Application Fernando Esquírio Torres, 2023-07-14 A Série Universitária foi desenvolvida pelo Senac São Paulo com o intuito de preparar profissionais para o mercado de trabalho. Os títulos abrangem diversas áreas, abordando desde conhecimentos teóricos e práticos adequados às exigências profissionais até a formação ética e sólida. Single Page Application aborda os conceitos fundamentais para a implementação de aplicações em React. Para isso, são apresentadas teorias para a criação de aplicações que utilizam aplicativos de página única (SPA), com exemplos e implementações práticas. Ao longo do livro, também são demonstrados conceitos e ferramentas para o desenvolvimento de aplicações web que interagem com o usuário, atualizando dinamicamente os dados de uma página. Dessa forma, é oferecido ao leitor o conhecimento necessário para o desenvolvimento de websites em React que empregam o conceito de SPA.

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high performing web apps. In this book, you'll learn how to create well structured and reusable react components that are easy to read and maintain by leveraging modern web development techniques. We will start with learning core TypeScript programming concepts before moving on to building reusable React components. You'll learn how to ensure all your components are type-safe by leveraging TypeScript's capabilities, including the latest on Project references, Tuples in rest parameters, and much more. You'll then be introduced to core features of React such as React Router, managing state with Redux and applying logic in lifecycle methods. Further on, you'll discover the latest features of React such as hooks and suspense which will enable you to create powerful function-based components. You'll get to grips with GraphQL web API using Apollo client to make your app more interactive. Finally, you'll learn how to write robust unit tests for React components using Jest. By the end of the book, you'll be well versed with all you need to develop fully featured web apps with React and TypeScript. What you will learn Gain a first-hand experience of TypeScript and its productivity features Transpile your TypeScript code into JavaScript for it to run in a browser Learn relevant advanced types in TypeScript for creating strongly typed and reusable components Create stateful function-based components that handle lifecycle events using hooks Get to know what GraphQL is and how to work with it by executing basic queries to get familiar with the syntax Become confident in getting good unit testing coverage on your components using Jest Who this book is for The ideal target audience for this book are web developers who want to get started with creating modern day web apps with React and TypeScript. You are expected to have a basic understanding of JavaScript and HTML programming. No prior knowledge of TypeScript and React is needed.

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Reading, navigating, and debugging a large frontend codebase is a major issue faced by frontend developers. This book is designed to help web developers like you learn about ReactJS and TypeScript, both of which power large-scale apps for many organizations. This second edition of *Learn React with TypeScript* is updated, enhanced, and improved to cover new features of React 18 including hooks, state management libraries, and features of TypeScript 4. The book will enable you to create well-structured and reusable React components that are easy to read and maintain, leveraging modern design patterns. You'll be able to ensure that all your components are type-safe, making the most of TypeScript features, including some advanced types. You'll also learn how to manage complex states using Redux and how to interact with a GraphQL web API. Finally, you'll discover how to write robust unit tests for React components using Jest. By the end of the book, you'll be well-equipped to use both React and TypeScript.

What you will learn

- Gain first-hand experience of TypeScript and its productivity features
- Understand how to transpile your TypeScript code into JavaScript for running in a browser
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- Interact with REST and GraphQL web APIs
- Design and develop strongly typed reusable components
- Create automated component tests

Who this book is for

This book is for experienced frontend developers looking to build large scale web applications using React and TypeScript. Intermediate knowledge of JavaScript, HTML and CSS is a prerequisite.

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TypeScript is JavaScript with an important upgrade! By adding a strong type system to JavaScript, TypeScript can help you eliminate entire categories of runtime errors. In *TypeScript Quickly*, you'll learn to build rock-solid apps through practical examples and hands-on projects under the expert instruction of experienced web developers Yakov Fain and Anton Moiseev. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

About the technology

Strong typing can eliminate nearly all errors caused by unanticipated data values. With TypeScript, an enhanced version of JavaScript, you can specify types and type annotations so your code is easier to read and far less likely to fail at runtime. And because the core of TypeScript is standard JavaScript, it runs on all major browsers and can be used with frameworks like Angular, Vue, and React.

About the book

TypeScript Quickly teaches you to exploit the benefits of types in browser-based and standalone applications. In this practical guide, you'll build a

fascinating blockchain service app that takes you through a range of type-sensitive programming techniques. As you go, you'll also pick up valuable techniques for object-oriented programming with classes, interfaces, and advanced features such as decorators and conditional types. What's inside Mastering TypeScript syntax Using TypeScript with JavaScript libraries Tooling with Babel and Webpack Developing TypeScript apps using Angular, React, and Vue About the reader For web developers comfortable with JavaScript and HTML. About the author Yakov Fain and Anton Moiseev are experienced web developers. They have authored two editions of Manning's Angular Development with TypeScript. Table of Contents: PART 1 MASTERING THE TYPESCRIPT SYNTAX 1 | Getting familiar with TypeScript 2 | Basic and custom types 3 | Object-oriented programming with classes and interfaces 4 | Using enums and generics 5 | Decorators and advanced types 6 | Tooling 7 | Using TypeScript and JavaScript in the same project PART 2 APPLYING TYPESCRIPT IN A BLOCKCHAIN APP 8 | Developing your own blockchain app 9 | Developing a browser-based blockchain node 10 | Client-server communications using Node.js, TypeScript, and WebSockets 11 | Developing Angular apps with TypeScript 12 | Developing the blockchain client in Angular 13 | Developing React.js apps with TypeScript 14 | Developing a blockchain client in React.js 15 | Developing Vue.js apps with TypeScript 16 | Developing the blockchain client in Vue.js

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