

## .env POPCORN HACK:

Commands to install .env file:

```
(base) ekamjotkaire@Ekamjots-MacBook-Pro csa % cd student-1
(base) ekamjotkaire@Ekamjots-MacBook-Pro student-1 % npm init -y
Wrote to /Users/ekamjotkaire/csa/student-1/package.json:

{
  "name": "student-1",
  "version": "1.0.0",
  "description": "> This site is intended for Students. This is to record plans, complete hacks, and do work for y
our learnings. - This can be customized to support computer science as you work through pathway (JavaScript, Python/
Flask, Java/Spring) - All tangible artifact work is in a _posts or in a _notebooks. - Front matter (aka meta data)
in ipynb and md files is used to organize information according to week and column in running web site.",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC"
}

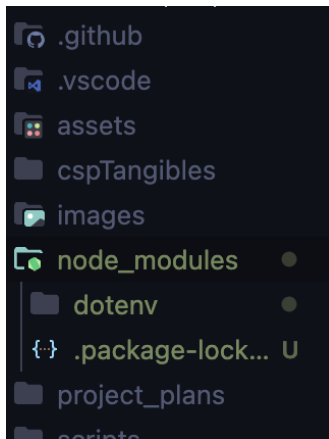
(base) ekamjotkaire@Ekamjots-MacBook-Pro student-1 % npm install dotenv
added 1 package, and audited 2 packages in 765ms

1 package is looking for funding
  run `npm fund` for details

found 0 vulnerabilities

npm notice
npm notice New major version of npm available! 9.5.1 -> 10.2.5
npm notice Changelog: https://github.com/npm/cli/releases/tag/v10.2.5
npm notice Run `npm install -g npm@10.2.5` to update!
npm notice
(base) ekamjotkaire@Ekamjots-MacBook-Pro student-1 %
```

Files created in repository:



Adding .env to the gitignore

```
_site
scripts/__pycache__/convert_notebooks.cpython-311.pyc
_posts/*_IPYNB_2_.md
nohup.out
Gemfile.lock
.env
```

## TCP and TLS Capturing HACK:

The screenshot displays a network traffic capture in Wireshark and a terminal window. The Wireshark interface shows a list of captured packets with columns for Time, Source, Destination, Protocol, Length, and Info. The selected packet (No. 8) is a TCP SYN packet from 127.0.0.1 to 127.0.0.1 on port 54044. The terminal window shows the output of a Spring Boot application, including logs for building the application, compiling resources, and running the application. The application is running on port 54044.

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	127.0.0.1	127.0.0.1	TCP	68	54044 → 27017 [SYN] Seq=0 Win=65535 Len=0 MSS=
2	0.000001	127.0.0.1	127.0.0.1	TCP	68	54045 → 27017 [SYN] Seq=0 Win=65535 Len=0 MSS=
3	0.000060	127.0.0.1	127.0.0.1	TCP	44	27017 → 54045 [RST, ACK] Seq=1 Ack=1 Win=0 Len=
4	0.000063	127.0.0.1	127.0.0.1	TCP	44	27017 → 54044 [RST, ACK] Seq=1 Ack=1 Win=0 Len=
5	10.002124	127.0.0.1	127.0.0.1	TCP	68	54048 → 27017 [SYN] Seq=0 Win=65535 Len=0 MSS=
6	10.002198	127.0.0.1	127.0.0.1	TCP	44	27017 → 54048 [RST, ACK] Seq=1 Ack=1 Win=0 Len=
7	10.002611	127.0.0.1	127.0.0.1	TCP	68	54049 → 27017 [SYN] Seq=0 Win=65535 Len=0 MSS=
8	10.002633	127.0.0.1	127.0.0.1	TCP		
9	13.842843	192.168.1.19	224.0.0.251	MDNS		
10	13.842936	fe80::845b:c4ff:fe...	ff02::fb	MDNS		
11	13.842978	fe80::845b:c4ff:fe...	ff02::fb	MDNS		
12	15.771274	192.168.1.19	239.255.255.250	SSDP		
13	18.650520	192.168.1.19	192.168.1.255	UDP		

```
[INFO] Building spring 0.0.1-SNAPSHOT
[INFO] from pom.xml
[INFO] -----[ jar ]-----
[INFO] >>> spring-boot:3.1.5:run (default-cli) > test-compile @ spring >>>
[INFO] --- resources:3.3.1:resources (default-resources) @ spring ---
[INFO] Copying 1 resource from src/main/resources to target/classes
[INFO] Copying 23 resources from src/main/resources to target/classes
[INFO] --- compiler:3.11.0:compile (default-compile) @ spring ---
[INFO] Changes detected - recompiling the module! source
[INFO] Compiling 57 source files with javac [debug release 17] to target/classes
[INFO] --- resources:3.3.1:testResources (default-testResources) @ spring ---
[INFO] skip non existing resourceDirectory /Users/ekamjotkai/Sorting-Backend/src/test/resources
[INFO] --- compiler:3.11.0:testCompile (default-testCompile) @ spring ---
[INFO] No sources to compile
[INFO]
[INFO] <<< spring-boot:3.1.5:run (default-cli) < test-compile @ spring <<<
[INFO]
[INFO] --- spring-boot:3.1.5:run (default-cli) @ spring ---
[INFO] Attaching agents: []
```

## How CORS was used in a previous project HACK:

```
@Override
public void addCorsMappings(CorsRegistry registry) {
    registry.addMapping("/api/sorts/bubble")
        .allowedOrigins("http://127.0.0.1:5500",
            "https://card-complexity.github.io/Card-Visualization-Frontend",
            "http://127.0.0.1:4100/Card-Visualization-Frontend/")
        .allowedMethods("GET", "POST", "PUT", "DELETE")
        .allowedHeaders("*");

    registry.addMapping("/api/sorts/selection")
        .allowedOrigins("http://127.0.0.1:5500",
            "https://card-complexity.github.io/Card-Visualization-Frontend",
            "http://127.0.0.1:4100/Card-Visualization-Frontend/")
        .allowedMethods("GET", "POST", "PUT", "DELETE")
        .allowedHeaders("*");

    registry.addMapping("/api/sorts/merge")
        .allowedOrigins("http://127.0.0.1:5500",
            "https://card-complexity.github.io/Card-Visualization-Frontend",
            "http://127.0.0.1:4100/Card-Visualization-Frontend/")
        .allowedMethods("GET", "POST", "PUT", "DELETE")
        .allowedHeaders("*");

    registry.addMapping("/api/sorts/insertion")
        .allowedOrigins("http://127.0.0.1:5500",
            "https://card-complexity.github.io/Card-Visualization-Frontend",
            "http://127.0.0.1:4100/Card-Visualization-Frontend/")
        .allowedMethods("GET", "POST", "PUT", "DELETE")
        .allowedHeaders("*");
}
```