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Learn App Development in UI5 with TypeScript – Reprise

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Overview / Learnings

Updated end-to-end experience developing a UI5 app in TypeScript, plus advanced topics

1. Use the UI5 TypeScript application template to get started quickly
2. Write application code in TypeScript
3. Use third-party libraries seamlessly from NPM
4. Develop a UI5 control in TypeScript
5. Test the application with QUnit and OPA

General TS Documentation: https://sap.github.io/ui5-typescript

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TypeScript – Quick Intro

- = JavaScript **plus types**
- Only at development/compile time
- ***.d.ts** files: type information for JS libs
  - @types/openui5
  - @sapui5/types + @openui5/types
  - App code: ES6 classes + module imports

- Benefits:
  - Error messages while you code
  - Code completion
  - In-place API reference, navigation
  - Easier refactoring & maintenance

Some noticeable immediately, others only over time
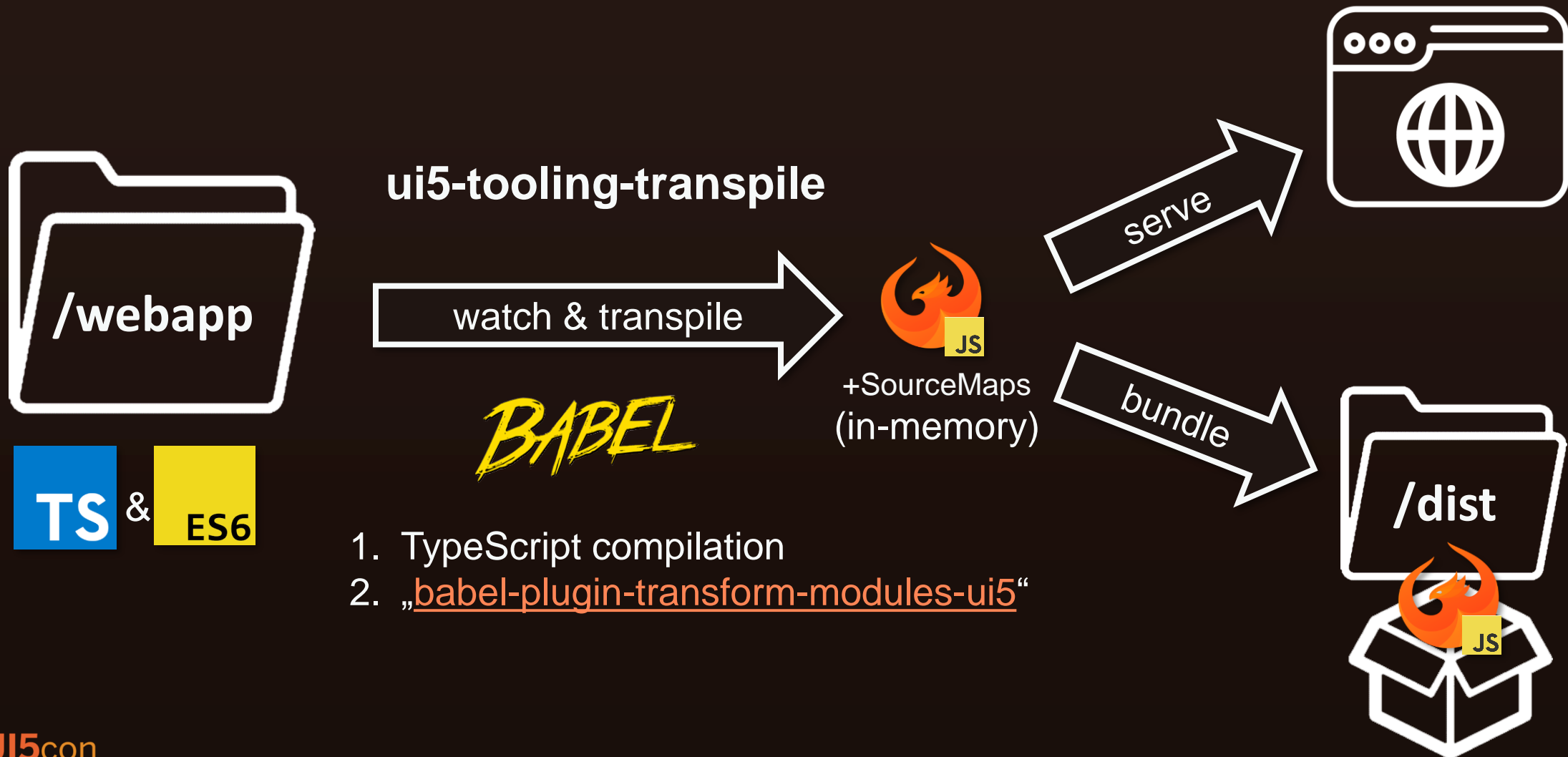
```typescript
var someNumber: number;

var otherNumber = 1;

function square(x: number) {
    return x * x;
}


type Point = {
    x: number;
    y: number;
};                    …and more
```

Build Pipeline

/webapp

ui5-tooling-transpile

watch & transpile

BABEL

TS & ES6

1. TypeScript compilation
2. „babel-plugin-transform-modules-ui5"

serve

+SourceMaps
(in-memory)

bundle

/dist

Instructions on
https://github.com/SAP-samples/ui5-typescript-tutorial

Let's Start!

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Thank you!

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