

Visual Interface and Designs

Colour palette:

I chose this colour palette to match the eco-friendly business model of the website.



Forest green (#228B22)

- Main colour for headers and buttons



Lime Green (#32CD32)

- Accent colour for highlights and small UI elements



Neutral Gray (#D3D3D3)

- Backgrounds and secondary text



Charcoal Black (#333333)

- Primary content and text

Logo

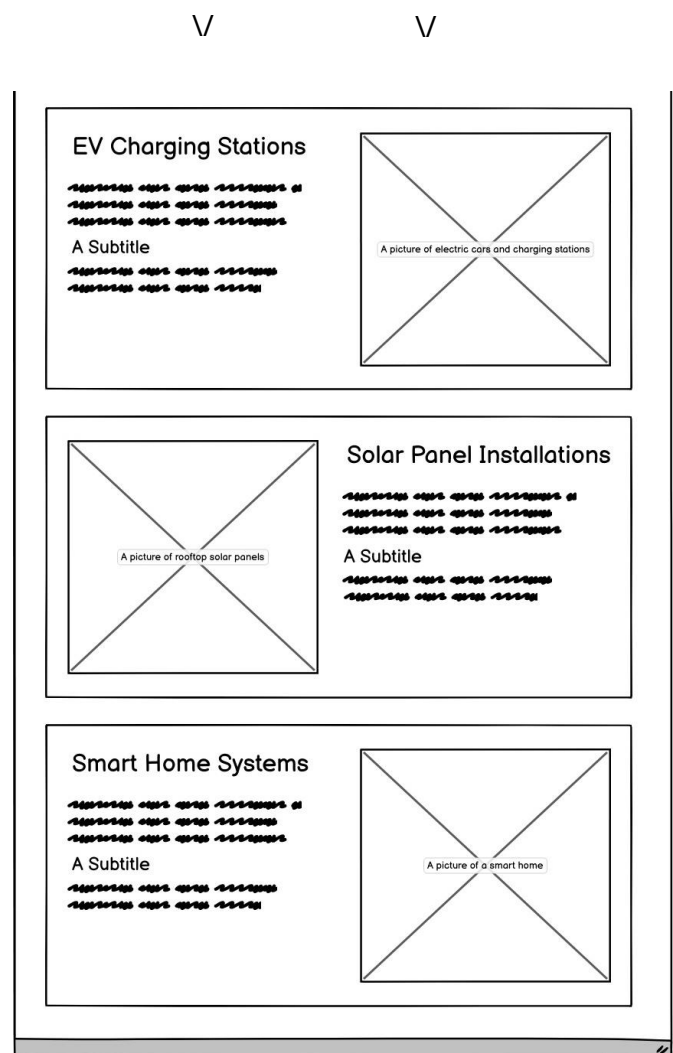
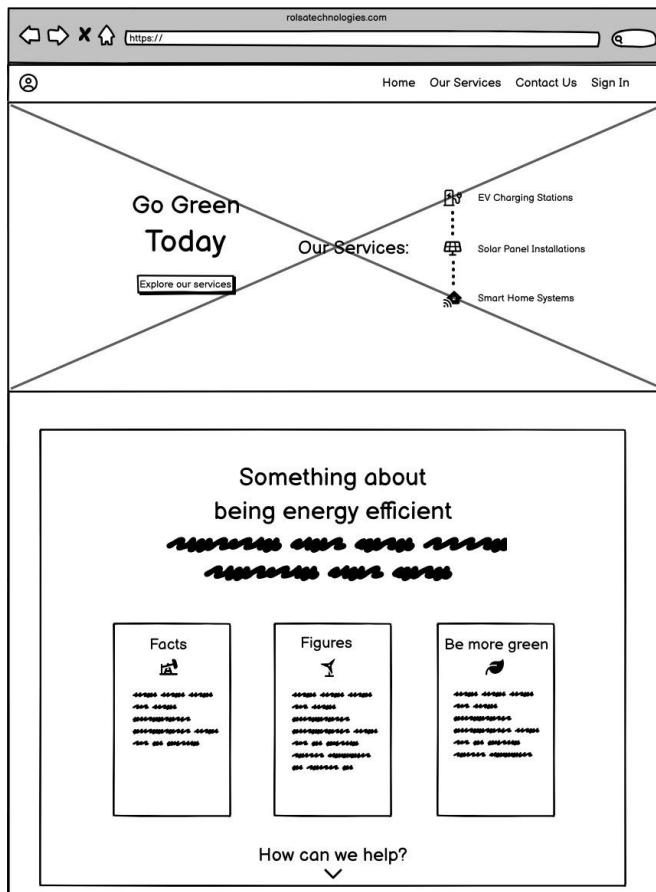
I chose to create a logo that matches the eco-friendly business model of the website. This logo effectively shows that the company specialises in environmentally friendly living solutions.

I used created this logo using Canva



Home page:

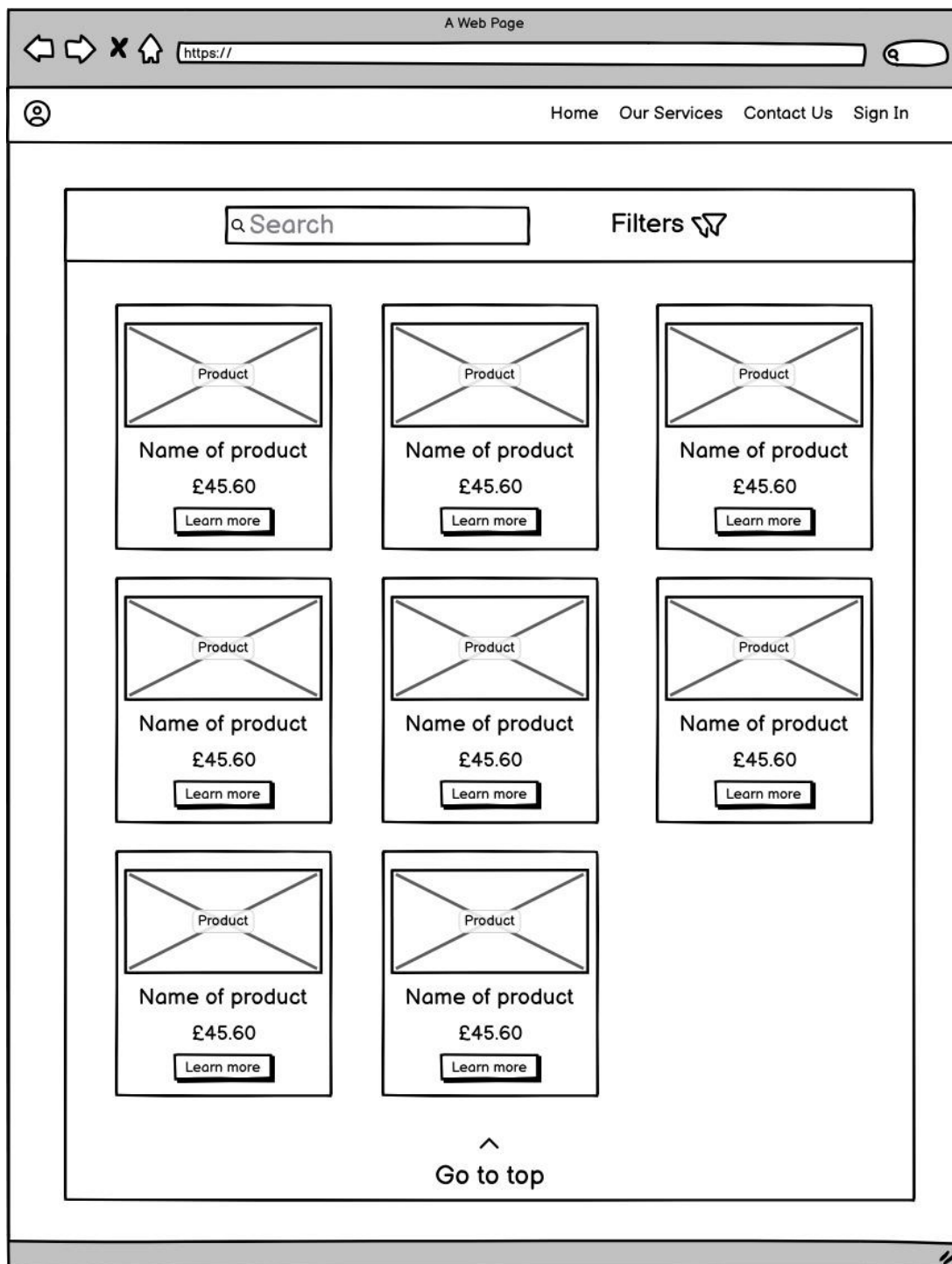
The toolbar will stick to the top of the viewport, so that it can be accessed without needing to scroll back to the top. It will also be accessible on every page.



Our services:

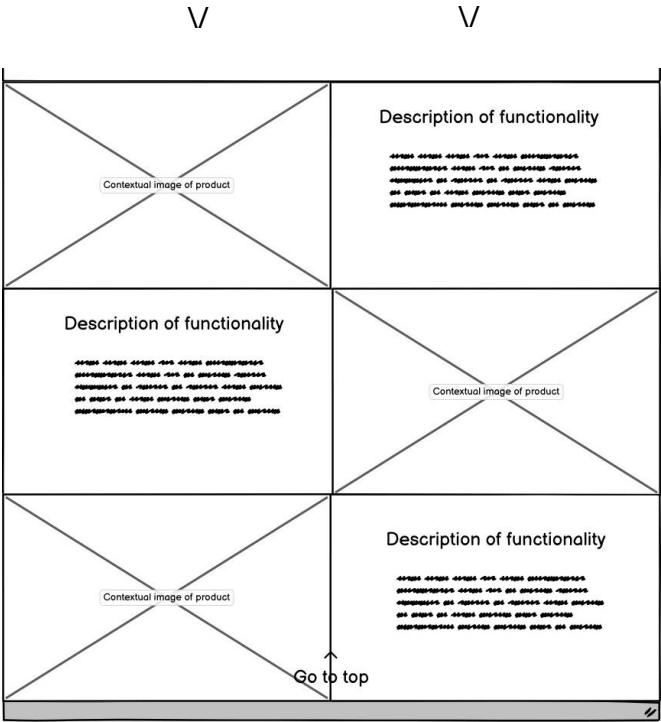
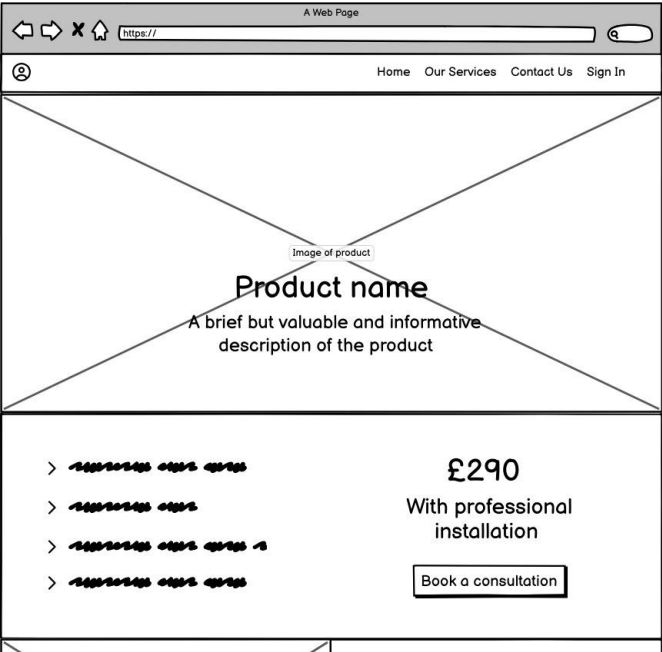
All services and products will be listed here.

The “go to top” button will stick to the bottom of the screen no matter how far scrolled down, but disappear when at top.

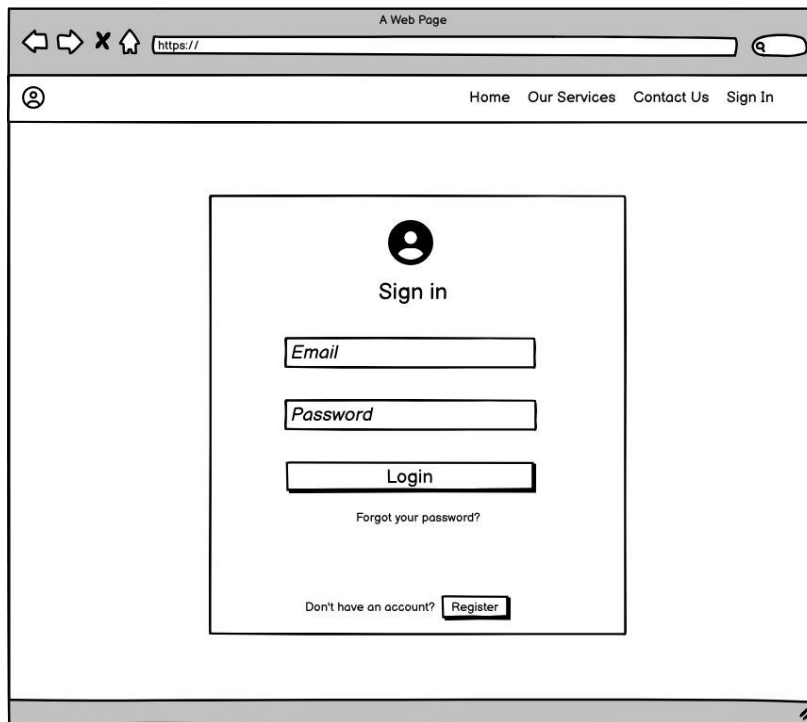


Product / Service Profile:

The “go to top” button will stick to the bottom of the screen no matter how far scrolled down, but disappear when at top.




Sign in / Sign up



A Web Page

https://

Home Our Services Contact Us Sign In



Sign in

Email

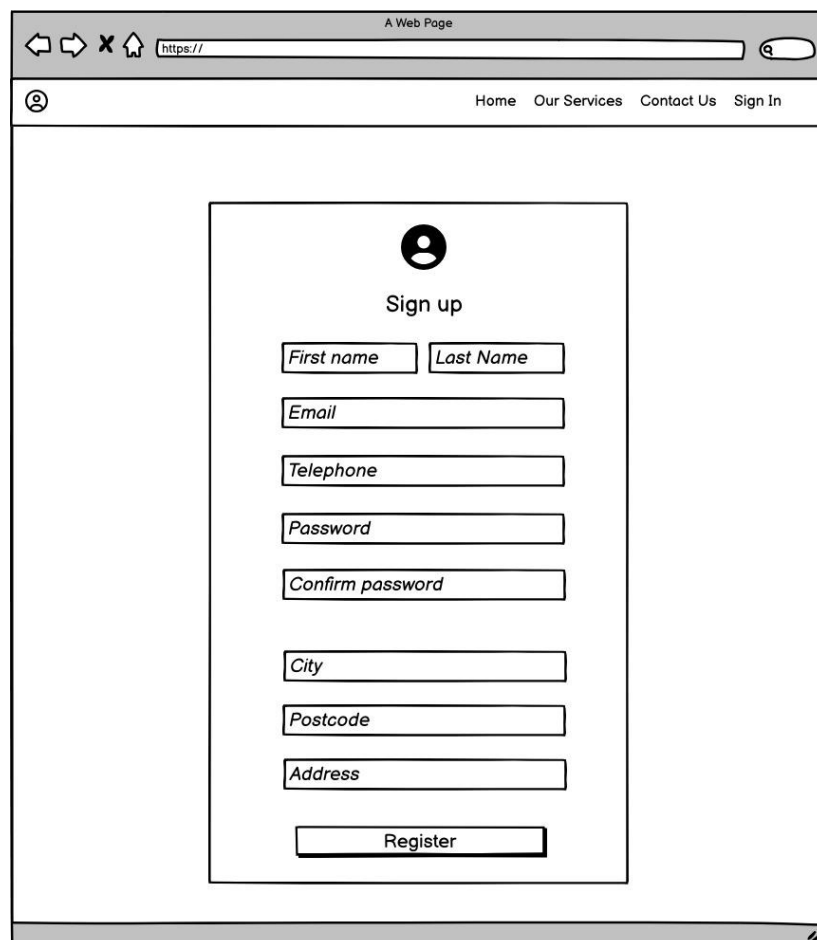
Password

Login

Forgot your password?

Don't have an account? Register


The sign-in form is centered on the page. It features a user icon at the top, followed by the title 'Sign in'. Below the title are two input fields for 'Email' and 'Password', and a 'Login' button. A link for 'Forgot your password?' is positioned below the password field. At the bottom, there is a link 'Don't have an account?' followed by a 'Register' button. The form is enclosed in a rectangular border.



A Web Page

https://

Home Our Services Contact Us Sign In



Sign up

First name Last Name

Email

Telephone

Password

Confirm password

City

Postcode

Address

Register

The sign-up form is centered on the page. It features a user icon at the top, followed by the title 'Sign up'. Below the title are several input fields: 'First name' and 'Last Name' (side-by-side), 'Email', 'Telephone', 'Password', 'Confirm password', 'City', 'Postcode', and 'Address'. A 'Register' button is at the bottom. The form is enclosed in a rectangular border.

Contact us:

A Web Page

https://

Home Our Services Contact Us Sign In

Have a question?

Subject 0 / 100

What can we help you with? 0 / 1000

Submit

Book a consultation

Start booking

More ways you can talk to us

customersupport@rolsatech.co.uk

@RolsaTechGroup

Rolsa Technologies

Profile:

A Web Page

https://

Home Our Services Contact Us Sign In

Hi Chandler

Your carbon footprint

60 / 100

Could be better

Get your carbon footprint

Upcoming consultation:

Product:
4x Philips Ultra-Massive Solar Panel

Address:
1 Yemen Road
Yemen
CT10 8Ui

Date:
05/06/2025
13:00

Change or cancel

Questionnaire example:

A Web Page

https://

Home Our Services Contact Us Sign In

Question 3 of 8

Example question goes here?

☐ Response 1

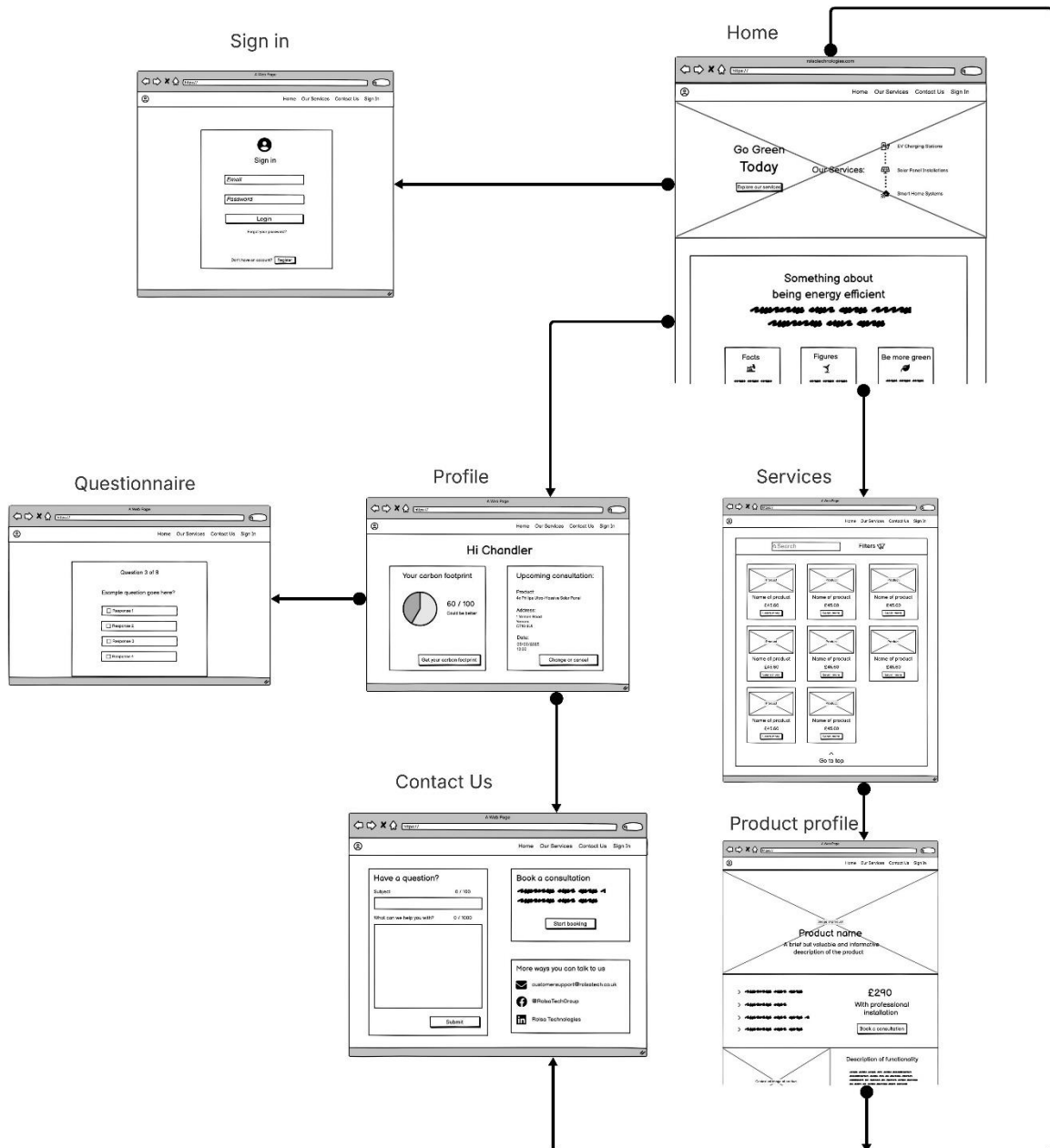
☐ Response 2

☐ Response 3

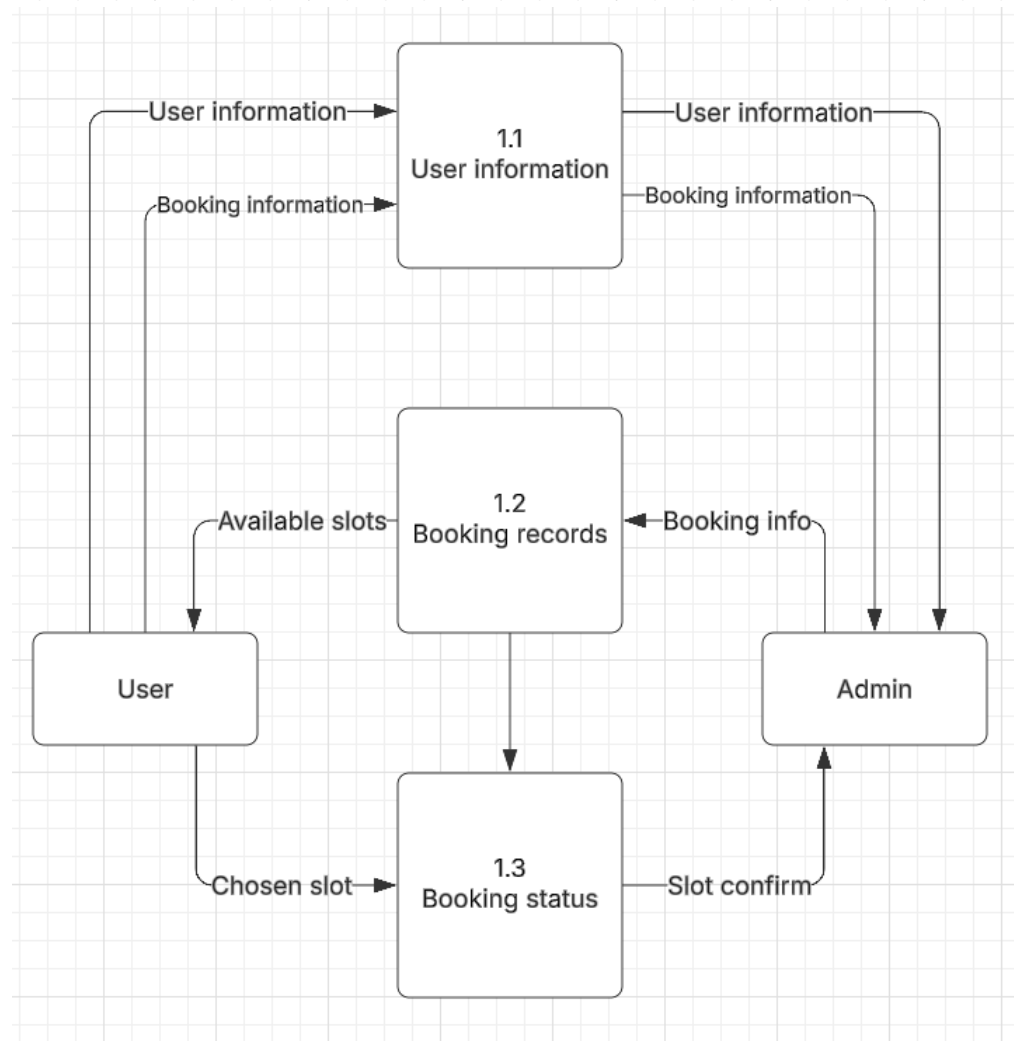
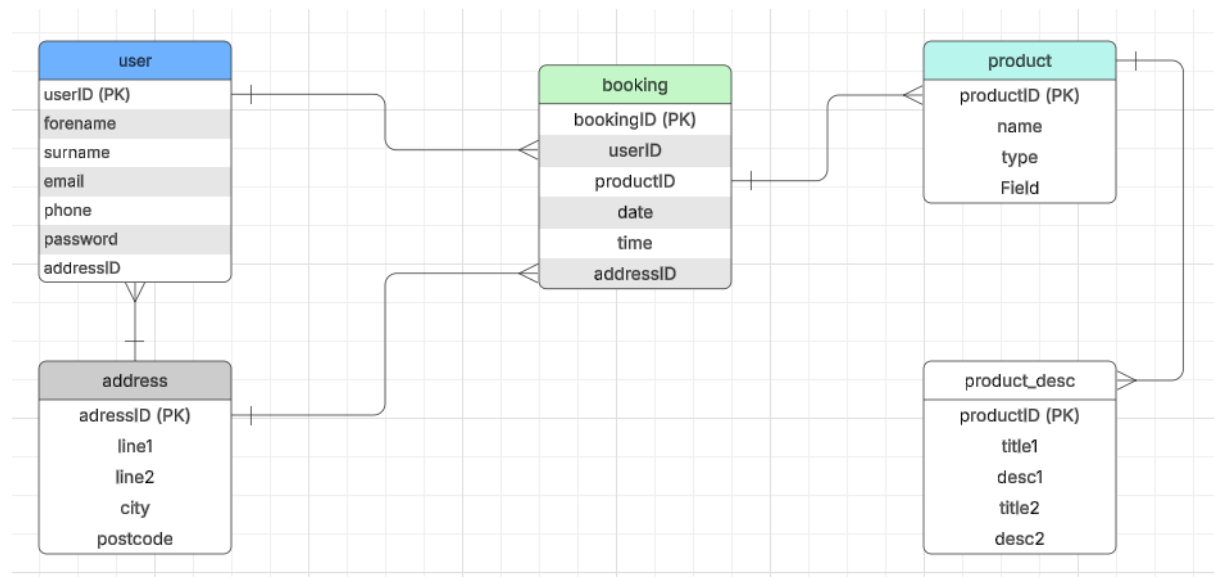
☐ Response 4

Wire flow

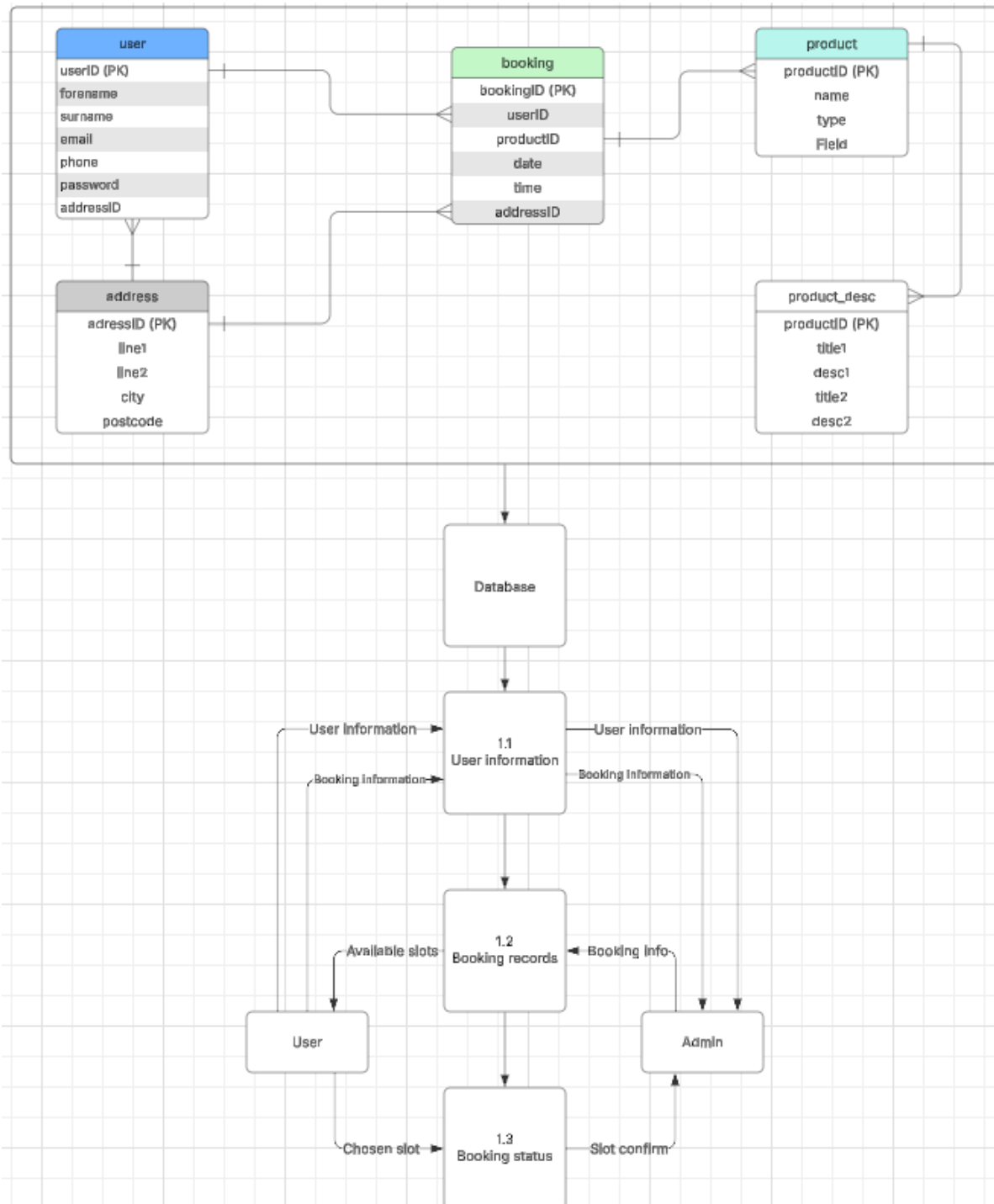
Full solution:



Data requirements

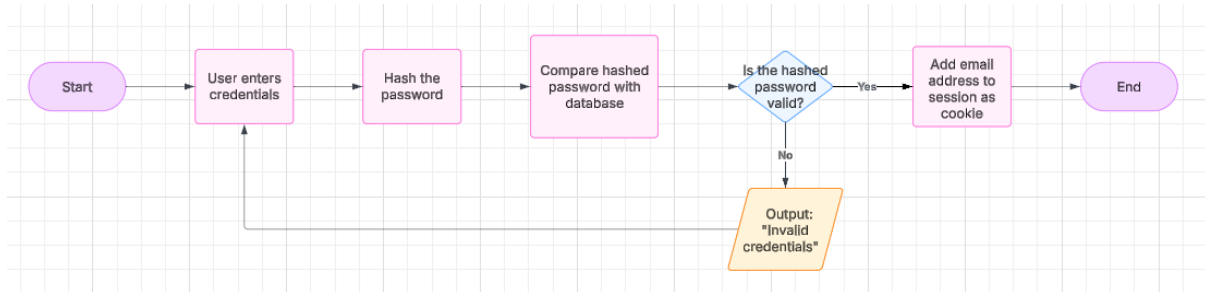


Data requirements: full solution:



Algorithms and Flowcharts

Sign in:



```
START SignInProcess()

    username = GetInputFromHTMLForm("username")
    password = GetInputFromHTMLForm("password")

    hashedPassword = HashPassword(password)

    storedHashedPassword = GetStoredPasswordFromDatabase(username)

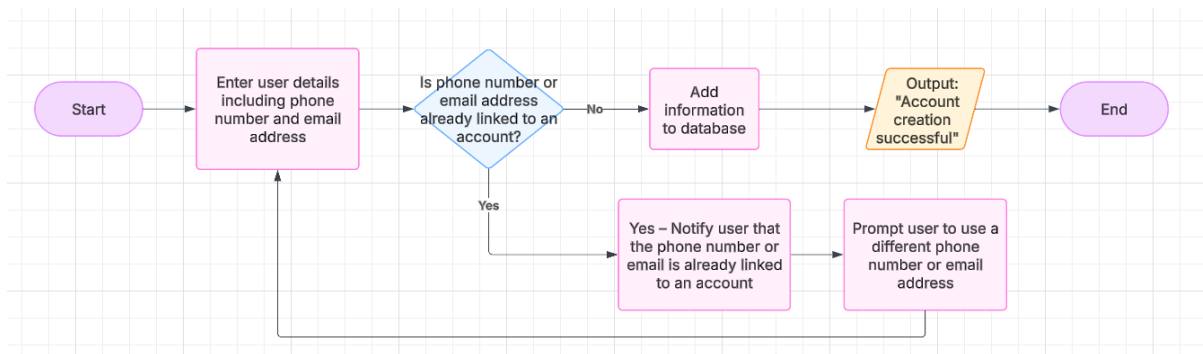
    IF hashedPassword == storedHashedPassword
        DisplayMessage("Sign in successful")
        RedirectToDashboard()
    ELSE
        DisplayMessage("Invalid username or password")
        RedirectToSignInPage()

END SignInProcess()

// function to hash the inputted password
FUNCTION HashPassword(password)
    hashedPassword = HashUsingSecureAlgorithm(password)
    RETURN hashedPassword
END FUNCTION

// function to grab an existing password from database
FUNCTION GetStoredPasswordFromDatabase(username)
    storedHashedPassword = QueryDatabase("SELECT password FROM users WHERE username = ?", username)
    RETURN storedHashedPassword
END FUNCTION
```

Sign up:



```
START SignUp()
```

```
email = GetInputFromHTMLForm("email")
password = GetInputFromHTMLForm("password")
```

```
hashedPassword = HashPassword(password)
```

```
IF CheckIfEmailExists(email)
    DisplayMessage("Email already registered")
    RedirectToSignUpPage()
```

```
ELSE
    StoreUserInDatabase(email, hashedPassword)
    DisplayMessage("Account creation successful")
    RedirectToSignInPage()
```

```
END SignIp()
```

```
// function to hash inputted password
```

```
FUNCTION HashPassword(password)
    hashedPassword = HashUsingSecureAlgorithm(password)
    RETURN hashedPassword
END FUNCTION
```

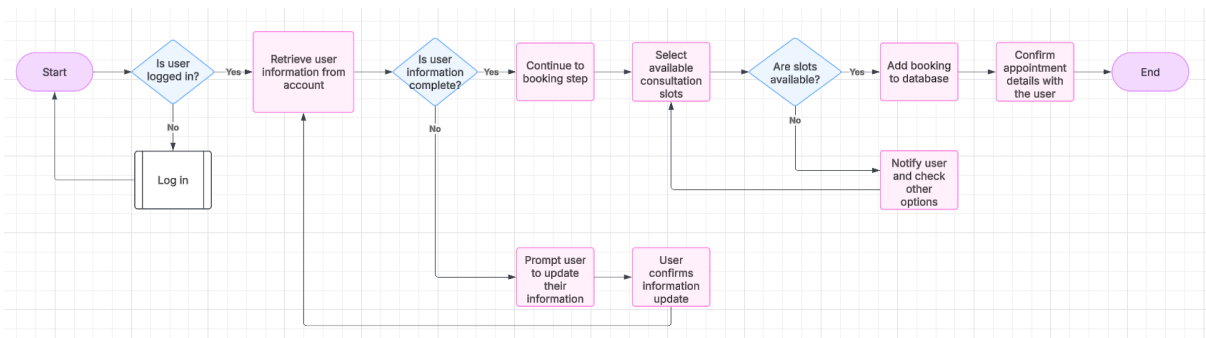
```
// function to check if email already exists within database
```

```
FUNCTION CheckIfEmailExists(email)
    result = QueryDatabase("SELECT COUNT(*) FROM users WHERE email = ?", email)
    IF result > 0
        RETURN TRUE
    ELSE
        RETURN FALSE
    END IF
END FUNCTION
```

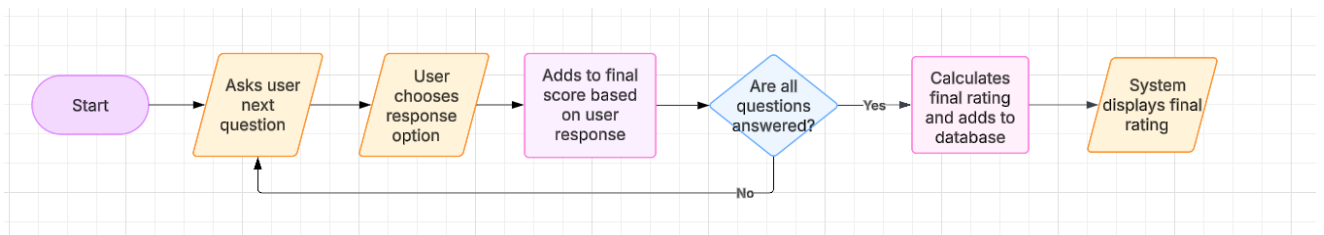
```
// function to add into to database
```

```
FUNCTION StoreUserInDatabase(email, hashedPassword)
    ExecuteQuery("INSERT INTO users (email, password) VALUES (?, ?)", email, hashedPassword)
END FUNCTION
```

Booking:



Carbon footprint questionnaire:



Test strategy

Date of test	Component tested	Type of test	Prerequisites and dependencies
18/03/24	Sign up function	Unit testing: testing valid and invalid input formats	Requires a registration page
18/03/24	Sign in function	Black box testing White box testing: testing if on successful login cookie is stored correctly	Requires a login page connected to back end
18/03/24	Booking function	Integration testing: testing compatibility and data flow of booking and user information White box testing: testing if bookings are being correctly scheduled	Requires a booking system and related databases
18/03/24	Footprint calculator function	Black box testing: Test that ratings received are accurate and expected	Requires a questionnaire form
19/03/24	Browsing function	Black box testing: Test that all items are displaying images and descriptions correctly	Requires page displaying all products
19/03/24	Search and filter function	Black box testing: test that results are displaying correctly	Requires search and filter features
20/03/24	Error messages	Validation testing: testing inputted values are checked	Requires error handling features
31/03/24	Accessibility	Compliance testing: Testing W3C compliance ratings	Requires accessibility features
31/03/24	Security	Security testing: testing for SQL injection and other vulnerabilities	Requires connected back end
01/04/24	Full system (user journey)	System testing: testing complete end to end user journey	System must be complete and functional
01/04/24	Full system (user experience)	Beta testing: gathering user feedback	System must be complete, functional and responsive

Appendix

[Products and services](#)[Our company](#)[Careers](#)[Home](#) > [Products and services](#)**Bosch in the United Kingdom**

Products and services

In your car, at home, or at work — Bosch technology shapes many areas of life.

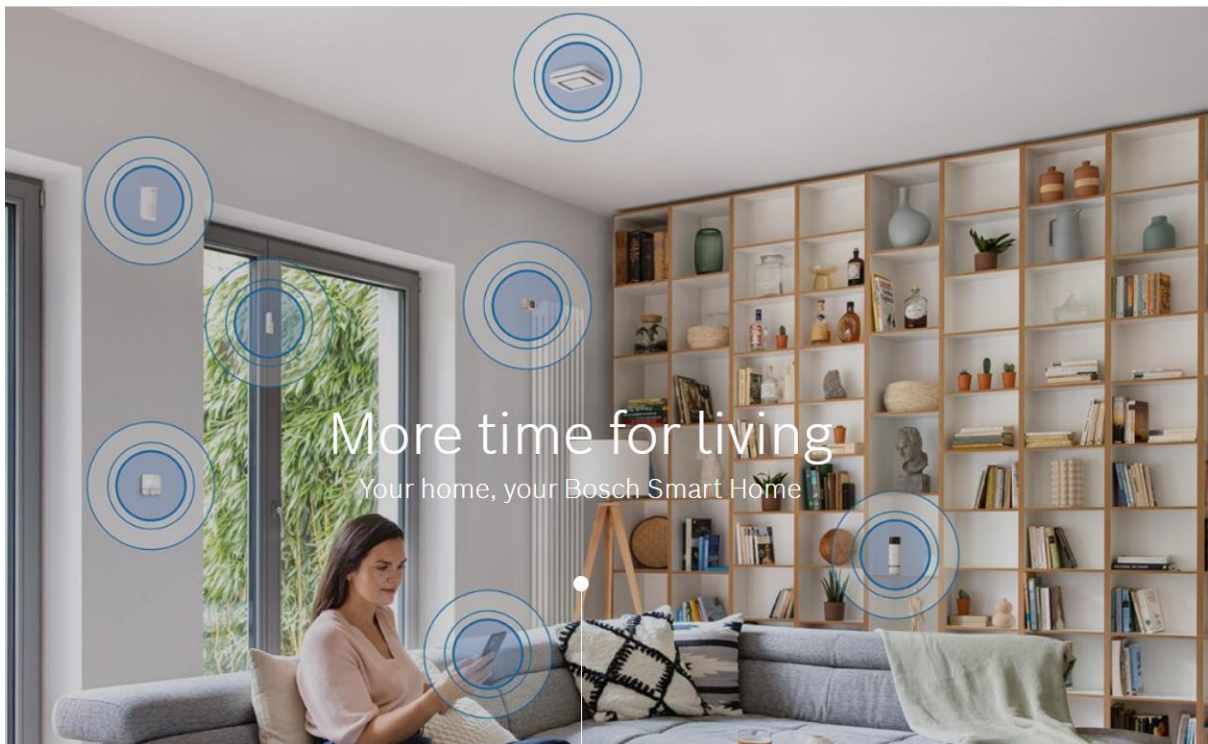


Mobility

Bosch develops innovative solutions that facilitate new mobility offerings. Whether for private or commercial vehicles, multimodal transportation services, fleet management, or smart transport infrastructure, Bosch brings together vehicle technology, the data cloud, and services to offer complete mobility solutions.

[To our mobility offerings](#)

At home

[Start](#) [Smart Home explained](#) [Solutions](#) [Products](#) [Apps](#) [Partners](#) [Service](#)[SingleKey ID](#)[Shopping cart](#)

More time for living

Your home, your Bosch Smart Home

Products(19)

Sort by 



Smart Home controller II

88.70£ * Including 20% VAT


Find out more



Radiator Thermostat II [+M] Anthrazit

75.38£ * Including 20% VAT

Find out more



Universal switch II

48.76£ * Including 20% VAT

Find out more



Room thermostat II 230 V

102.01£ * Including 20% VAT


Find out more



Light/shutter control II

66.51£ * Including 20% VAT

Find out more



Smart Home Relay

62.07£ * Including 20% VAT

Find out more

AGE RANGE


☐ Adult


☐ Kids


BRAND

☐ Amazon

COLOUR

☒ 

☐ 

☐ 


GENERATION

☐ 3rd Gen (2023)

MODEL


☐ Echo Pop

On sale



Amazon Echo Dot Kids | Smart Speaker with parental controls | Owl (5th generation, 2022)


On sale



Amazon Fire TV Stick 4K Max | Wi-Fi 6 | Alexa Voice Remote | 4K Streaming

★★★★★2 reviews


On sale



Amazon Echo - 4th generation | With premium sound, smart home hub and Alexa | Charcoal

★★★★★1 review


On sale




Amazon Echo Show 8 | 3rd Gen 2023 | HD Smart Screen with Spatial Audio, Smart Hub | Alexa | Charcoal

★★★★★1 review


On sale




On sale



On sale



On sale





Sustainable ventilation and temperature drop

Windows open, heating off - completely automatically! Thanks to the 'Sustainable ventilation' service, you don't heat out the window: if your door/window contact detects that a window is open, it automatically reduces the smart radiator thermostats. You can define the response time of the throttling yourself so that it is not triggered every time a window is opened.

Detecting a drop in temperature: Your smart thermostats can also recognise a sudden drop in temperature in the room and respond with a heating pause and/or push message.

Thanks to such services, smart heating can also save up to 36% energy.

The color indicates the heating status

Not only the link to your Smart Home system makes your heating thermostat smart - it stands out from conventional devices in design terms too.

Thanks to its compact size (87 x 51 x 51 mm (LxWxD)) and swivelling display, it fits discreetly into your living room - either horizontally or vertically mounted.

The high-contrast display with background lighting guarantees optimum legibility whatever the lighting conditions are.

