

TypeScript at a glance

[Shaimaa]

Typescript, What Can it Do!

Type inference

Implicit typing performed by TypeScript itself, so that your developers don't need to provide types where the compiler can find them on its own (hint: that is exactly why all the examples in last session were all TS)

Structural typing

JavaScript allows for a lot of strange things to be done, so relying on a specific structure is a much safer solution.

Strict Null Checking

By using Typescript, you already avoid most of these kind of errors, since one cannot use a variable that is not known to the TypeScript compiler. But its still possible though to mistakenly utilize a variable that is set to undefined. By using `--strictNullChecks` flag in TypeScript compiler you can eliminate these kinds of errors all together.

Using new features of ECMAScript

TypeScript supports new ECMAScript standards and transpiles them to (older) ECMAScript targets of your choice

[Burham]

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/`````````` BadCats[Team] ``````````\
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|```` Session(1) -> Assessment (1) ```` (Jun 7th,2022)
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| [1]TypeScript Static Typing Purposes. |
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| -> Defines the correct types of statements |
| -> Makes the code readable and the result expectable |
| -> Avoids dynamic typing Mistakes and bugs. |
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| [2]TypeScript Static Typing Advantages |
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| -> Getting rid of the runtime errors, as it is checking errors |
| instantly |
| -> Getting a clear readable code, which allows the IDE to assist |
| developer with the right suggestions. |
| -> Makes the code easier at reading which helps developer later at |
| future editing. |
| -> Getting better performance at runtime, as the code compiler at |
| low level have guarantees at the shape of the data structure |
| which reduces the runtime compliance |
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