My Smart Home

I was able to fulfil most of the requirements for this project. The home page and about page just included one line each about the website. The add device page functioned as wanted and added the device to the database. There was also a check status page where you had to select the device from a dropdown and click the button to check its status. Similarly, update and delete pages allowed you to select a device and redirect you to another page where the action wanted can be performed.

The success feedback was shown by redirecting to another page in the module.

```
//redirects to updateDeviceStatus page to show action is successful
res.redirect("/updateDeviceStatus");
```

In the hot reloading, when the device was updated, I added the values in input boxes from the database but set it 0 for checkboxes as it gave an error when I would change the device type from a device with on/off property to an open/close one.

For non-applicable fields, I disabled the appropriate fields using javascript. I also added verification in the form using min max values.

```
document.getElementById('onoff').disabled = false;
document.getElementById('openclose').disabled = true;
document.getElementById('temp').disabled = false;
document.getElementById("vol").disabled = true;
```

The values which weren't applicable were assigned -1 in the module.

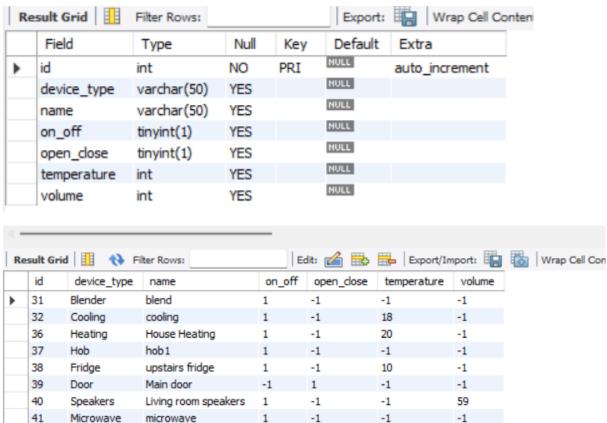
```
//Adding data to database
let sqlquery = "INSERT INTO devices (device_type , name , on_off, open_close, temperature,volume) VALUES (?,?,?,?,?)"
// execute sql query
let newrecord = [req.body.selectDevice, req.body.device_name , -1 , req.body.opencloseCheckbox, -1, -1];
db.query(sqlquery, newrecord, (err, result) => {
   if (err) {
        return console.error(err.message);
    }
}
```

Appropriate get and post endpoints were used. Lastly the CSS was mostly done from scratch but some code was used from w3 schools for example the switch.

I initially planned on showing the status of devices on the same page when a dropdown option was selected but unable to do that, I had to add another page for show, update and delete pages. Moreover, I was unable to make the two buttons in a form perform different actions so I made a link look like a button in delete page instead.

This app is a very basic one and the designing can be improved significantly. There could be checks for names so there aren't any devices with the same values and name could be set as the primary key.

I used just one table with the name devices. It had an auto increment id set as the primary key to make each device unique. Moreover it had a varchar device name and device type. It included booleans on/off and open/close which would be set to -1 when the device doesn't have the functionality. Lastly there were integers temperature and volume which had a range of values.



NULL

NULL

NULL

NULL

NULL

NULL

NULL