

# Web Development Tools

**JavaScript fundamentals** 



#### Introduction

#### The Open Web Development Stack

- Using third-party Packages and dependency management
- Automation support and Continuous Development
- Version control and package management
- Working with the Command Line and Terminal
- Continuous Development and a DevOps Methodology

#### **Q^ Node & NPM**

- Node.js is an open-source command line tool for server side JS.
  - The script is executed by the V8 JavaScript engine.

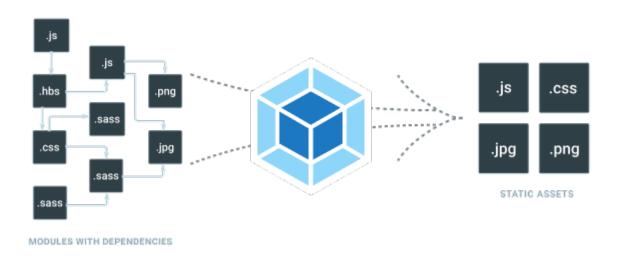
NPM manages dependencies for an application via the command line.





#### **Q^** webpack

- webpack is a module bundler for modern JavaScript applications
- Entry points define where webpack starts. From here, it builds a graph of your applications dependencies
- Output tells webpack where to emit the bundled code
- Loaders teach webpack how to handle assets that aren't JavaScript
- Plugins are used to perform actions and add custom functionality for our bundled code



### **Q^** What is Core-js?

- A JavaScript transpiler
- JavaScript in : JavaScript Out Used for "polyfills"
- It implements modern features in older, less capable browsers

Not required, but still used by companies (namely Apple) and some government organisations

Good to know how to use it as many companies still rely on older browsers



## QuickLab 15 - Create a webpack deployment

Use NPM and webpack to prepare JavaScript to be deployed



#### CONCLUSION



- Integrated development environments and enhanced text editors
- Debugging tools
- Using third-party packages and dependency management
- Automation support and continuous development
- Version control and package management
- Working with the command line and terminal
- Continuous development and a DevOps methodology

