



HTML и CSS. Адаптивная вёрстка и автоматизация

Уровень 2, с 21 ноября 2022 по 30 января 2023

Меню курса

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8.17. Сборка проекта

На лайве этого раздела мы написали код для сборки проекта. Ниже мы предоставляем исходный код сборки для того, чтобы вы смогли сравнить его со своим кодом. В конце статьи показана сборка для node.js 12 версии.

Сборка на Less

package.json

```
{
  "private": true,
  "devDependencies": {
    "@htmlacademy/editorconfig-cli": "1.0.0",
    "autoprefixer": "10.4.0",
    "browser-sync": "2.27.7",
    "del": "6.0.0",
    "gulp": "4.0.2",
    "gulp-less": "5.0.0",
    "gulp-libsquoosh": "^1.0.12",
    "gulp-plumber": "1.2.1",
    "gulp-postcss": "9.0.1",
    "gulp-rename": "2.0.0",
    "gulp-svgmin": "^4.1.0",
    "gulp-svgstore": "8.0.0",
    "gulp-terser": "2.1.0",
    "postcss": "8.3.11",
    "postcss-csso": "5.0.1",
    "stylelint": "13.13.1",
```

```

    "stylelint-config-htmlacademy": "^0.1.11"
  },
  "scripts": {
    "editorconfig": "editorconfig-cli",
    "stylelint": "stylelint \"source/less/**/*.less\" --syntax less",
    "lint": "npm run editorconfig && npm run stylelint",
    "build": "gulp build",
    "start": "gulp"
  },
  "browserslist": [
    "last 2 versions",
    "not dead",
    "not ie <= 11",
    "not op_mini all",
    "not < 0.25%"
  ],
  "editorconfig-cli": [
    "*.json",
    "*.js",
    "source/*.html",
    "source/js/**/*.js",
    "source/img/**/*.svg",
    "source/less/**/*.less"
  ],
  "engines": {
    "node": "16.13.0"
  },
  "type": "module"
}

```

gulpfile.js

```

import gulp from 'gulp';
import plumber from 'gulp-plumber';
import less from 'gulp-less';
import postcss from 'gulp-postcss';
import autoprefixer from 'autoprefixer';
import csso from 'postcss-csso';

```

```
import rename from 'gulp-rename';
import terser from 'gulp-terser';
import squoosh from 'gulp-libsquoosh';
import svgo from 'gulp-svgmin';
import svgstore from 'gulp-svgstore';
import del from 'del';
import browser from 'browser-sync';

// Styles

export const styles = () => {
return gulp.src('source/less/style.less', { sourcemaps: true })
.pipe(plumber())
.pipe(less())
.pipe(postcss([
autoprefixer(),
csso()
])))
.pipe(rename('style.min.css'))
.pipe(gulp.dest('build/css', { sourcemaps: '.' })))
.pipe(browser.stream());
}

// HTML

const html = () => {
return gulp.src('source/*.html')
.pipe(gulp.dest('build'));
}

// Scripts

const scripts = () => {
return gulp.src('source/js/script.js')
.pipe(gulp.dest('build/js'))
.pipe(browser.stream());
}

// Images

const optimizeImages = () => {
return gulp.src('source/img/**/*.{png,jpg}')
.pipe(squoosh())
.pipe(gulp.dest('build/img'))
}
```

```
const copyImages = () => {
  return gulp.src('source/img/**/*.{png,jpg}')
    .pipe(gulp.dest('build/img'))
}

// WebP

const createWebp = () => {
  return gulp.src('source/img/**/*.{png,jpg}')
    .pipe(squoosh({
      webp: {}
    })))
    .pipe(gulp.dest('build/img'))
}

// SVG

const svg = () =>
  gulp.src(['source/img/*.svg', '!source/img/icons/*.svg'])
    .pipe(svgo())
    .pipe(gulp.dest('build/img'));

const sprite = () => {
  return gulp.src('source/img/icons/*.svg')
    .pipe(svgo())
    .pipe(svgstore({
      inlineSvg: true
    })))
    .pipe(rename('sprite.svg'))
    .pipe(gulp.dest('build/img'));
}

// Copy

const copy = (done) => {
  gulp.src([
    'source/fonts/**/*.{woff2,woff}',
    'source/*.ico',
  ], {
    base: 'source'
  })
    .pipe(gulp.dest('build'))
  done();
}
```

```
// Clean
```

```
const clean = () => {  
  return del('build');  
};
```

```
// Server
```

```
const server = (done) => {  
  browser.init({  
    server: {  
      baseDir: 'build'  
    },  
    cors: true,  
    notify: false,  
    ui: false,  
  });  
  done();  
}
```

```
// Reload
```

```
const reload = (done) => {  
  browser.reload();  
  done();  
}
```

```
// Watcher
```

```
const watcher = () => {  
  gulp.watch('source/less/**/*.less', gulp.series(styles));  
  gulp.watch('source/js/script.js', gulp.series(scripts));  
  gulp.watch('source/*.html', gulp.series(html, reload));  
}
```

```
// Build
```

```
export const build = gulp.series(  
  clean,  
  copy,  
  optimizeImages,  
  gulp.parallel(  
    styles,  
    html,  
    scripts,
```

```
svg,  
sprite,  
createWebp  
)  
);  
  
// Default  
export default gulp.series(  
  clean,  
  copy,  
  copyImages,  
  gulp.parallel(  
    styles,  
    html,  
    scripts,  
    svg,  
    sprite,  
    createWebp  
  ),  
  gulp.series(  
    server,  
    watcher  
  ));
```

Сборка на SASS

package.json

```
{  
  "private": true,  
  "devDependencies": {  
    "@htmlacademy/editorconfig-cli": "1.0.0",  
    "autoprefixer": "10.4.0",  
    "browser-sync": "2.27.7",  
    "del": "6.0.0",  
    "gulp": "4.0.2",  
    "gulp-dart-sass": "^1.0.2",  
    "gulp-libsquoosh": "^1.0.12",
```

```
"gulp-plumber": "1.2.1",
"gulp-postcss": "9.0.1",
"gulp-rename": "2.0.0",
"gulp-svgmin": "^4.1.0",
"gulp-svgstore": "8.0.0",
"gulp-terser": "2.1.0",
"postcss": "8.3.11",
"postcss-cssnano": "5.0.1",
"stylelint": "13.13.1",
"stylelint-config-htmlacademy": "^0.1.11"
},
"scripts": {
  "editorconfig": "editorconfig-cli",
  "stylelint": "stylelint \"source/sass/**/*.scss\" --syntax scss",
  "lint": "npm run editorconfig && npm run stylelint",
  "build": "gulp build",
  "start": "gulp"
},
"browserslist": [
  "last 2 versions",
  "not dead",
  "not ie <= 11",
  "not op_mini all",
  "not < 0.25%"
],
"editorconfig-cli": [
  "*.json",
  "*.js",
  "source/*.html",
  "source/js/**/*.js",
  "source/img/**/*.svg",
  "source/sass/**/*.scss"
],
"engines": {
  "node": "16.13.0"
},
"type": "module"
}
```

Node.js 12

Сборка на Less

package.json

```
{
  "private": true,
  "devDependencies": {
    "@htmlacademy/editorconfig-cli": "1.0.0",
    "autoprefixer": "10.2.5",
    "browser-sync": "2.26.14",
    "del": "6.0.0",
    "gulp": "4.0.2",
    "gulp-imagemin": "7.1.0",
    "gulp-less": "4.0.1",
    "gulp-plumber": "1.2.1",
    "gulp-postcss": "9.0.0",
    "gulp-rename": "2.0.0",
    "gulp-sourcemaps": "3.0.0",
    "gulp-svgstore": "7.0.1",
    "gulp-terser": "2.0.1",
    "gulp-webp": "4.0.1",
    "postcss": "8.2.10",
    "postcss-csso": "5.0.1",
    "stylelint": "13.12.0",
    "stylelint-config-htmlacademy": "0.1.4"
  },
  "scripts": {
    "editorconfig": "editorconfig-cli",
    "stylelint": "stylelint \"source/less/**/*.less\" --syntax less",
    "lint": "npm run editorconfig && npm run stylelint",
    "build": "gulp build",
    "start": "gulp"
  },
  "browserslist": [
    "last 2 versions",
    "not dead",
    "not ie <= 11"
  ],
  "editorconfig-cli": [
```



```
    "*.json",
    "*.js",
    "source/*.html",
    "source/js/**/*.js",
    "source/img/**/*.svg",
    "source/less/**/*.less"
  ],
  "engines": {
    "node": "14.15.0"
  }
}
```

gulpfile.js

```
const gulp = require("gulp");
const plumber = require("gulp-plumber");
const sourcemap = require("gulp-sourcemaps");
const less = require("gulp-less");
const postcss = require("gulp-postcss");
const autoprefixer = require("autoprefixer");
const csso = require("postcss-csso");
const rename = require("gulp-rename");
const terser = require("gulp-terser");
const imagemin = require("gulp-imagemin");
const webp = require("gulp-webp");
const svgstore = require("gulp-svgstore");
const del = require("del");
const sync = require("browser-sync").create();

// Styles

const styles = () => {
  return gulp.src("source/less/style.less")
    .pipe(plumber())
    .pipe(sourcemap.init())
    .pipe(less())
    .pipe(postcss([
      autoprefixer(),
      csso()
    ]))
```

```
]))
.pipe(rename("style.min.css"))
.pipe(sourcemaps.write("."))
.pipe(gulp.dest("build/css"))
.pipe(sync.stream());
}

exports.styles = styles;

// HTML

const html = () => {
return gulp.src("source/*.html")
.pipe(gulp.dest("build"));
}

// Scripts

const scripts = () => {
return gulp.src("source/js/script.js")
.pipe(uglify())
.pipe(rename("script.min.js"))
.pipe(gulp.dest("build/js"))
.pipe(sync.stream());
}

exports.scripts = scripts;

// Images

const optimizeImages = () => {
return gulp.src("source/img/**/*.{png,jpg,svg}")
.pipe(imagemin([
imagemin.mozjpeg({progressive: true}),
imagemin.optipng({optimizationLevel: 3}),
imagemin.svgo()
]))
.pipe(gulp.dest("build/img"))
}

exports.images = optimizeImages;

const copyImages = () => {
return gulp.src("source/img/**/*.{png,jpg,svg}")
```

```
.pipe(gulp.dest("build/img"))
}

exports.images = copyImages;

// WebP

const createWebp = () => {
return gulp.src("source/img/**/*.{jpg,png}")
.pipe(webp({quality: 90}))
.pipe(gulp.dest("build/img"))
}
```

```
exports.createWebp = createWebp;
```

```
// Sprite

const sprite = () => {
return gulp.src("source/img/icons/*.svg")
.pipe(svgstore({
inlineSvg: true
}))
.pipe(rename("sprite.svg"))
.pipe(gulp.dest("build/img"));
}
```

```
exports.sprite = sprite;
```

```
// Copy

const copy = (done) => {
gulp.src([
"source/fonts/*.{woff2,woff}",
"source/*.ico",
"source/img/**/*.{svg}",
"!source/img/icons/*.svg",
], {
base: "source"
})
.pipe(gulp.dest("build"))
done();
}
```

```
exports.copy = copy;
```

```
// Clean
```

```
const clean = () => {  
  return del("build");  
};
```

```
// Server
```

```
const server = (done) => {  
  sync.init({  
    server: {  
      baseDir: "build"  
    },  
    cors: true,  
    notify: false,  
    ui: false,  
  });  
  done();  
}
```

```
exports.server = server;
```

```
// Reload
```

```
const reload = (done) => {  
  sync.reload();  
  done();  
}
```

```
// Watcher
```

```
const watcher = () => {  
  gulp.watch("source/less/**/*.less", gulp.series(styles));  
  gulp.watch("source/js/script.js", gulp.series(scripts));  
  gulp.watch("source/*.html", gulp.series(html, reload));  
}
```

```
// Build
```

```
const build = gulp.series(  
  clean,  
  copy,  
  optimizeImages,  
  gulp.parallel(  
    styles,
```

```
html,  
scripts,  
sprite,  
createWebp  
),  
);  
  
exports.build = build;  
  
// Default  
exports.default = gulp.series(  
clean,  
copy,  
copyImages,  
gulp.parallel(  
styles,  
html,  
scripts,  
sprite,  
createWebp  
),  
gulp.series(  
server,  
watcher  
));
```

Сборка на SASS

package.json

```
{  
  "private": true,  
  "devDependencies": {  
    "@htmlacademy/editorconfig-cli": "1.0.0",  
    "autoprefixer": "10.2.5",  
    "browser-sync": "2.26.14",  
    "del": "6.0.0",  
    "gulp": "4.0.2",  
    "gulp-imagemin": "7.1.0",
```

```
"gulp-sass": "4.1.0",
"gulp-plumber": "1.2.1",
"gulp-postcss": "9.0.0",
"gulp-rename": "2.0.0",
"gulp-sourcemaps": "3.0.0",
"gulp-svgstore": "7.0.1",
"gulp-terser": "2.0.1",
"gulp-webp": "4.0.1",
"postcss": "8.2.10",
"postcss-cssnano": "5.0.1",
"stylelint": "13.12.0",
"stylelint-config-htmlacademy": "0.1.4"
},
"scripts": {
  "editorconfig": "editorconfig-cli",
  "stylelint": "stylelint \"source/sass/**/*.scss\" --syntax scss",
  "lint": "npm run editorconfig && npm run stylelint",
  "build": "gulp build",
  "start": "gulp"
},
"browserslist": [
  "last 2 versions",
  "not dead",
  "not ie <= 11"
],
"editorconfig-cli": [
  "*.json",
  "*.js",
  "source/*.html",
  "source/js/**/*.js",
  "source/img/**/*.svg",
  "source/sass/**/*.scss"
],
"engines": {
  "node": "14.15.0"
}
}
```

```
const gulp = require("gulp");
const plumber = require("gulp-plumber");
const sourcemap = require("gulp-sourcemaps");
const sass = require("gulp-sass");
const postcss = require("gulp-postcss");
const autoprefixer = require("autoprefixer");
const csso = require("postcss-csso");
const rename = require("gulp-rename");
const terser = require("gulp-terser");
const imagemin = require("gulp-imagemin");
const webp = require("gulp-webp");
const svgstore = require("gulp-svgstore");
const del = require("del");
const sync = require("browser-sync").create();
```

// Styles

```
const styles = () => {
return gulp.src("source/sass/style.scss")
.pipe(plumber())
.pipe(sourcemap.init())
.pipe(sass())
.pipe(postcss([
autoprefixer(),
csso()
])))
.pipe(rename("style.min.css"))
.pipe(sourcemap.write("."))
.pipe(gulp.dest("build/css"))
.pipe(sync.stream());
}
```

```
exports.styles = styles;
```

// HTML

```
const html = () => {
return gulp.src("source/*.html")
.pipe(gulp.dest("build"));
}
```

// Scripts

```
const scripts = () => {
  return gulp.src("source/js/script.js")
    .pipe(terser())
    .pipe(rename("script.min.js"))
    .pipe(gulp.dest("build/js"))
    .pipe(sync.stream());
}

exports.scripts = scripts;

// Images

const optimizeImages = () => {
  return gulp.src("source/img/**/*.{png,jpg,svg}")
    .pipe(imagemin([
      imagemin.mozjpeg({progressive: true}),
      imagemin.optipng({optimizationLevel: 3}),
      imagemin.svggo()
    ]))
    .pipe(gulp.dest("build/img"))
}

exports.images = optimizeImages;

const copyImages = () => {
  return gulp.src("source/img/**/*.{png,jpg,svg}")
    .pipe(gulp.dest("build/img"))
}

exports.images = copyImages;

// WebP

const createWebp = () => {
  return gulp.src("source/img/**/*.{jpg,png}")
    .pipe(webp({quality: 90}))
    .pipe(gulp.dest("build/img"))
}

exports.createWebp = createWebp;

// Sprite

const sprite = () => {
  return gulp.src("source/img/icons/*.svg")
```



```
.pipe(svgstore({
  inlineSvg: true
})))
.pipe(rename("sprite.svg"))
.pipe(gulp.dest("build/img"));
}
```

```
exports.sprite = sprite;
```

```
// Copy
```

```
const copy = (done) => {
  gulp.src([
    "source/fonts/*.woff2,woff",
    "source/*.ico",
    "source/img/**/*.svg",
    "!source/img/icons/*.svg",
  ], {
    base: "source"
  })
  .pipe(gulp.dest("build"))
  done();
}
```

```
exports.copy = copy;
```

```
// Clean
```

```
const clean = () => {
  return del("build");
};
```

```
// Server
```

```
const server = (done) => {
  sync.init({
    server: {
      baseDir: "build"
    },
    cors: true,
    notify: false,
    ui: false,
  });
  done();
}
```

```
exports.server = server;

// Reload

const reload = (done) => {
  sync.reload();
  done();
}

// Watcher

const watcher = () => {
  gulp.watch("source/sass/**/*.scss", gulp.series(styles));
  gulp.watch("source/js/script.js", gulp.series(scripts));
  gulp.watch("source/*.html", gulp.series(html, reload));
}

// Build

const build = gulp.series(
  clean,
  copy,
  optimizeImages,
  gulp.parallel(
    styles,
    html,
    scripts,
    sprite,
    createWebp
  ),
);

exports.build = build;

// Default
exports.default = gulp.series(
  clean,
  copy,
  copyImages,
  gulp.parallel(
    styles,
    html,
    scripts,
    sprite,
    createWebp
```

```
),  
gulp.series(  
  server,  
  watcher  
));
```

Прочитали статью?

Нажмите кнопку «Готово», чтобы сохранить прогресс.

Готово

⚠ Если вы обнаружили ошибку или неработающую ссылку, выделите ее и нажмите Ctrl + Enter

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Vue.js 3. Разработка клиентских приложений

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С чего начать

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Отчеты о курсах

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Фронтенд-разработчик

JavaScript-разработчик

Фулстек-разработчик

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Для учителей

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Форум

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