Module bundler

AGENDA

1. Overview
2. ViteJS

1. Overview

Module: when a js file import a another file, it's a module.

```
root
|__ utils.js    # export function sayHello() {}
|__ main.js     # import { sayHello } from './utils.js'
|__ index.html  # <script type="module" src="./main.js" />
```

There are some common module types: CommonJS, AMD, UMD, **ESM** (ECMAScript Modules)

> Browser support ESM: https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Modules

Some common issues when building web application:

- Code is not optimized (minify, uglify, unused code, ...)
- New syntax is not supported on browser

--> Task Runner or Module Bundlers
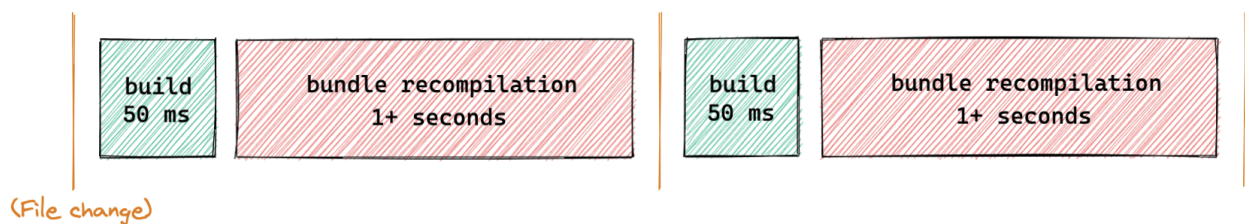
Task Runner: Grunt, Gulp

- Provides the capability to execute tasks sequentially or concurrently on the files
- No initial setup --> Define each task to have your build process.
- Less usages in projects atm.

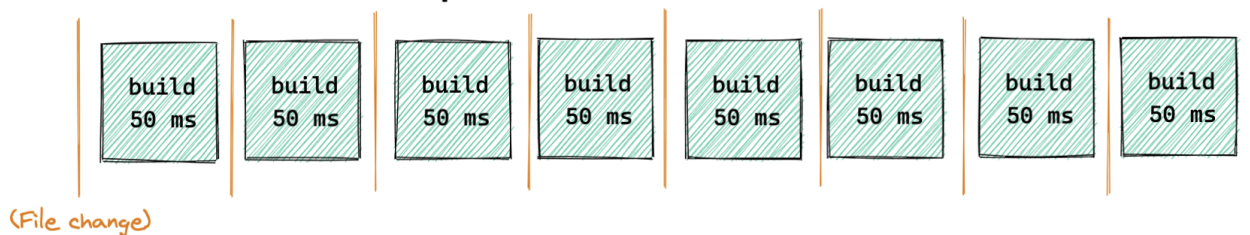**Module Bundler**: Webpack, Rollup, Parcel, ...

- Gain popular in 2015-2017
- Have abstracted the pain of tooling and provide an optimized & performance-centric solution to generate static assets.
- Code transformanation
- Tree shaking
- Hot Module Replacement
- ...

Source: https://medium.com/@rajatgms/why-do-we-need-a-module-bundler-c5ff221523f5

Source: https://www.snowpack.dev/concepts/how-snowpack-works

2. Why ViteJS

Read more: https://vitejs.dev/guide/why.html

Source: https://vitejs.dev/guide/why.html#slow-server-start
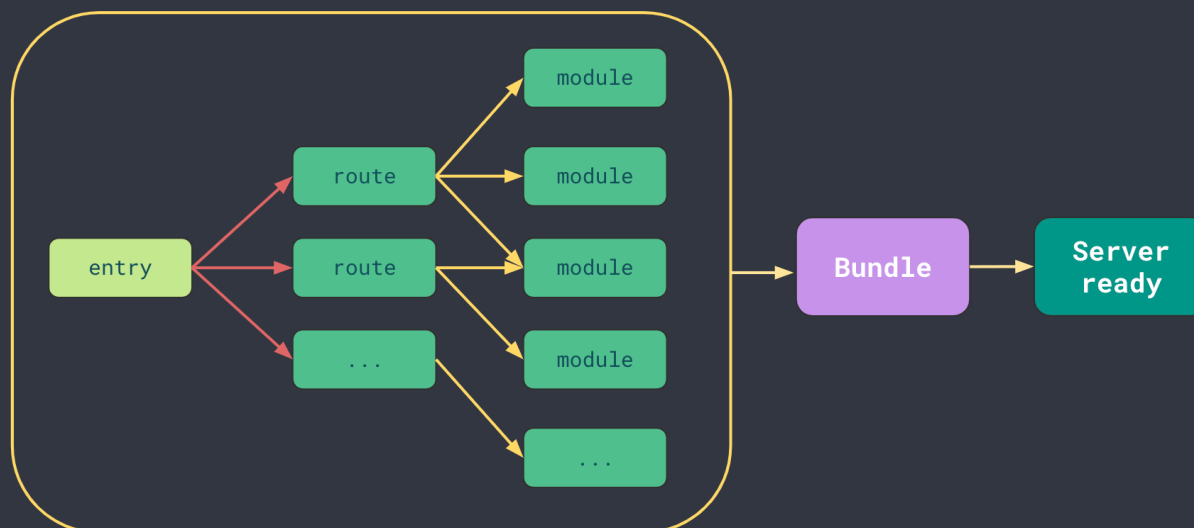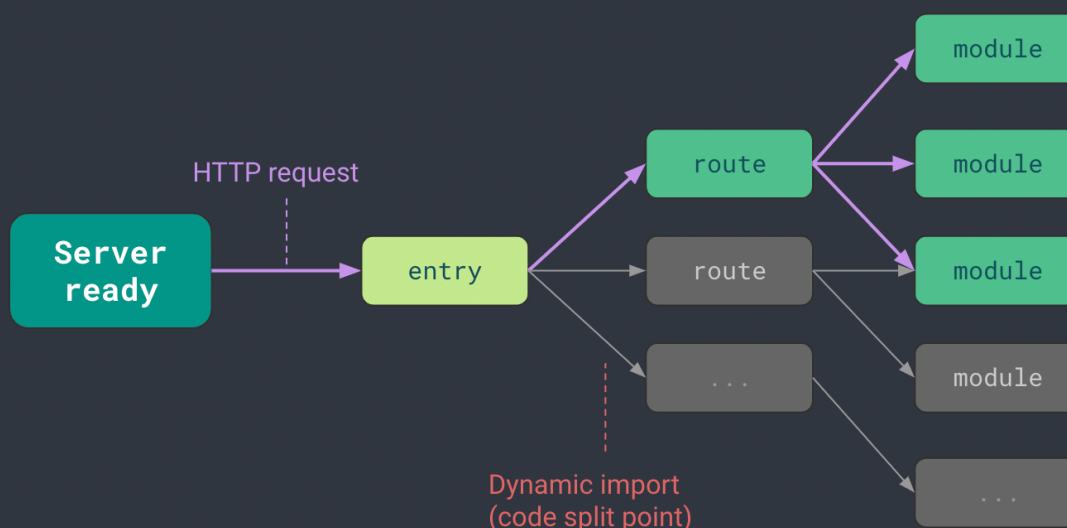
Watch for Vite introduction: https://youtu.be/3ADapNcDLZU

Tham khảo

- https://www.toptal.com/front-end/webpack-browserify-gulp-which-is-better
- https://medium.com/@rajatgms/why-do-we-need-a-module-bundler-c5ff221523f5
- https://webpack.js.org/concepts/#entry

Khoá học Javascript cho người mới bắt đầu 2021🎉

- Tác giả: **Hậu Nguyễn** - Founder Easy Frontend
- Khoá học chỉ được published trên Udemy, không thông qua trung gian.
- Khoá học không bán dạng videos upload trên Google Drive hay bất cứ hình thức nào tương tự.
- Khoá học có nhóm discord để hỗ trợ trong quá trình học tập.

☎️ Liên hệ tác giả để được hỗ trợ:

- ✅ Facebook: https://www.facebook.com/nvhauesmn/
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