

NPM and node packages

Week 1, Day 2



Agenda

- package.json
- Adding a package
- Project scripts
- .gitignore

NPM and node packages



Using our own code:

```
lib.js: `export default thing`
index.js: `import thing from './lib.js'`
```

Using external code:

- Useful code is widely hosted on the internet.
- NPM stands for 'Node Package Manager' and allows us to install packages.
- Located at https://npmjs.com

package.json Demo



- The configuration file for a node project.
 - Contains data about the project, packages, scripts etc.
- You can create a new package.json file with `npm init`.
 - `npm init -y`will auto answer yes to all the defaults.
- We want to make sure our projects use ESM.
 - You can add `"type": "module", `to your package.json to allow node to run your modules.

Adding a package Demo



- `npm install example-package-name` will download a package and all its dependencies. You can then use it in your code with `import ____ from "example-package-name"`
- Packages install to the `node_modules` directory within the project.
- Cowsay! https://www.npmjs.com/package/cowsay
- Packages use semantic versioning (semver) https://semver.org/

Project scripts Demo



- A way to save terminal commands in your package.json for easy use.
- Executed with `npm run example-script-name`
 - 'run' is optional for the start and test scripts.
- Example scripts: `"test": "vitest"`
 - or `"count-deps": "ls node_modules | wc -l"`

.gitignore



- gitignore is a text file which tells git not to track certain files.
- When setting up a project, always have a .gitignore that includes `node_modules`
 - 'echo node_modules >> .gitignore' is a quick way to add it.
- Other directories/files that might be worth ignoring:
 - DS_Store` and `tag`