**Lesson № 7**

Why use TypeScript

There are two main reasons to use TypeScript:

TypeScript adds a type system to help you avoid many problems with dynamic types in JavaScript.

TypeScript implements the future features of JavaScript a.k.a ES Next so that you can use them today.

* TsConfig file ( <https://www.typescriptlang.org/tsconfig> )
* Primitive types ( [https://www.typescripttutorial.net/typescript-tutorial/typescript-types/](https://www.typescripttutorial.net/typescript-tutorial/typescript-types/%20) )
* Object types ( Object types are functions, arrays, classes )
* Type annotation ( <https://www.typescripttutorial.net/typescript-tutorial/typescript-type-annotations/> )
* Number type ( <https://www.typescripttutorial.net/typescript-tutorial/typescript-number/> )
* String type ( <https://www.typescripttutorial.net/typescript-tutorial/typescript-string/> )
* Boolean type ( <https://www.typescripttutorial.net/typescript-tutorial/typescript-boolean/> )
* Object type ( <https://www.typescripttutorial.net/typescript-tutorial/typescript-object-type/> )
* Array type ( <https://www.typescripttutorial.net/typescript-tutorial/typescript-array-type/> )
* Tuple type ( <https://www.typescripttutorial.net/typescript-tutorial/typescript-tuple/> )
* Enum type ( <https://www.typescripttutorial.net/typescript-tutorial/typescript-enum/> )
* Any type ( <https://www.typescripttutorial.net/typescript-tutorial/typescript-any-type/> )
* String literal types ( <https://www.typescripttutorial.net/typescript-tutorial/typescript-string-literal-types/> )
* Interfaces ( <https://www.typescripttutorial.net/typescript-tutorial/typescript-interface/> )
* Generics ( <https://www.typescripttutorial.net/typescript-tutorial/typescript-generics/> )
* Decorators ( <https://blog.logrocket.com/practical-guide-typescript-decorators/> )

<https://webpack.js.org/guides/typescript/>

<https://www.typescripttutorial.net/typescript-tutorial/setup-typescript/>

<https://www.typescriptlang.org/tsconfig>

<https://www.youtube.com/watch?v=nyIpDs2DJ_c>

**Homework learn and bring one example about each operator**

* **Pick<>**
* **Omit<>**
* **Record<>**
* **Partial<>**
* **Required<>**