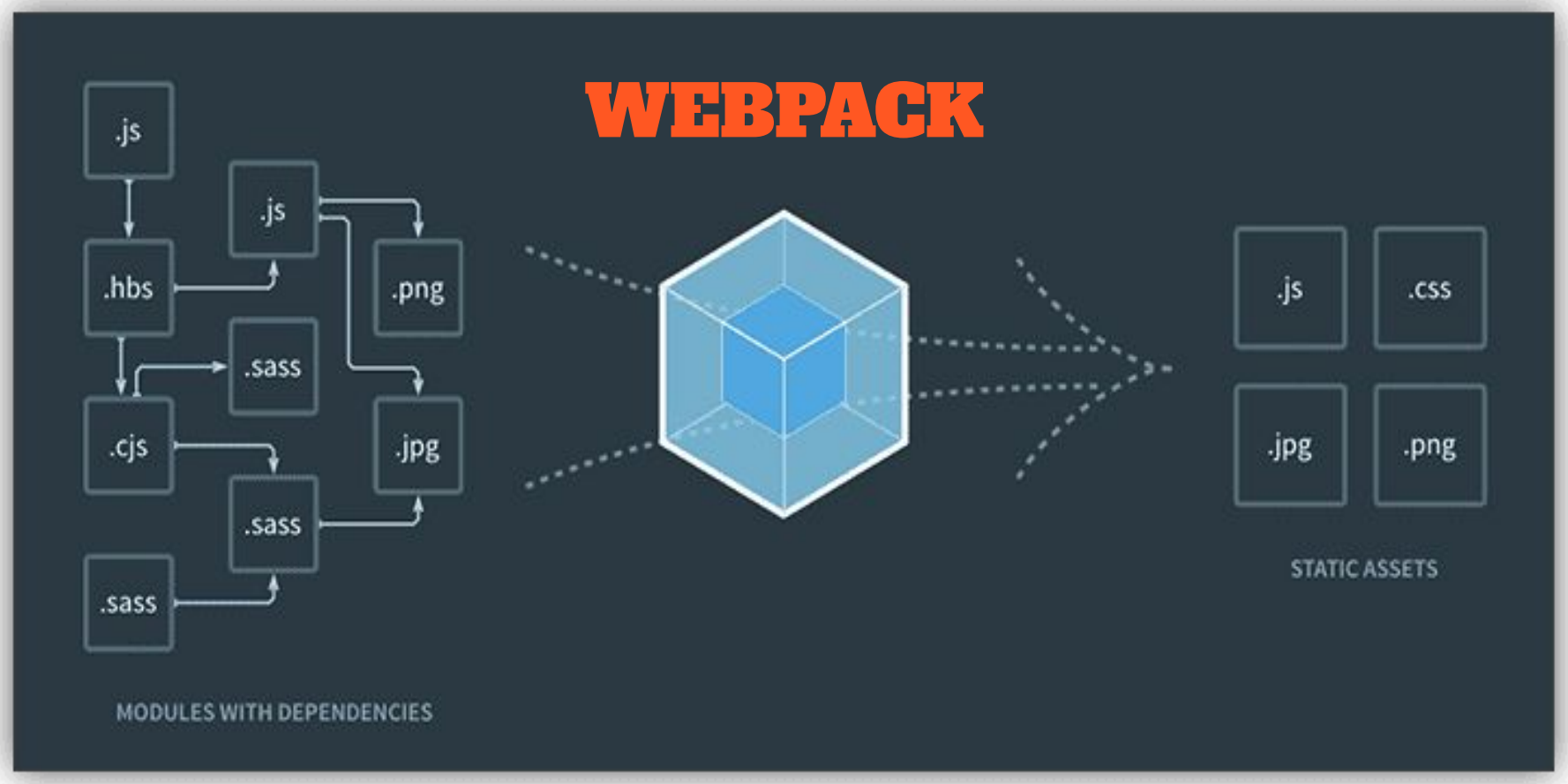
WEBPACK
.js
.js
.hbs
.png
.sass
.cjs
.jpg
.sass
.sass
MODULES WITH DEPENDENCIES
.js
.css
.jpg
.png
STATIC ASSETS

What is webpack ?

Malak AL-Salman

- A webpack is a builder tool, also called a compiler or modular(Module Bundler) .
- It is used in web applications to make a number of component file types, and can be called when needed via the require() function.
- These files can be Javascript, CSS, or even images and fonts.

Malak AL-Salman

One of the ways in managing dependencies in our projects was to add JavaScript files one by one - taking into account the order - using the <script> tag, before closing the <body> tag:

```
<script src="jquery.min.js"></script>
<script src="jquery.some.plugin.js"></script>
<script src="script.js"></script>
```

This method is not good for several reasons:

- First, we make several HTTP requests to fetch the files concerned, which means more server usage and increased page load time.
- Then the biggest problem is the use of global variables and thus the risk and possibility of conflict between them

As for Webpack, and this is its main feature, it makes it possible for us to import all kinds of project dependencies (not just Javascript) from images, fonts, CSS files In modern applications, such as React.js, that depend on the concept of components or components

Malak AL-Salman

- `npm init`

  can be used to set up a new or existing npm package

- `npm install webpack webpack-cli --save-dev`

  install/setup webpack & webpack cli

Webpack Configuration

- **entry** : The name of the starting file
- **output** :
  - File name
  - Path
- **mode** :
  - 'none'
  - 'development'
  - 'production'

require function

is the easiest way to include modules that exist in separate files. The basic functionality of `require` is that it reads a JavaScript file, executes the file, and then proceeds to return the `exports` object

`__dirname`

is an environment variable that tells you the absolute path of the directory containing the currently executing file.