Assignment

CRUD OPERATION ON CSV FILE

1.Frontend – Php

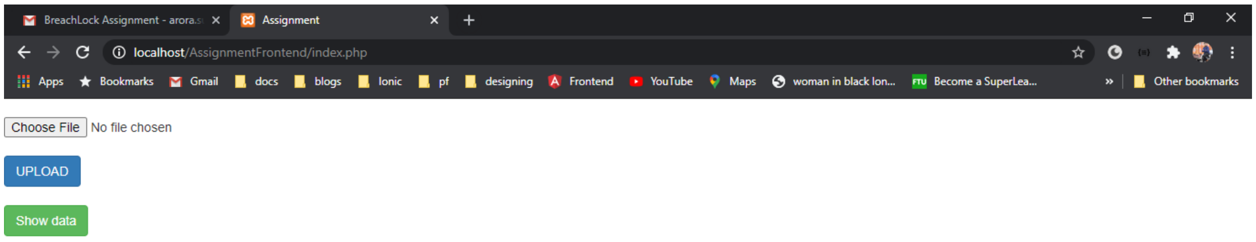
2.Backend – (Server-side language)->Node.js

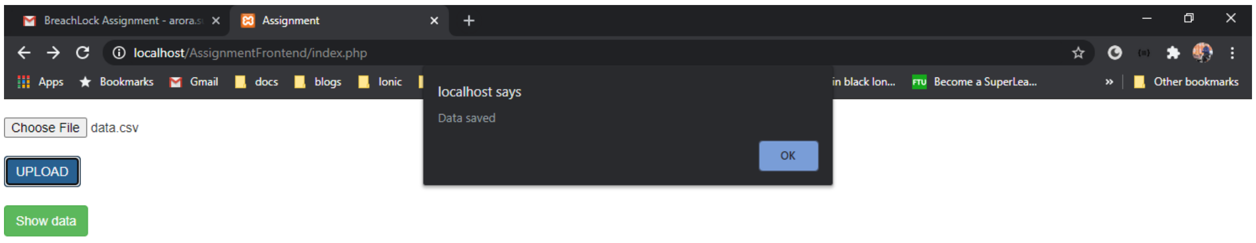
(Database) -> Mongodb

CRUD: - Create, Read, Update, Delete

1.Create

Frontend

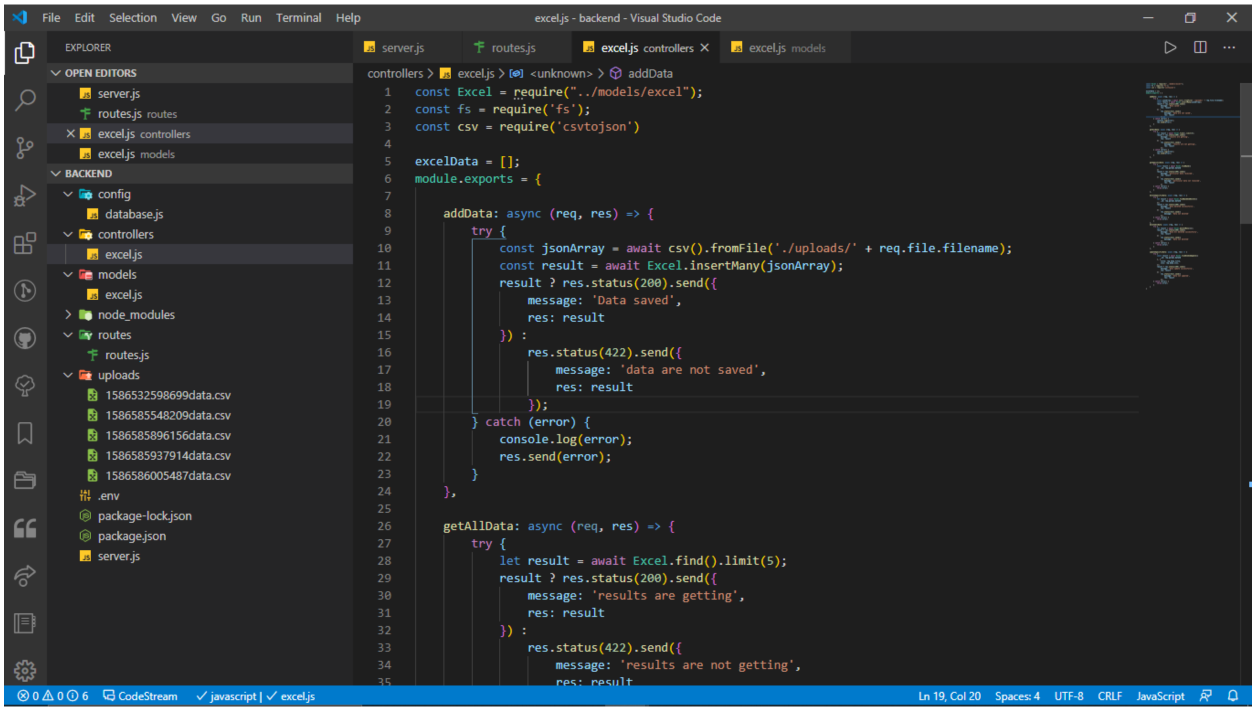

BreachLock Assignment - arora.s
Assignment
localhost/AssignmentFrontend/index.php
Choose File
No file chosen
UPLOAD
Show data


BreachLock Assignment - arora.
Assignment
localhost/AssignmentFrontend/index.php
Choose File data.csv
UPLOAD
Show data
OK

```
localhost says
Data saved
```

Backend

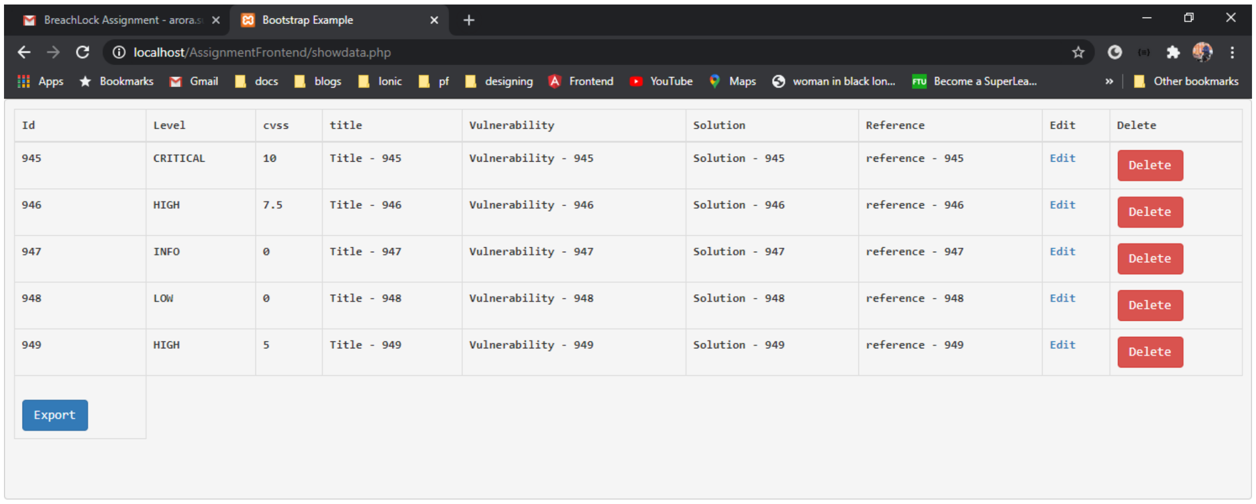
Here function addData() is used to post the data into database and create the collection



```
const Excel = require("../models/excel");
const fs = require('fs');
const csv = require('csvtojson')

excelData = [];
module.exports = {

    addData: async (req, res) => {
        try {
            const jsonArray = await csv().fromFile('./uploads/' + req.file.filename);
            const result = await Excel.insertMany(jsonArray);
            result ? res.status(200).send({
                message: 'Data saved',
                res: result
            }) :
                res.status(422).send({
                    message: 'data are not saved',
                    res: result
                });
        } catch (error) {
            console.log(error);
            res.send(error);
        }
    },

    getAllData: async (req, res) => {
        try {
            let result = await Excel.find().limit(5);
            result ? res.status(200).send({
                message: 'results are getting',
                res: result
            }) :
                res.status(422).send({
                    message: 'results are not getting',
                    res: result
```

2. Read

Frontend



Id	Level	cvss	title	Vulnerability	Solution	Reference	Edit	Delete
945	CRITICAL	10	Title - 945	Vulnerability - 945	Solution - 945	reference - 945	Edit	Delete
946	HIGH	7.5	Title - 946	Vulnerability - 946	Solution - 946	reference - 946	Edit	Delete
947	INFO	0	Title - 947	Vulnerability - 947	Solution - 947	reference - 947	Edit	Delete
948	LOW	0	Title - 948	Vulnerability - 948	Solution - 948	reference - 948	Edit	Delete
949	HIGH	5	Title - 949	Vulnerability - 949	Solution - 949	reference - 949	Edit	Delete

Export

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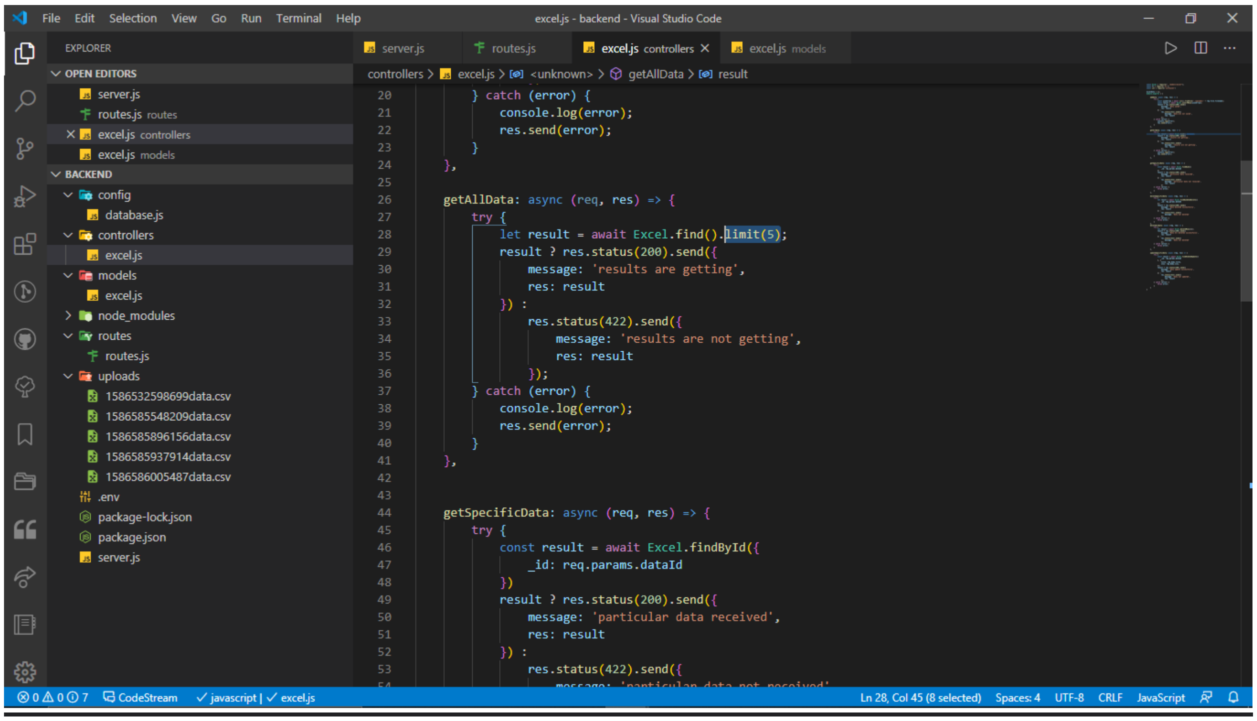
*Note:-

The data is too large as(28885 rows) it is taking few minutes to load in the frontend from the database. So to avoid this I have used **limit 5** when getting the data from the database. Yes, you can load all the data from the database (Soultion):- remove the **.limit(5)** in getAllData() function.

Backend


File Edit Selection View Go Run Terminal Help
excel.js - backend - Visual Studio Code
server.js
routes.js
excel.js controllers
excel.js models
controllers > excel.js > <unknown> > getAllData > result
⊗ 0 ⚠ 0 ⓘ 7
CodeStream
✓ javascript | ✓ excel.js
Ln 28, Col 45 (8 selected) Spaces: 4 UTF-8 CRLF JavaScript

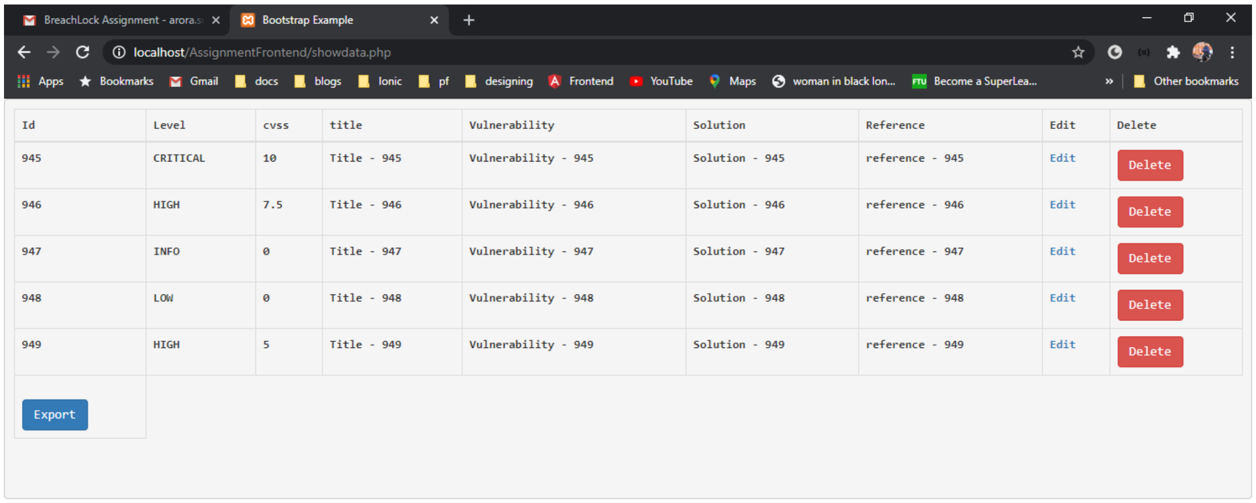
```
EXPLORER
OPEN EDITORS
    server.js
    routes.js routes
  × excel.js controllers
    excel.js models
BACKEND
  config
    database.js
  controllers
    excel.js
  models
    excel.js
  node_modules
  routes
    routes.js
  uploads
    1586532598699data.csv
    1586585548209data.csv
    1586585896156data.csv
    1586585937914data.csv
    1586586005487data.csv
  .env
  package-lock.json
  package.json
  server.js
```

```
        } catch (error) {
            console.log(error);
            res.send(error);
        }
    },

    getAllData: async (req, res) => {
        try {
            let result = await Excel.find().limit(5);
            result ? res.status(200).send({
                message: 'results are getting',
                res: result
            }) :
                res.status(422).send({
                    message: 'results are not getting',
                    res: result
                });
        } catch (error) {
            console.log(error);
            res.send(error);
        }
    },


    getSpecificData: async (req, res) => {
        try {
            const result = await Excel.findById({
                _id: req.params.dataId
            })
            result ? res.status(200).send({
                message: 'particular data received',
                res: result
            }) :
                res.status(422).send({
                    message: 'particular data not received'
```

3. Update

Frontend

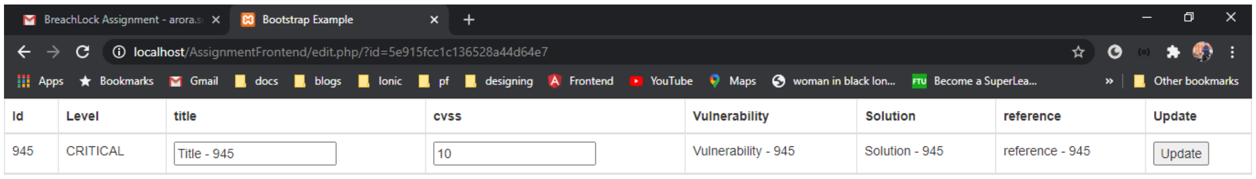
Step 1:- Click on the Edit link it will redirect to edit page.



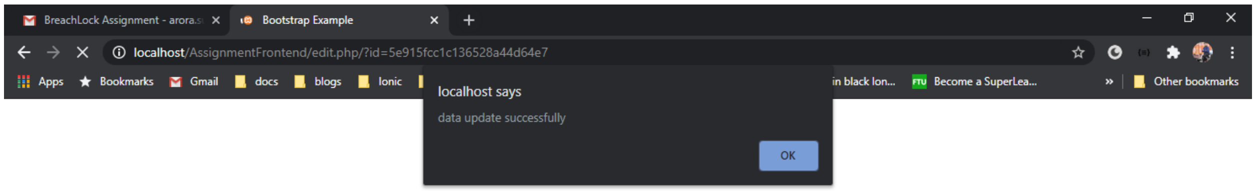
Id	Level	cvss	title	Vulnerability	Solution	Reference	Edit	Delete
945	CRITICAL	10	Title - 945	Vulnerability - 945	Solution - 945	reference - 945	Edit	Delete
946	HIGH	7.5	Title - 946	Vulnerability - 946	Solution - 946	reference - 946	Edit	Delete
947	INFO	0	Title - 947	Vulnerability - 947	Solution - 947	reference - 947	Edit	Delete
948	LOW	0	Title - 948	Vulnerability - 948	Solution - 948	reference - 948	Edit	Delete
949	HIGH	5	Title - 949	Vulnerability - 949	Solution - 949	reference - 949	Edit	Delete

Export

Step 2:- Update the value and click on update button to update the data.



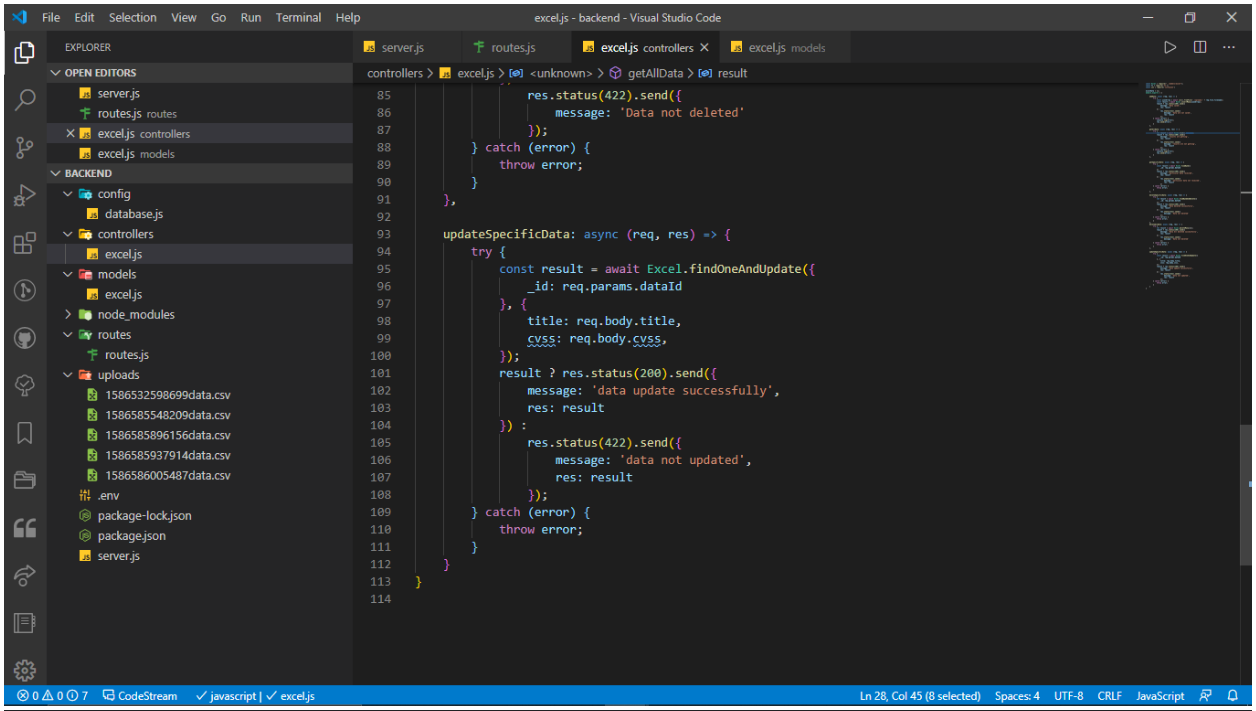
Id	Level	title	cvss	Vulnerability	Solution	reference	Update
945	CRITICAL	Title - 945	10	Vulnerability - 945	Solution - 945	reference - 945	Update



localhost says

data update successfully

Backend

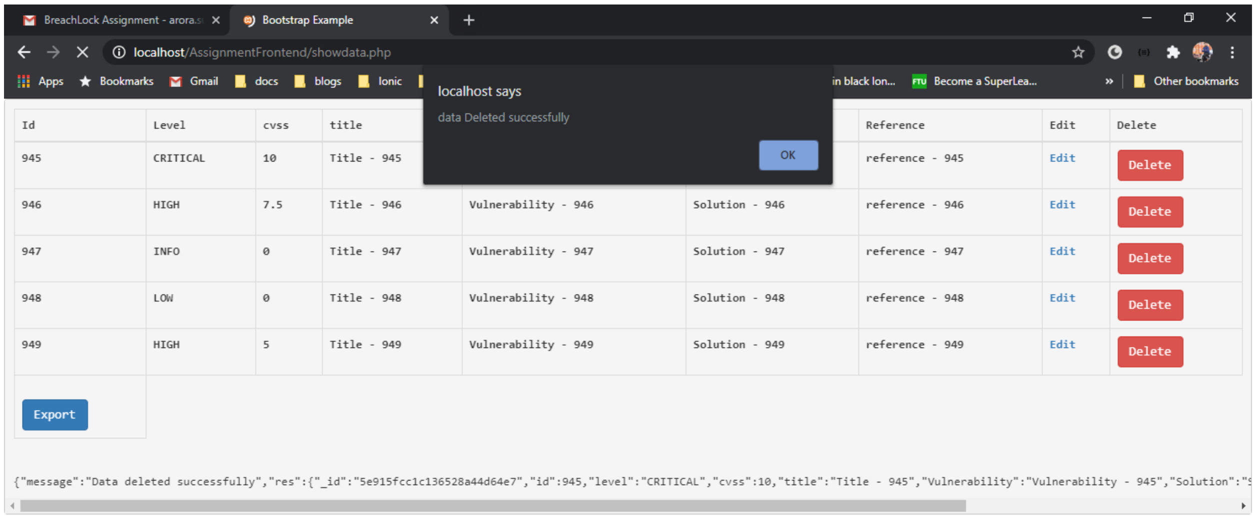


```
                res.status(422).send({
                    message: 'Data not deleted'
                });
        } catch (error) {
            throw error;
        }
    },

    updateSpecificData: async (req, res) => {
        try {
            const result = await Excel.findOneAndUpdate({
                _id: req.params.dataId
            }, {
                title: req.body.title,
                cvss: req.body.cvss,
            });
            result ? res.status(200).send({
                message: 'data update successfully',
                res: result
            }) :
                res.status(422).send({
                    message: 'data not updated',
                    res: result
                });
        } catch (error) {
            throw error;
        }
    }
}
```

3. Delete

Frontend

Click on the delete the button to delete the specific record.



localhost says

data Deleted successfully

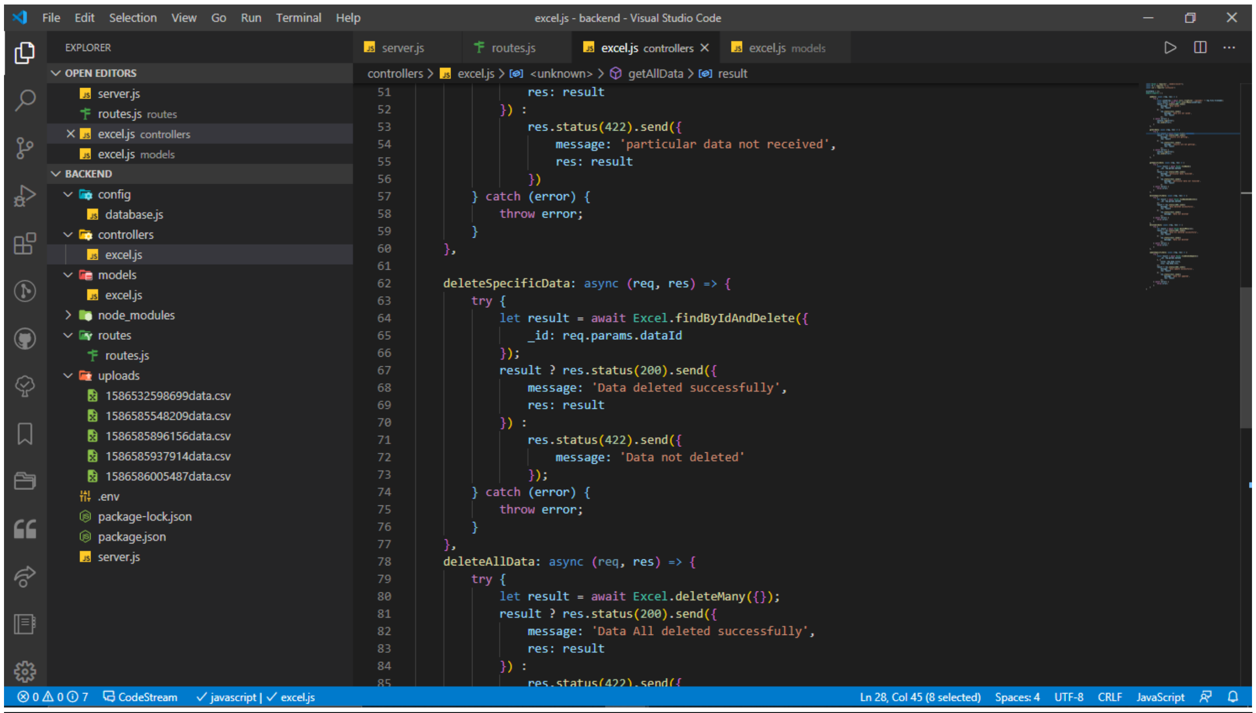
OK

Id	Level	cvss	title			Reference	Edit	Delete
945	CRITICAL	10	Title - 945			reference - 945	Edit	Delete
946	HIGH	7.5	Title - 946	Vulnerability - 946	Solution - 946	reference - 946	Edit	Delete
947	INFO	0	Title - 947	Vulnerability - 947	Solution - 947	reference - 947	Edit	Delete
948	LOW	0	Title - 948	Vulnerability - 948	Solution - 948	reference - 948	Edit	Delete
949	HIGH	5	Title - 949	Vulnerability - 949	Solution - 949	reference - 949	Edit	Delete

Export

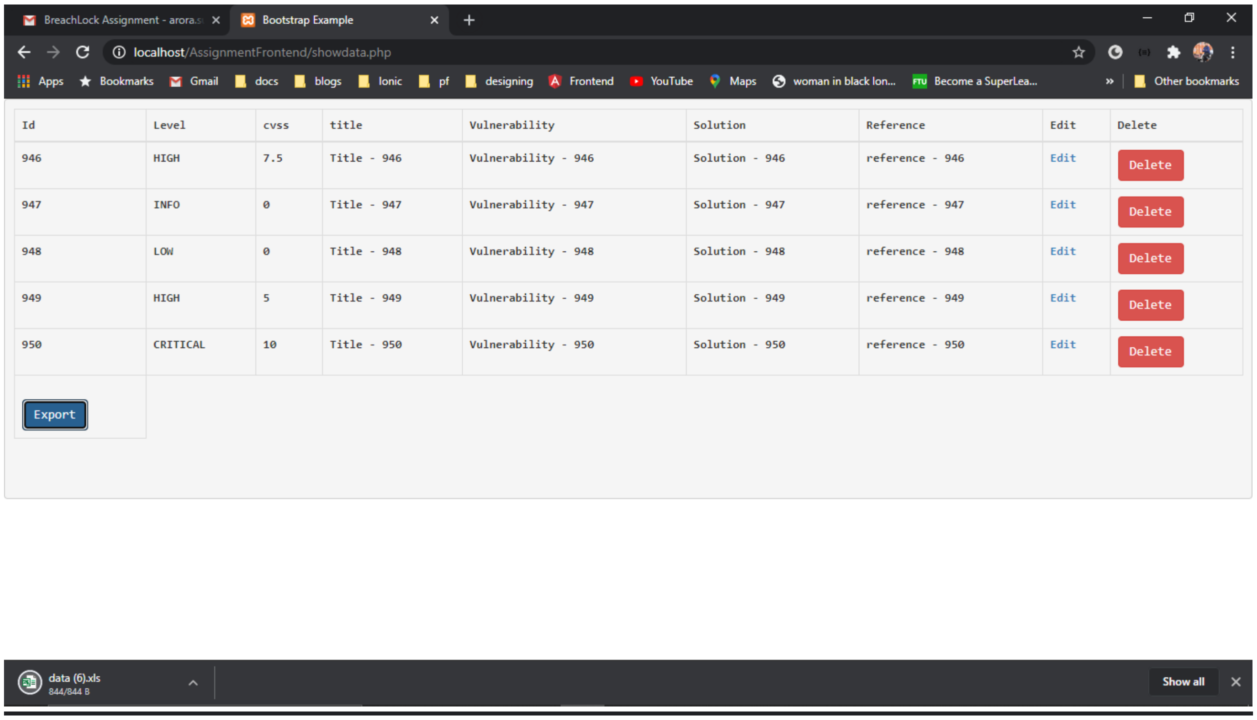
```
{"message":"Data deleted successfully","res":{"_id":"5e915fcc1c136528a44d64e7","id":945,"level":"CRITICAL","cvss":10,"title":"Title - 945","Vulnerability":"Vulnerability - 945","Solution":"S
```

Backend



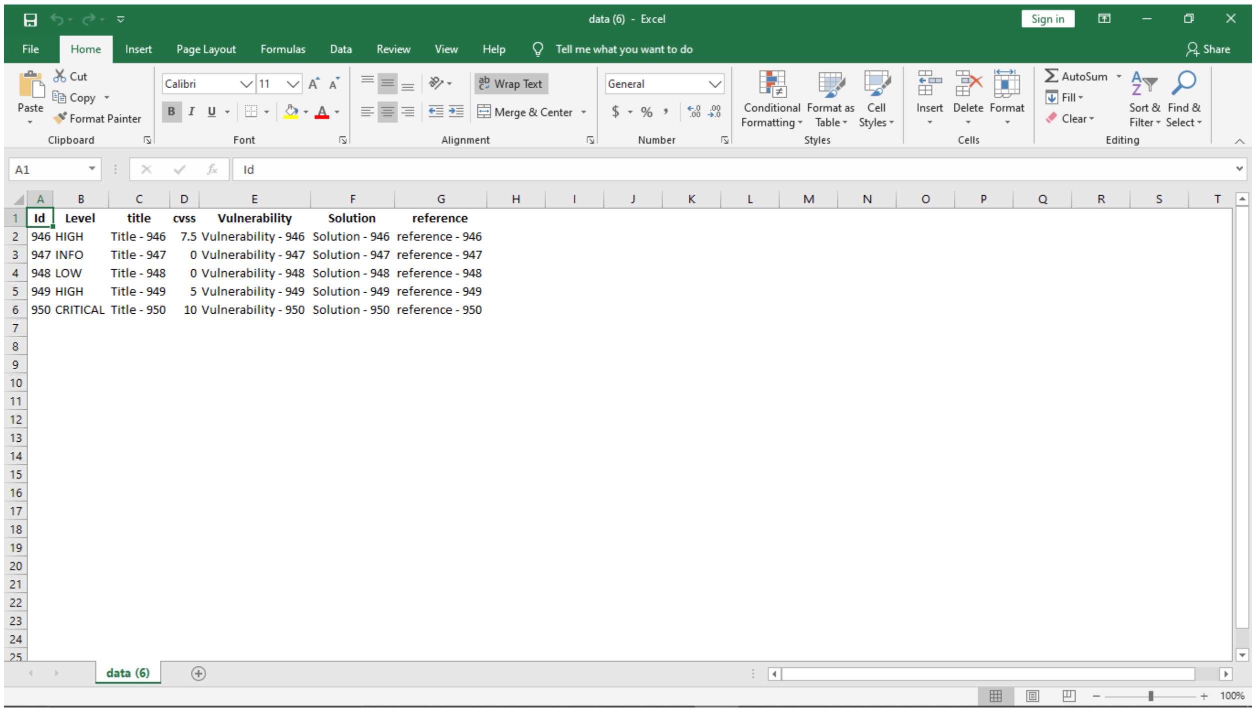
```
                res: result
            }) :
                res.status(422).send({
                    message: 'particular data not received',
                    res: result
                })
        } catch (error) {
            throw error;
        }
    },

    deleteSpecificData: async (req, res) => {
        try {
            let result = await Excel.findByIdAndDelete({
                _id: req.params.dataId
            });
            result ? res.status(200).send({
                message: 'Data deleted successfully',
                res: result
            }) :
                res.status(422).send({
                    message: 'Data not deleted'
                });
        } catch (error) {
            throw error;
        }
    },
    deleteAllData: async (req, res) => {
        try {
            let result = await Excel.deleteMany({});
            result ? res.status(200).send({
                message: 'Data All deleted successfully',
                res: result
            }) :
                res.status(422).send({
```

Export the data into excel file



Id	Level	cvss	title	Vulnerability	Solution	Reference	Edit	Delete
946	HIGH	7.5	Title - 946	Vulnerability - 946	Solution - 946	reference - 946	Edit	Delete
947	INFO	0	Title - 947	Vulnerability - 947	Solution - 947	reference - 947	Edit	Delete
948	LOW	0	Title - 948	Vulnerability - 948	Solution - 948	reference - 948	Edit	Delete
949	HIGH	5	Title - 949	Vulnerability - 949	Solution - 949	reference - 949	Edit	Delete
950	CRITICAL	10	Title - 950	Vulnerability - 950	Solution - 950	reference - 950	Edit	Delete

Excel file



Id	Level	title	cvss	Vulnerability	Solution	reference
946	HIGH	Title - 946	7.5	Vulnerability - 946	Solution - 946	reference - 946
947	INFO	Title - 947	0	Vulnerability - 947	Solution - 947	reference - 947
948	LOW	Title - 948	0	Vulnerability - 948	Solution - 948	reference - 948
949	HIGH	Title - 949	5	Vulnerability - 949	Solution - 949	reference - 949
950	CRITICAL	Title - 950	10	Vulnerability - 950	Solution - 950	reference - 950

Node.js Packages

1.body-parser – Parsing the incoming request bodies in a middleware.

2.cors – cross origin resource sharing for access resource from remote hosts.

3.csvtojson – used to convert the csv file into json format.

4.express – framework in node.js.

5.fs – to communicate with the file system.

6.mongoose – used to create the schema and operations in db.

7.multer – used to upload the file on the server.

8.nodemon – used to restart the server after saving the file.