

This example illustrates how common modules from deep ancestors of an entry point can be split into a separate common chunk

- `pageA` and `pageB` are dynamically required
- `pageC` and `pageA` both require the `reusableComponent`
- `pageB` dynamically requires `PageC`

You can see that webpack outputs five files/chunks:

- `output.js` is the entry chunk and contains
 - the module system
 - chunk loading logic
 - the entry point `example.js`
- `0.output.js` is an additional chunk
 - module `reusableComponent`
- `1.output.js` is an additional chunk
 - module `pageB`
- `2.output.js` is an additional chunk
 - module `pageA`
- `3.output.js` is an additional chunk
 - module `pageC`

example.js

```
var main = function() {
  console.log("Main class");
  require.ensure([], () => {
    const page = require("./pageA");
    page();
  });
  require.ensure([], () => {
    const page = require("./pageB");
    page();
  });
};

main();
```

pageA.js

```
var reusableComponent = require("./reusableComponent");

module.exports = function() {
  console.log("Page A");
  reusableComponent();
};
```

pageB.js

```
module.exports = function() {  
  console.log("Page B");  
  require.ensure([], ()=>{  
    const page = require("./pageC");  
    page();  
  });  
};
```

pageC.js

```
var reusableComponent = require("./reusableComponent");  
  
module.exports = function() {  
  console.log("Page C");  
  reusableComponent();  
};
```

reusableComponent.js

```
module.exports = function() {  
  console.log("reusable Component");  
};
```

webpack.config.js

```
"use strict";  
const path = require("path");  
  
module.exports = {  
  // mode: "development" || "production",  
  entry: {  
    main: ["./example.js"]  
  },  
  optimization: {  
    splitChunks: {  
      minSize: 0 // This example is too small, in practice you can use the  
defaults  
    },  
    chunkIds: "deterministic" // To keep filename consistent between different
```

```

modes (for example building only)
  },
  output: {
    path: path.resolve(__dirname, "dist"),
    filename: "output.js"
  }
};

```

dist/output.js

```

/*****/ (() => { // webpackBootstrap
/*****/      var __webpack_modules__ = ({});

```

► /* webpack runtime code */

```

var __webpack_exports__ = {};
/*!*****!\
!*** ./example.js ***!
\*****/
/*! unknown exports (runtime-defined) */
/*! runtime requirements: __webpack_require__, __webpack_require__.e,
__webpack_require__(* */
var main = function() {
  console.log("Main class");
  Promise.all([/*! require.ensure */[__webpack_require__.e(421),
__webpack_require__.e(366)]).then(() => {
    const page = __webpack_require__(/*! ./pageA */ 1);
    page();
  }).bind(null, __webpack_require__)).catch(__webpack_require__.oe);
  __webpack_require__.e([/*! require.ensure */ 588]).then(() => {
    const page = __webpack_require__(/*! ./pageB */ 3);
    page();
  }).bind(null, __webpack_require__).catch(__webpack_require__.oe);
};

main();

/*****/ }) ()
;

```

dist/366.output.js

```

(self["webpackChunk"] = self["webpackChunk"] || []).push([[366],[
/* 0 */,
/* 1 */
/*!*****!\

```

```

    !*** ./pageA.js ***!
    \*****/
    /*! unknown exports (runtime-defined) */
    /*! runtime requirements: module, __webpack_require__ */
    /*! CommonJS bailout: module.exports is used directly at 3:0-14 */
    /***/ ((module, __unused_webpack_exports, __webpack_require__) => {

    var reusableComponent = __webpack_require__(/*! ./reusableComponent */ 2);

    module.exports = function() {
        console.log("Page A");
        reusableComponent();
    };

    /***/ })
    ]});

```

dist/588.output.js

```

(self["webpackChunk"] = self["webpackChunk"] || []).push([[588],{

/***/ 3:
/*!*****!*\
    !*** ./pageB.js ***!
    \*****/
    /*! unknown exports (runtime-defined) */
    /*! runtime requirements: module, __webpack_require__, __webpack_require__.e,
    __webpack_require__(* */
    /*! CommonJS bailout: module.exports is used directly at 1:0-14 */
    /***/ ((module, __unused_webpack_exports, __webpack_require__) => {

    module.exports = function() {
        console.log("Page B");
        Promise.all(/*! require.ensure */[__webpack_require__.e(421),
        __webpack_require__.e(145)]).then(()=>{
            const page = __webpack_require__(/*! ./pageC */ 4);
            page();
        }).bind(null, __webpack_require__).catch(__webpack_require__.oe);
    };

    /***/ })

    ]});

```

dist/145.output.js

```

(self["webpackChunk"] = self["webpackChunk"] || []).push([[145],{

/***/ 4:
/*!*****!\
  !*** ./pageC.js ***!
  \*****/
  /*! unknown exports (runtime-defined) */
  /*! runtime requirements: module, __webpack_require__ */
  /*! CommonJS bailout: module.exports is used directly at 3:0-14 */
/***/ ((module, __unused_webpack_exports, __webpack_require__) => {

var reusableComponent = __webpack_require__(/*! ./reusableComponent */ 2);

module.exports = function() {
  console.log("Page C");
  reusableComponent();
};

/***/ })

}]);

```

dist/421.output.js

```

(self["webpackChunk"] = self["webpackChunk"] || []).push([[421],{

/***/ 2:
/*!*****!\
  !*** ./reusableComponent.js ***!
  \*****/
  /*! unknown exports (runtime-defined) */
  /*! runtime requirements: module */
  /*! CommonJS bailout: module.exports is used directly at 1:0-14 */
/***/ ((module) => {

module.exports = function() {
  console.log("reusable Component");
};

/***/ })

}]);

```

Info

Unoptimized

```
asset output.js 9.11 KiB [emitted] (name: main)
asset 588.output.js 736 bytes [emitted]
asset 366.output.js 558 bytes [emitted]
asset 145.output.js 552 bytes [emitted]
asset 421.output.js 434 bytes [emitted]
chunk (runtime: main) 145.output.js 136 bytes [rendered]
  > ./pageB.js 3:1-6:3
  ./pageC.js 136 bytes [built] [code generated]
    [used exports unknown]
    cjs require ./pageC ./pageB.js 4:15-33
    cjs self exports reference ./pageC.js 3:0-14
chunk (runtime: main) output.js (main) 220 bytes (javascript) 4.98 KiB (runtime)
[entry] [rendered]
  > ./example.js main
  runtime modules 4.98 KiB 6 modules
  ./example.js 220 bytes [built] [code generated]
    [used exports unknown]
    entry ./example.js main
chunk (runtime: main) 366.output.js 136 bytes [rendered]
  > ./example.js 3:1-6:3
  ./pageA.js 136 bytes [built] [code generated]
    [used exports unknown]
    cjs require ./pageA ./example.js 4:15-33
    cjs self exports reference ./pageA.js 3:0-14
chunk (runtime: main) 421.output.js 69 bytes [rendered] split chunk (cache group:
default)
  > ./example.js 3:1-6:3
  > ./pageB.js 3:1-6:3
  ./reusableComponent.js 69 bytes [built] [code generated]
    [used exports unknown]
    cjs require ./reusableComponent ./pageA.js 1:24-54
    cjs require ./reusableComponent ./pageC.js 1:24-54
    cjs self exports reference ./reusableComponent.js 1:0-14
chunk (runtime: main) 588.output.js 133 bytes [rendered]
  > ./example.js 7:1-10:3
  ./pageB.js 133 bytes [built] [code generated]
    [used exports unknown]
    cjs require ./pageB ./example.js 8:15-33
    cjs self exports reference ./pageB.js 1:0-14
webpack 5.51.1 compiled successfully
```

Production mode

```
asset output.js 1.8 KiB [emitted] [minimized] (name: main)
asset 588.output.js 198 bytes [emitted] [minimized]
asset 145.output.js 134 bytes [emitted] [minimized]
asset 366.output.js 134 bytes [emitted] [minimized]
asset 421.output.js 123 bytes [emitted] [minimized]
```

```
chunk (runtime: main) 145.output.js 136 bytes [rendered]
> ./pageB.js 3:1-6:3
./pageC.js 136 bytes [built] [code generated]
[used exports unknown]
cjs require ./pageC ./pageB.js 4:15-33
cjs self exports reference ./pageC.js 3:0-14
chunk (runtime: main) output.js (main) 220 bytes (javascript) 4.98 KiB (runtime)
[entry] [rendered]
> ./example.js main
runtime modules 4.98 KiB 6 modules
./example.js 220 bytes [built] [code generated]
[no exports used]
entry ./example.js main
chunk (runtime: main) 366.output.js 136 bytes [rendered]
> ./example.js 3:1-6:3
./pageA.js 136 bytes [built] [code generated]
[used exports unknown]
cjs require ./pageA ./example.js 4:15-33
cjs self exports reference ./pageA.js 3:0-14
chunk (runtime: main) 421.output.js 69 bytes [rendered] split chunk (cache group:
default)
> ./example.js 3:1-6:3
> ./pageB.js 3:1-6:3
./reusableComponent.js 69 bytes [built] [code generated]
[used exports unknown]
cjs require ./reusableComponent ./pageA.js 1:24-54
cjs require ./reusableComponent ./pageC.js 1:24-54
cjs self exports reference ./reusableComponent.js 1:0-14
chunk (runtime: main) 588.output.js 133 bytes [rendered]
> ./example.js 7:1-10:3
./pageB.js 133 bytes [built] [code generated]
[used exports unknown]
cjs require ./pageB ./example.js 8:15-33
cjs self exports reference ./pageB.js 1:0-14
webpack 5.51.1 compiled successfully
```