

# TS Compiler

- `tsc --init`
- `noEmitOnError` : true
- **ts compiler** with **ts config** will automatically find **ts files** and compile them to **js files**
- **'tsc'** command compiles ts files into js
- **'tsc --watch'** - watch for changes in ts files in root directory
  - in watch mode we can see ts compilation errors in terminal
- **tsc --help** - know all ( options | switches ) for ts compiler
- **"exclude"** : array of files and directories we want to exclude from ts compiler
  - **node\_modules** are excluded by default in TS
  - but if we define our own 'exclude' property we need to add node\_modules under that
  - we can also use wildcard ( \*) symbol like \*.exculde.ts (all files ending with this notation, must not be compiled by ts compiler)
- **"include"** - ts will compile only defined files and directories under 'include' property
- include - exclude
- **rootDir** : ts will look for ts files in this directory and sub-directories
- **outDir** : out directory for all JS files
- **target** : version of JS to which TS will be compiles
- **lib** : based on which version of JS we are using, TS config will include respective libraries
  - we can see libraries needed in tsconfig / bases GitHub repo
- **noUnusedLocals** : helps in telling unused local variables in our code
- **noUnusedParameters** : similar to above for function parameters
- **noImplicitReturn** : only return defined in return type
- **allowUnreachableCode** : false
- **sourceMap** : true - we can debug ts files in dev-tools debugger