

CSE_236 WEB DEVELOPMENT FINAL PROJECT REPORT FOR HOME AUTOMATION SYSTEMS

Name: Abdurrahman Kürşat Özkan
Student number: 20210808047
Github: <https://github.com/Algos70>

Name: Baran Kırca
Student number: 20210808009
Github: <https://github.com/electus-1>

Project's github page: <https://github.com/electus-1/home-automation-project>

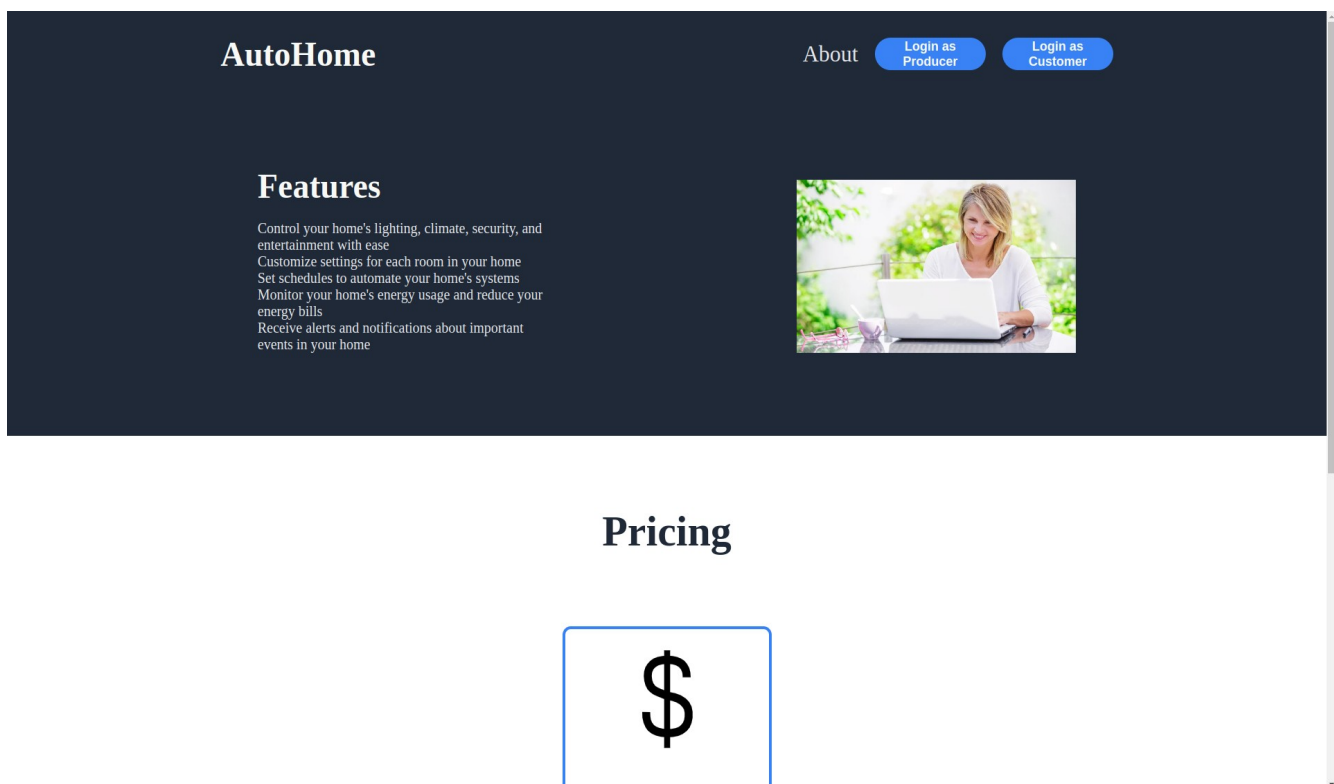
To login Use these parameters please:

producer email: b@gmail.com
producer password: 123

consumer email: a@gmail.com
consumer password: 1234

1) Landingpage:

- There are 2 different buttons for login. One for the customer another one for the producer.



Home



Home Automation

\$99.99

*SOMETIMES WE MAKE THE PROCESS MORE COMPLICATED THAN WE NEED TO.
WE WILL NEVER MAKE A JOURNEY OF A THOUSAND MILES BY FRETTING ABOUT
HOW LONG IT WILL TAKE OR HOW HARD IT WILL BE. WE MAKE THE JOURNEY BY
TAKING EACH DAY STEP BY STEP AND THEN REPEATING IT AGAIN AND AGAIN
UNTIL WE REACH OUR DESTINATION.*

-Joseph B. Wirthlin

2) Login:

- Both producer and consumer have the same UI for login.
- A proper email is required to login
- Password is not shown to the user during login
- When login button is pushed the system checks the database if the information is valid.

AutoHome

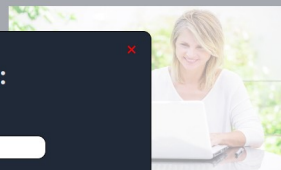
About

Login as
Producer

Login as
Customer

Features

Control your home's lighting
entertainment with ease
Customize settings for each
Set schedules to automate
Monitor your home's energy
energy bills
Receive alerts and notifications
events in your home



Email or Username:

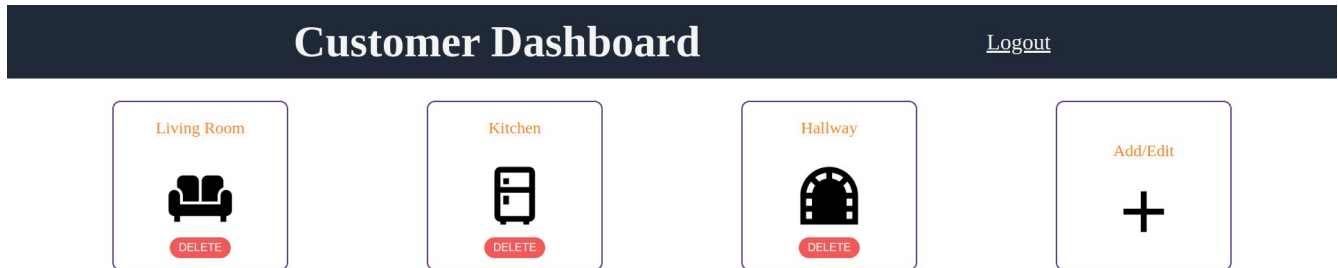
Password:

Login



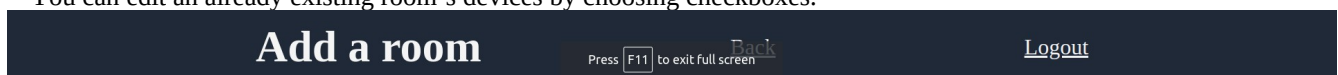
3) Customer Dashboard:

- The page the customer sees after logging in.
- Here is shown all the rooms an user has, a button to delete them and a card to edit or add a room.
- You can change the devices in a room from add/edit.
- It uses the same .php file to show different customer's rooms.
- There is a Logout button for logging out



4) Add A Room

- You can add a room and choose the devices in that room from the checkboxes.
- There is a total of 6 rooms and 8 devices you can choose from.
- You can edit an already existing room's devices by choosing checkboxes.



Room type: Kitchen

Choose Devices:

Light Sensor

Light Color Sensor

Temperature Capturer

Sound System

Security System

Door Locking Mechanism

Roomba Cleaner

Water Heating System

Add

5)Customer Room

- You can see and change the state of a device by choosing a state and then clicking the buttons.
- You can go back to the previous page by clicking the back button.
- You can see the past time's data by clicking the Device Info page.
- You can logout from the system.


Livingroom

Device Info

Back

Logout


LIGHTS



OFF

TURN ON

LIGHT COLOR




RED

RED

APPLY CHANGES

ROOM TEMPERATURE




0

8

START AIR CONDITIONER


SOUND SYSTEM



OFF

TURN ON


SECURITY



LOW

LOW

ROOBMA



CHARGING

6) Device Info

- You can see the previous states of all the devices and the numbers of them.
- You can go back to the previous page or logout.

Device Livingroom								
Press F11 to exit full screen								
Back								
Logout								
Number	Light System	Light Color	Temperature (°C)	Sound System	Security System	Lock	Roomba	Water Heater
1	ON	green	25	ON	No device found	No device found	Charging	OFF
2	ON	red	25	ON	No device found	No device found	Charging	OFF
3	ON	red	25	ON	No device found	No device found	Charging	OFF
4	ON	red	25	OFF	No device found	No device found	Charging	OFF
5	ON	red	8	OFF	No device found	No device found	Charging	OFF
6	ON	red	8	OFF	No device found	No device found	Charging	OFF
7	ON	red	8	OFF	No device found	No device found	Charging	OFF
8	ON	red	8	OFF	No device found	No device found	Charging	OFF
9	ON	red	8	OFF	No device found	No device found	Charging	OFF
10	ON	red	8	OFF	No device found	No device found	Charging	OFF
11	ON	red	8	OFF	No device found	No device found	Charging	OFF
12	ON	red	8	OFF	No device found	No device found	Charging	OFF
13	ON	blue	8	OFF	No device found	No device found	Charging	OFF
14	OFF	blue	8	OFF	No device found	No device found	Charging	OFF
15	ON	blue	8	OFF	No device found	No device found	Charging	OFF
16	OFF	blue	8	OFF	No device found	No device found	Charging	OFF
17	OFF	No device found	0	No device found	No device found	No device found	No device found	No device found
18	OFF	red	0	No device found	No device found	No device found	No device found	No device found
19	OFF	red	0	No device found	No device found	No device found	No device found	No device found
20	ON	red	0	No device found	No device found	No device found	No device found	No device found
21	ON	red	8	No device found	No device found	No device found	No device found	No device found
22	OFF	No device found	0	OFF	No device found	No device found	Charging	OFF
23	OFF	red	0	OFF	No device found	No device found	Charging	OFF

7) Producer Entry

- The page the producer sees after logging in.
- He can see all the customers information and chose a customer to view their system.


Producer Dashboard Press F11 to exit full screen [Logout](#)


Email	Password	Select
a@gmail.com	1234	Select
c@gmail.com	1234	Select


8) Producer's Customer Room View

- After choosing a customer from the producer entry page you can see the customer's system.
- You can go back to the previous page by clicking back.
- By clicking a room you can see the devices the customer has.

a@gmail.com's Dashboard [Back](#) [Logout](#)

Living Room


Kitchen


Hallway


9) Producer's Customer Room View

- You can observe the states of the customer's devices inside a room.
- By clicking the device info you can see the information about the previous states of devices.


Hallway

Device Info
Press **F11** to exit full screen

Back


Logout

LIGHTS




ON

LIGHT COLOR




RED

ROOM TEMPERATURE




8

SECURITY



OFF

DOOR LOCK



OPEN

Device Hallway								
Press F11 to exit full screen								
Back								
Logout								
Number	Light System	Light Color	Temperature (°C)	Sound System	Security System	Lock	Roomba	Water Heater
1	ON	green	25	No device found	off	ON	No device found	No device found
2	ON	green	25	No device found	off	OFF	No device found	No device found
3	ON	green	25	No device found	off	ON	No device found	No device found
4	ON	red	25	No device found	off	ON	No device found	No device found
5	ON	red	8	No device found	off	ON	No device found	No device found
6	ON	red	8	No device found	high	ON	No device found	No device found
7	ON	red	8	No device found	low	ON	No device found	No device found
8	ON	red	8	No device found	off	ON	No device found	No device found
9	ON	red	8	No device found	high	ON	No device found	No device found
10	ON	red	8	No device found	high	OFF	No device found	No device found
11	ON	red	8	No device found	high	OFF	No device found	No device found
12	OFF	red	8	No device found	high	OFF	No device found	No device found
13	ON	red	8	No device found	high	OFF	No device found	No device found
14	ON	red	8	No device found	low	OFF	No device found	No device found
15	ON	red	8	No device found	off	OFF	No device found	No device found
16	ON	red	8	No device found	low	OFF	No device found	No device found
17	ON	red	8	No device found	off	OFF	No device found	No device found
18	ON	red	8	No device found	off	OFF	No device found	No device found
19	OFF	red	8	No device found	off	OFF	No device found	No device found
20	ON	red	8	No device found	off	OFF	No device found	No device found
21	OFF	red	8	No device found	off	OFF	No device found	No device found
22	ON	red	8	No device found	off	OFF	No device found	No device found
23	OFF	red	8	No device found	off	OFF	No device found	No device found

Workflows:

-To open the Customer Dashboard

- 1) Open the landing page
- 2) Click the customer login button
- 3) Enter the customer's e-mail and password

-When you already have Access to customer dashboard you can:

- 1) Choose a room to see their devices
- 2) Delete an already existing room
- 3) Add or edit a room by clicking add/edit card

-When you click a room you can:

- 1) Turn on or turn off your lights.
- 2) Change the color of home's lights
- 3) Change the rooms temperature with air conditioner
- 4) Turn on or turn off the sound system
- 5) Change the security system of the house
- 6) Lock or unlock the doors(exterior door, balcony doors and garage doors)
- 7) Start the roomba to clean your house or send it to charging
- 8) Turn on the water heating system of the house to heat the water in the water tank
- 9) Click device info to see that room's previous device states
- 10)Logout

-To open producer dashboard

- 1) Open the landing page
- 2) Click the producer login button
- 3) Enter the producer's e-mail and password

-When you already have access to customer dashboard you can:

- 1) See all the customer's information.
- 2) Can choose a customer to view their system
- 3) Logout

-When you choose a customer you can:

- 1) See all the rooms a customer has
- 2) Can click a room to see all the devices a customer has

-When you click a room you can:

- 1) See all the devices and their state a user has.
- 2) Can click on the device information to see the previous states of the devices

