

**САНКТ-ПЕТЕРБУРГСКИЙ НАЦИОНАЛЬНЫЙ
ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ ИТМО**

Дисциплина: Бэк-энд разработка

Отчет

Домашняя работа № 1

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ЗАДАЧА

- Установка npm (8.1.0), node.js (16.13.0)
- Инициализация npm-пакета
- Установка express
- Удаление express/попытка его обновить
- Написание кастомной команды для npm, чтобы можно удалить express командой “npm run rme”

ХОД РАБОТЫ

1) Установка node (на mac) через утилиту brew командой:

brew install node

```
yunet бекэнд >> brew install node
==> Fetching dependencies for node: brotli, c-ares, icu4c, libnghttp2, libuv, ca-certificates and openssl@1.1
==> Fetching brotli
==> Downloading https://ghcr.io/v2/homebrew/core/brotli/manifests/1.0.9
##### 100.0%
==> Downloading https://ghcr.io/v2/homebrew/core/brotli/blobs/sha256:5e9bdd862b
==> Downloading from https://pkg-containers.githubusercontent.com/ghcr1/blobs/sh
##### 100.0%
[==> Fetching c-ares
==> Downloading https://ghcr.io/v2/homebrew/core/c-ares/manifests/1.19.0
##### 100.0%
==> Downloading https://ghcr.io/v2/homebrew/core/c-ares/blobs/sha256:1fc78eca07e
==> Downloading from https://pkg-containers.githubusercontent.com/ghcr1/blobs/sh
##### 100.0%
==> Fetching icu4c
==> Downloading https://ghcr.io/v2/homebrew/core/icu4c/manifests/72.1
##### 100.0%
[==> Downloading https://ghcr.io/v2/homebrew/core/icu4c/blobs/sha256:90c50fe2cbf8
==> Downloading from https://pkg-containers.githubusercontent.com/ghcr1/blobs/sh
##### 100.0%
==> Fetching libnghttp2
==> Downloading https://ghcr.io/v2/homebrew/core/libnghttp2/manifests/1.52.0
##### 100.0%
==> Downloading https://ghcr.io/v2/homebrew/core/libnghttp2/blobs/sha256:947d901
==> Downloading from https://pkg-containers.githubusercontent.com/ghcr1/blobs/sh
##### 100.0%
==> Fetching libuv
==> Downloading https://ghcr.io/v2/homebrew/core/libuv/manifests/1.44.2-1
##### 100.0%
[==> Downloading https://ghcr.io/v2/homebrew/core/libuv/blobs/sha256:1134b22185ef
==> Downloading from https://pkg-containers.githubusercontent.com/ghcr1/blobs/sh
##### 100.0%
==> Fetching ca-certificates
==> Downloading https://ghcr.io/v2/homebrew/core/ca-certificates/manifests/2022
```

Теперь посмотрим текущие версии node и npm:

```
yunet бекэнд >> node -v
v19.7.0
yunet бекэнд >> npm -v
9.5.0
```

2) Сделаем инициализацию проекта командой:

npm init

```
[yunet hw-1 >> npm init
```

This utility will walk you through creating a package.json file.

It only covers the most common items, and tries to guess sensible defaults.

See `npm help init` for definitive documentation on these fields
and exactly what they do.

Use `npm install <pkg>` afterwards to install a package and
save it as a dependency in the package.json file.

Press ^C at any time to quit.

```
[package name: (hw-1)
```

```
[version: (1.0.0)
```

```
[description:
```

```
[entry point: (index.js)
```

```
[test command:
```

```
[git repository:
```

```
[keywords:
```

```
[author: Ivan Kozlov
```

```
[license: (ISC)
```

About to write to /Users/yunet/Documents/Учеба/6 семестр/бекэнд/hw-1/package.json:

```
{
  "name": "hw-1",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "Ivan Kozlov",
  "license": "ISC"
}
```

```
[Is this OK? (yes)
```

```
[yunet hw-1 >> ls package.json
```

```
package.json
```

3) Теперь установим express и сохраним его в списке зависимостей командой: `npm install express --save`

```
yunet hw-1 >> npm install express --save
```

```
added 57 packages, and audited 58 packages in 954ms
```

```
7 packages are looking for funding
  run `npm fund` for details
```

```
found 0 vulnerabilities
```

```
yunet hw-1 >> cat package.json
```

```
{
  "name": "hw-1",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "Ivan Kozlov",
  "license": "ISC",
  "dependencies": {
    "express": "^4.18.2"
  }
}
```

4) Теперь удалим или обновим express из проекта командой:

```
npm uninstall express --save
```

```
npm update express --save
```

```
[yunet hw-1 >> npm uninstall express -save
```

```
npm ERR! arg Argument starts with non-ascii dash, this is probably invalid: -save
```

```
removed 95 packages, and audited 1 package in 153ms
```

```
found 0 vulnerabilities
```

```
[yunet hw-1 >> cat package.json
```

```
{
  "name": "hw-1",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "Ivan Kozlov",
  "license": "ISC"
}
```

```
[yunet hw-1 >> cat package.json
```

```
{
  "name": "hw-1",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "Ivan Kozlov",
  "license": "ISC",
  "dependencies": {
    "express": "^3.20.1"
  }
}
```

```
[yunet hw-1 >> npm update express --save
```

```
npm WARN deprecated mkdirp@0.5.1: Legacy versions of mkdirp are no longer supported. Please update to m
npm WARN deprecated connect@2.30.2: connect 2.x series is deprecated
```

```
added 15 packages, removed 17 packages, changed 35 packages, and audited 96 packages in 6s
```

```
23 vulnerabilities (3 moderate, 19 high, 1 critical)
```

```
To address issues that do not require attention, run:
```

```
npm audit fix
```

```
To address all issues (including breaking changes), run:
```

```
npm audit fix --force
```

```
Run `npm audit` for details.
```

```
[yunet hw-1 >> cat package.json
```

```
{
  "name": "hw-1",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "Ivan Kozlov",
  "license": "ISC",
  "dependencies": {
    "express": "^3.21.2"
  }
}
```

5) Пишем кастомную команду `npm run rme` для удаления express, для этого надо изменить файл `package.json`:

```
{
  "name": "hw-1",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  ▶ Отладка
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1",
    "rme": "npm uninstall express --save"
  },
  "author": "Ivan Kozlov",
  "license": "ISC"
}
```

Протестируем, предварительно установив express:

```
[yunet hw-1 >> npm run rme
```

```
> hw-1@1.0.0 rme
> npm uninstall express --save
```

```
removed 57 packages, and audited 1 package in 120ms
```

```
found 0 vulnerabilities
```

```
[yunet hw-1 >> cat package.json
```

```
{
  "name": "hw-1",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1",
    "rme": "npm uninstall express --save"
  },
  "author": "Ivan Kozlov",
  "license": "ISC"
}
```

Вывод: в ходе работы я познакомился с командами npm.