

Лабораторная работа по теме “Транспиляция с Babel”

1.Развертывание проекта с использованием Babel.

Создание проекта:


```
PS D:\babel> yarn init -y
yarn init v1.22.10
warning The yes flag has been set. This will automatically answer yes to all questions, which may have security implications.
success Saved package.json
Done in 0.07s.
PS D:\babel> npm install --save-dev @babel/core @babel/cli
npm WARN deprecated resolve-url@0.2.1: https://github.com/lydell/resolve-url#deprecated
npm WARN deprecated urix@0.1.0: Please see https://github.com/lydell/urix#deprecated
npm notice created a lockfile as package-lock.json. You should commit this file.
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@~2.3.1 (node_modules\chokidar\node_modules\fsevents):
fsevents@2.3.2: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN babel@1.0.0 No description
npm WARN babel@1.0.0 No repository field.

+ @babel/core@7.14.2
added 208 packages from 127 contributors and audited 209 packages in 15.063s

5 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
```

Исходный файл index.js:



```
.babelrc  index.js  index.js  package.json
Разное  <global>  helll
const helll = () => {
  console.log('World');
}
```

Установка зависимости пресета env в package.json:

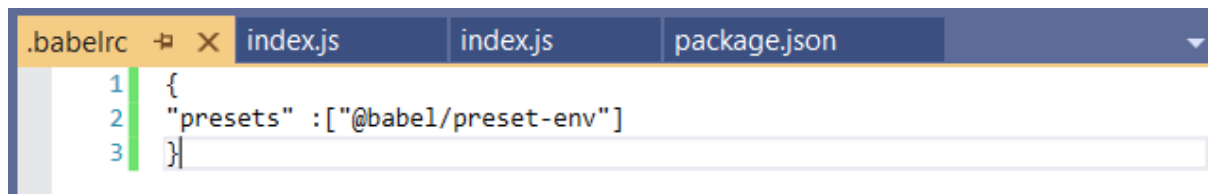
```
PS D:\babel> npm install --save-dev @babel/preset-env
npm WARN babel@1.0.0 No description
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.3.2 (node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.3.2: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})

+ @babel/preset-env@7.14.2
added 112 packages from 28 contributors and audited 321 packages in 10.678s

run `npm fund` for details

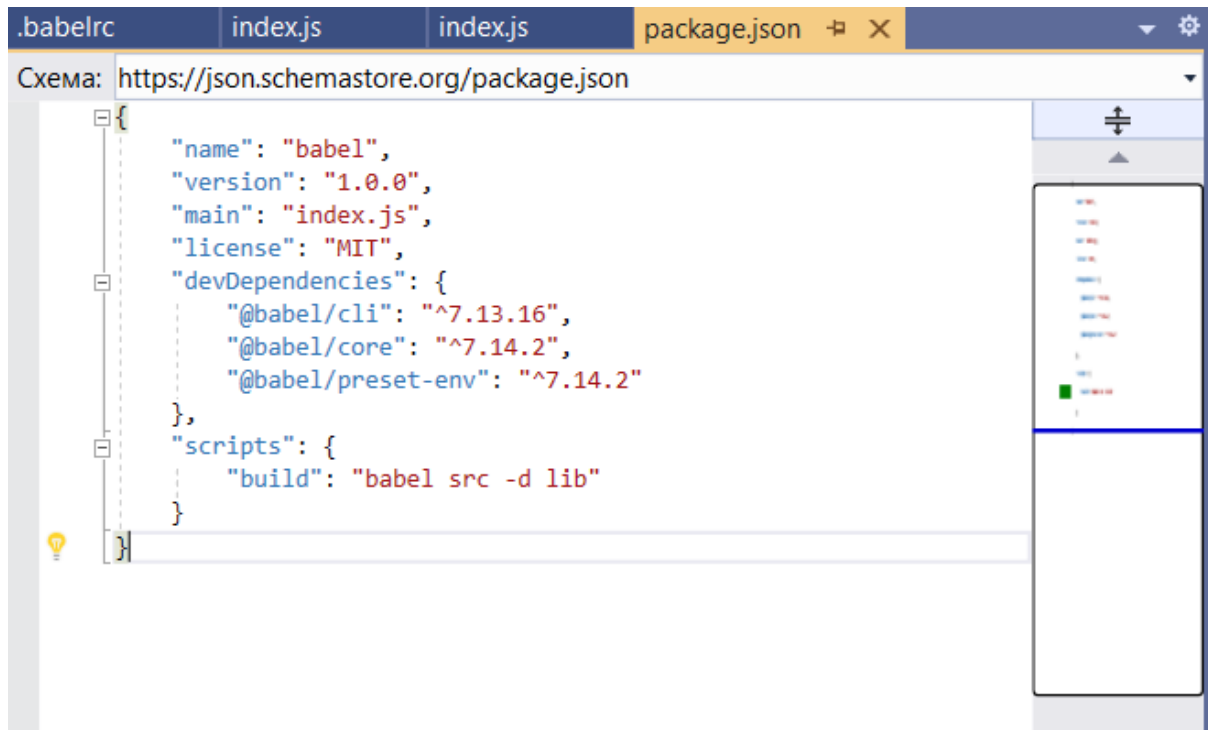
found 0 vulnerabilities
```

Создание .babelrc и установка в него пресета env:



```
.babelrc  index.js  index.js  package.json
1  {
2    "presets": ["@babel/preset-env"]
3  }
```

Создание скрипта для package.json:



```
Схема: https://json.schemastore.org/package.json
{
  "name": "babel",
  "version": "1.0.0",
  "main": "index.js",
  "license": "MIT",
  "devDependencies": {
    "@babel/cli": "^7.13.16",
    "@babel/core": "^7.14.2",
    "@babel/preset-env": "^7.14.2"
  },
  "scripts": {
    "build": "babel src -d lib"
  }
}
```

Сборка проекта:

```
PS D:\babel> npm run build
```

```
> babel@1.0.0 build D:\babel
```

```
> babel src -d lib
```

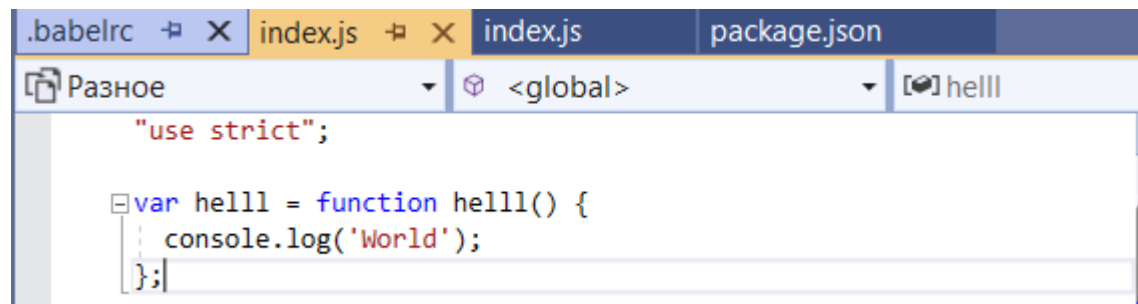
```
Successfully compiled 1 file with Babel (881ms).
```

Содержимое папки проекта:

Каталог: D:\babel

Mode		LastWriteTime	Length	Name
d-----		16.05.2021 14:07		lib
d-----		16.05.2021 14:10		node_modules
d-----		16.05.2021 14:07		src
-a----		16.05.2021 14:15	38	.babelrc
-a----		16.05.2021 14:10	131633	package-lock.json
-a----		16.05.2021 14:10	307	package.json

Содержимое транпилированного файла:



2.Преобразование кода на JavaScript, содержащего инструкции из следующих версий стандарта ECMAScript.

Добавление поддержки class properties:

```

PS D:\babel> yarn add -D babel-plugin-transform-class-properties
yarn add v1.22.10
info No lockfile found.
warning package-lock.json found. Your project contains lock files generated by tools other than
Yarn. It is advised not to mix package managers in order to avoid resolution inconsistencies c
aused by unsynchronized lock files. To clear this warning, remove package-lock.json.
[1/4] Resolving packages...
warning @babel/cli > @nicolo-ribaudo/chokidar-2 > braces > snapdragon > source-map-resolve > re
solve-url@0.2.1: https://github.com/lydell/resolve-url#deprecated
warning @babel/cli > @nicolo-ribaudo/chokidar-2 > braces > snapdragon > source-map-resolve > ur
ix@0.1.0: Please see https://github.com/lydell/urix#deprecated
info There appears to be trouble with your network connection. Retrying...
info There appears to be trouble with your network connection. Retrying...
info There appears to be trouble with your network connection. Retrying...
warning babel-plugin-transform-class-properties > babel-runtime > core-js@2.6.12: core-js@<3.3
is no longer maintained and not recommended for usage due to the number of issues. Because of t
he V8 engine whims, feature detection in old core-js versions could cause a slowdown up to 100x
even if nothing is polyfilled. Please, upgrade your dependencies to the actual version of core
-js.
[2/4] Fetching packages...
info fsevents@2.3.2: The platform "win32" is incompatible with this module.
info "fsevents@2.3.2" is an optional dependency and failed compatibility check. Excluding it fr
om installation.
[3/4] Linking dependencies...
[4/4] Building fresh packages...
success Saved lockfile.
success Saved 203 new dependencies.
info Direct dependencies
├─ @babel/cli@7.13.16
├─ @babel/core@7.14.2
├─ @babel/preset-env@7.14.2
└─ babel-plugin-transform-class-properties@6.24.1
info All dependencies
├─ @babel/cli@7.13.16
└─ @babel/compat-data@7.14.0

```

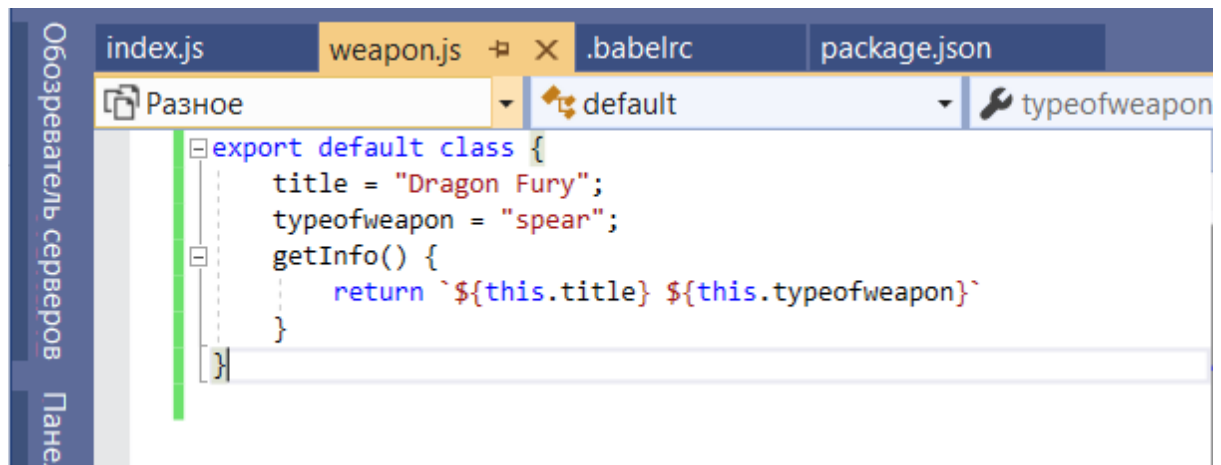
Изменение файла .babelrc:

```

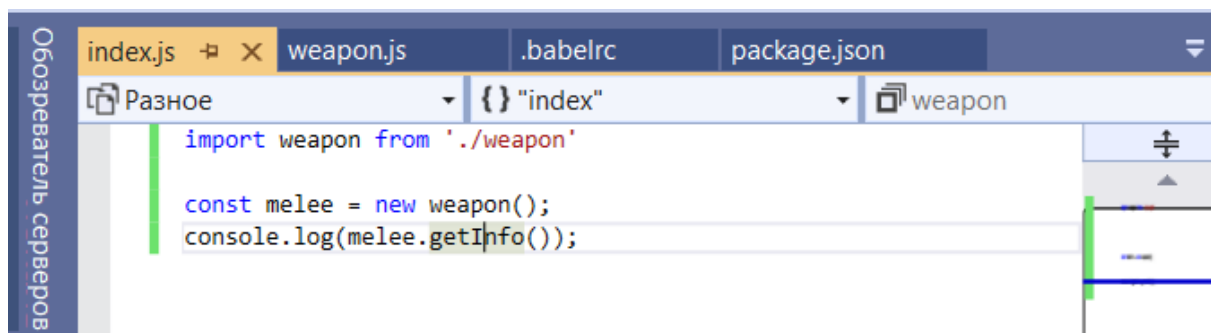
1 {
2   "presets" :["@babel/preset-env"],
3   "plugins": ["transform-class-properties"]
4 }

```

Создание файла weapon.js:



Импорт класса в файле index.js:



Сборка проекта:

```
PS D:\babel\lib> npm run build
```

```
> babel@1.0.0 build D:\babel
```

```
> babel src -d lib
```

```
Successfully compiled 2 files with Babel (1258ms).
```

Выполнение файла index.js:

```
PS D:\babel\lib> node index.js
```

```
Dragon Fury spear
```