

JOTSHANA S M (7376221CS181)

Github link: <https://github.com/JOTSHANA/Securin-7376221CS181>

Securin-7376221CS181

SECURIN - CPE Data Collection and API Development

How to run the project?

- **STEP 1:** - Select a folder on your local system, to run this project inside it.
- **STEP 2:** - Open the folder path in command prompt.
- **STEP 3:** - type this command to clone the repository "git clone <https://github.com/JOTSHANA/Securin-7376221CS181.git>".
- **STEP 4:** - After cloning the repository, enter the repository using the command "cd Securin-7376221CS181".
- **STEP 5:** - type "code ." to open the folder in Visual Studio code.
- **STEP 6:** - open two terminals side-by-side to run both frontend and the backend.
- **STEP 7:** - Enter into frontend folder and backend folder using the command "cd frontend" in one terminal and "cd backend" in another terminal.
- **STEP 8:** - Use the command "npm install" in both the terminal to install all the necessary dependencies.
- **STEP 8:** - Type "npm run dev" to start the react js frontend application in the frontend terminal.
- **STEP 9: - Database setup** run the below query in MySQL to create the database.

```
CREATE DATABASE cpe;
```

```
USE cpe;
```

```
CREATE TABLE cpe_entries (  
    id INT AUTO_INCREMENT PRIMARY KEY,  
    cpe_title VARCHAR(255) NOT NULL,  
    cpe_22_uri TEXT,  
    cpe_23_uri TEXT,  
    reference_links JSON,  
    cpe_22_deprecation_date DATE,  
    cpe_23_deprecation_date DATE );
```

- **STEP 9:** - Type "cd src" in backend terminal and then use the command "node app.js" to run the backend.
- **STEP 10:** Add a file called ".env" under the src folder in the backend.

and add these in that

DB_HOST=localhost

DB_NAME=cpe

DB_PASS=root

DB_USER=root

PORT=5000

- **STEP 11:** Add a folder called "data" and paste the downloaded xml file in that.
- **STEP 12:** - After completing all these steps, now you can try accessing the data from frontend.

APIs

NOTE:

Open Postman and check the working of these APIs one-by-one

1. <http://localhost:5000/api/cpes/import> (To parse all the data in the XML file and insert it into the database)
2. <http://localhost:5000/api/cpes?page=1&limit=10> (Filters the data in such a way that only 10 records are brought from db)
3. http://localhost:5000/api/cpes/search?cpe_title=Algolplus&deprecation_date=2024-11-20 (To search for a particular title and by deprecation date)

DATABASE SCHEMA:

Language: English

MySQL » Server » cpe » Table: cpe_entries

Adminer 4.8.1 5.1.1

DB: cpe

SQL command Import
Export Create table

select cpe_entries

Table: cpe_entries

Select data Show structure Alter table New item

Column	Type	Comment
id	int Auto Increment	
cpe_title	varchar(255)	
cpe_22_uri	text NULL	
cpe_23_uri	text NULL	
reference_links	json NULL	
cpe_22_deprecation_date	date NULL	
cpe_23_deprecation_date	date NULL	

Indexes

PRIMARY id

Alter indexes

Foreign keys

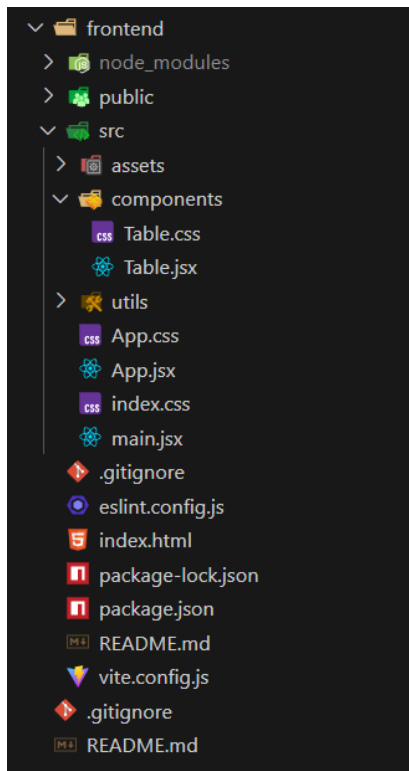
Add foreign key

Triggers

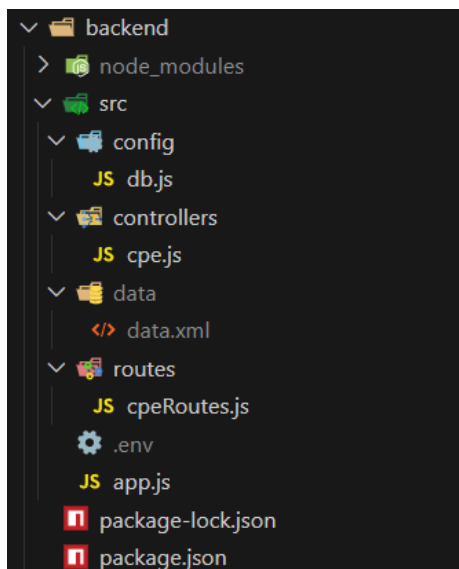
Add trigger

Folder structure:

Frontend:



Backend:



Dependencies/Libraries Used For Frontend

```
"axios": "^1.8.4",

"react": "^19.0.0",

"react-dom": "^19.0.0"
Dependencies/Libraries Used For Backend

"body-parser": "^2.2.0",

"cors": "^2.8.5",

"dotenv": "^16.4.7",

"env": "^0.0.2",

"express": "^5.1.0",

"fast-xml-parser": "^5.2.0",

"mysql2": "^3.14.0",

"xml2js": "^0.6.2"
```

OUTPUT SCREENSHOT:

Frontend:

Data Collection System

Title:

Search by title...

CPE URI 2.2:

Search by URI 2.2...

CPE URI 2.3:

Search by URI 2.3...

Search

10 per page

Previous

Page 1 of 138660

Next

Showing 1-10 of 1386595 items

Title	CPE URI 2.2	CPE URI 2.3	Deprecated Date 2.2	Deprecated Date 2.3	References
\$0.99 Kindle Books project \$0.99 Kindle Books (aka com.kindle.books.for99) for android 6.0	cpe:/a:%240.99_kindle_books_project:%240.99_kindle_books.6::~::~~::android~::	cpe:2.3:a:\$0.99_kindle_books_project:\$0.99_kindle_books.6:*:*:*:*:android:*:*			https://play.google.com/store/... https://docs.google.com/spread...
@mubosoftware/node-static Project @mubosoftware/node-static for Node.js	cpe:/a:%40mubosoftware%2Fnode-static_project:%40mubosoftware%2Fnode-static::~::~~::node.js~::	cpe:2.3:a:@mubosoftware/node-static_project:@mubosoftware/node-static::~::~~::node.js:*:*			https://www.npmjs.com/package/...
@thi.ng/egf Project @thi.ng/egf for Node.js	cpe:/a:%40thi.ng%2Fegf_project:%40thi.ng%2Fegf.~::~~::node.js~::	cpe:2.3:a:@thi.ng/egf_project:@thi.ng/egf.~::~~::node.js:*:*			https://github.com/thi-ng/umbr... https://www.npmjs.com/package/...
@thi.ng/egf Project @thi.ng/egf 0.1.0 for Node.js	cpe:/a:%40thi.ng%2Fegf_project:%40thi.ng%2Fegf.0.1.0::~::~~::node.js~::	cpe:2.3:a:@thi.ng/egf_project:@thi.ng/egf.0.1.0:*:*:*:*:node.js:*:*			https://github.com/thi-ng/umbr... https://www.npmjs.com/package/...
@thi.ng/egf Project @thi.ng/egf 0.2.0 for Node.js	cpe:/a:%40thi.ng%2Fegf_project:%40thi.ng%2Fegf.0.2.0::~::~~::node.js~::	cpe:2.3:a:@thi.ng/egf_project:@thi.ng/egf.0.2.0:*:*:*:*:node.js:*:*			https://github.com/thi-ng/umbr... https://www.npmjs.com/package/...

API:

http://localhost:5000/api/cpes/import

GET http://localhost:5000/api/cpes/import

Params Authorization Headers (10) Body • Scripts Tests Settings

Query Params

Key	Value
Key	Value

Body Cookies Headers (8) Test Results ↺

{ } JSON ▾ ▶ Preview 🔄 Visualize ▾

```
1 {
2   "message": "CPE data imported successfully"
3 }
```

GET http://localhost:5000/api/cpes?page=1&limit=10

Params • Authorization Headers (10) Body • Scripts Tests Settings

Query Params

<input checked="" type="checkbox"/>	Key	Value	Description
<input checked="" type="checkbox"/>	page	1	
<input checked="" type="checkbox"/>	limit	10	
	Key	Value	Description

Body Cookies Headers (8) Test Results ↺ 200 OK • 1.05 s • 4.

{ } JSON ▾ ▶ Preview 🔄 Visualize ▾

```
1 {
2   "page": 1,
3   "limit": 10,
4   "total": 1386595,
5   "data": [
6     {
7       "id": 1,
8       "cpe_title": "$0.99 Kindle Books project $0.99 Kindle Books (aka com.kindle.books.for99) for android 6.0",
9       "cpe_22_uri": "cpe:/a:%240.99_kindle_books_project:%240.99_kindle_books:6::~~android~",
10      "cpe_23_uri": "cpe:2.3:a:\\$0.99_kindle_books_project:\\$0.99_kindle_books:6::~*:~*:android:*:*",
11      "reference_links": [
12        "https://play.google.com/store/apps/details?id=com.kindle.books.for99",
13        "https://docs.google.com/spreadsheets/d/1t5Gxwjw82SyunALVJb2w0zi3FoLRikfGpC7AMjRF0r4/edit?pli=1#gid=1053404143"
14      ],
15      "cpe_22_deprecation_date": null,
```

GET

http://localhost:5000/api/cpes/search?cpe_title=Algolplus&deprecation_date=2024-11-20

Params

Authorization

Headers (10)

Body

Scripts

Tests

Settings

Query Params

<input checked="" type="checkbox"/>	Key	Value	Description
<input checked="" type="checkbox"/>	cpe_title	Algolplus	
<input checked="" type="checkbox"/>	deprecation_date	2024-11-20	
	Key	Value	Description

Body

Cookies

Headers (8)

Test Results

{ } JSON

Preview

Visualize

```
1  {
2    "data": [
3      {
4        "id": 33843,
5        "cpe_title": "Algolplus Advanced Order Export for WooCommerce 1.0.0 for WordPress",
6        "cpe_22_uri": "cpe:/a:algolplus:advanced_order_export:1.0.0:~~~wordpress~~",
7        "cpe_23_uri": "cpe:2.3:a:algolplus:advanced_order_export:1.0.0:*:*:*:wordpress:*:*",
8        "reference_links": [
9          "https://algolplus.com/plugins/downloads/advanced-order-export-for-woocommerce-pro/",
10         "https://wordpress.org/plugins/woo-order-export-lite/",
11         "https://wordpress.org/plugins/woo-order-export-lite/#developers"
12       ],
13       "cpe_22_deprecation_date": "2024-11-19T18:30:00.000Z",
14       "cpe_23_deprecation_date": "2024-11-19T18:30:00.000Z"
15     },
16   ]
17 }
```