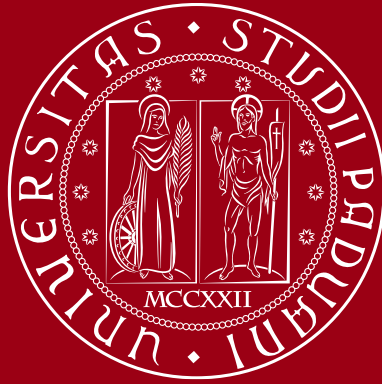


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**800**  
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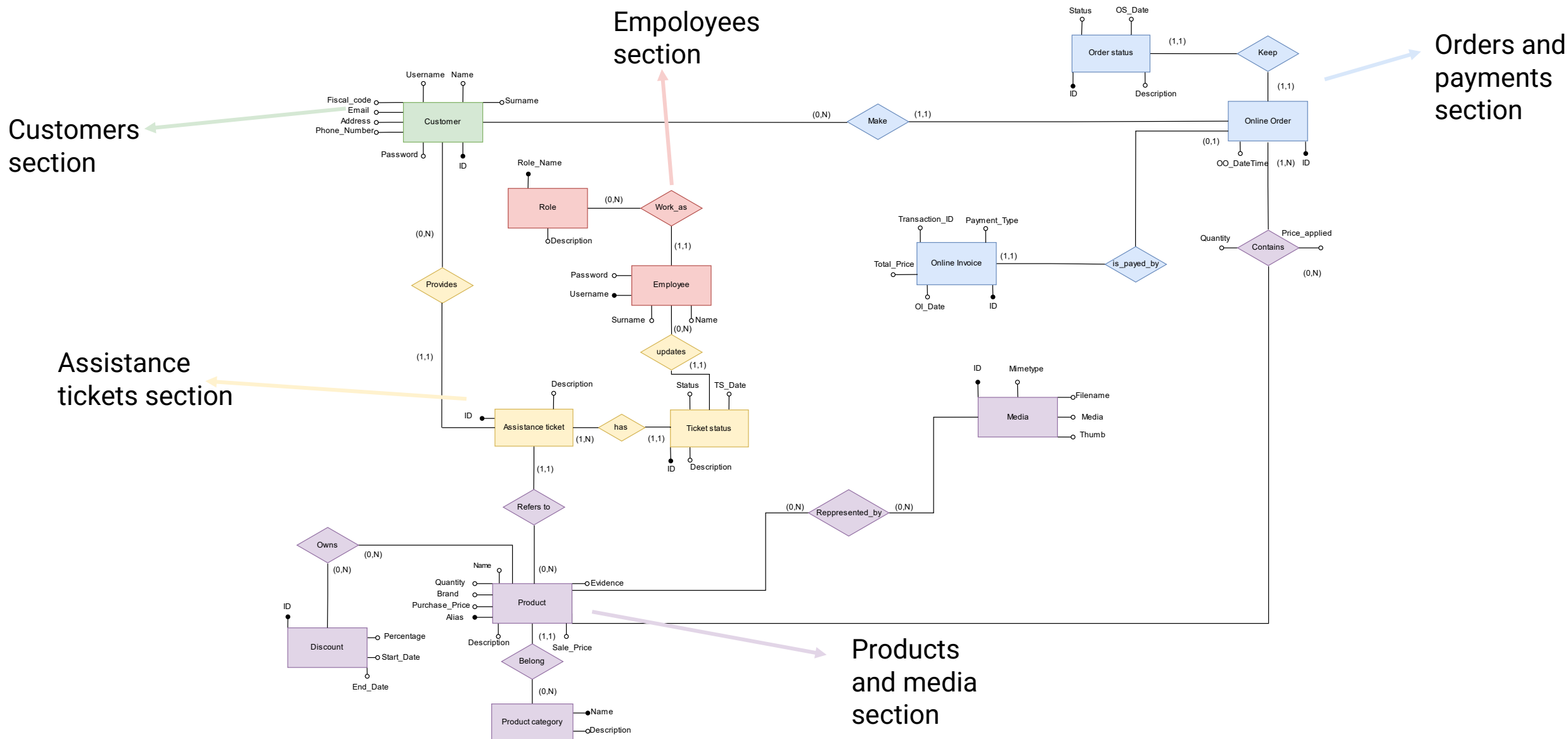
DIPARTIMENTO  
DI INGEGNERIA  
DELL'INFORMAZIONE

# Electromechanics shop

*WADteam*

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# Project Intro





## Customers

- Search products
- Register
- Buy products
- See the invoices
- Check the status of the orders and delete them
- Open assistance ticket and check for their updates
- Manage their accounts

Unregistered customer

Administrator

## Employees

- Add or modify product details and media
- Add or remove discounts
- View the tickets and update their status
- View the orders and update their status
- View the list of invoices
- Manage their account
- Manage accounts of other employees

Plain employee

Logged in customer

# Design Principles



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# Visual identity

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**ELECTROMECHANICS  
SHOP**



**BEBAS NEUE  
ROBOTO**

The appearance is key:





## **SIMPLE**

Minimal, no frill

## **BALANCE**

Symmetrical, Emphasis,  
Proportion and Hierarchy

## **ACCESSIBLE**

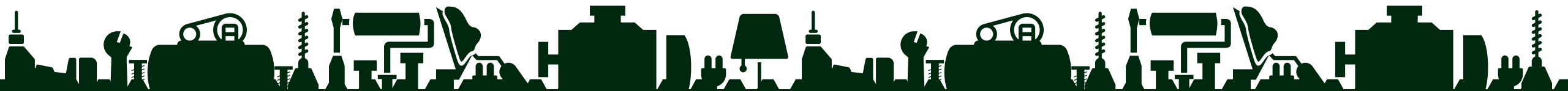
Good contrasts,  
Responsive for  
Mobile and Hi-Res

## **HOVER, FOCUS, CLICK**

To make the user  
realise that he is doing  
something

## **WHITE SPACES**

To relax and  
encourage reading





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# Complete Palette

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DELL'INFORMAZIONE

**Style palette:**

#3BB273

#FFB703

#F8F9FA

#00280E

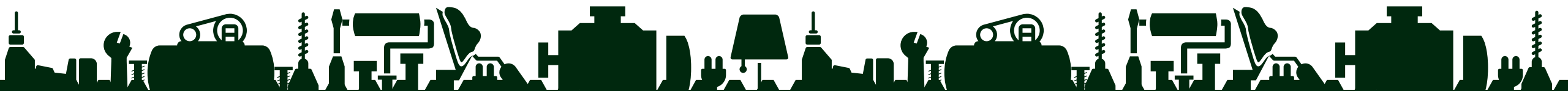
**Utilities palette:**

#63C0DF

#DC902C

#07750C

#FA3228

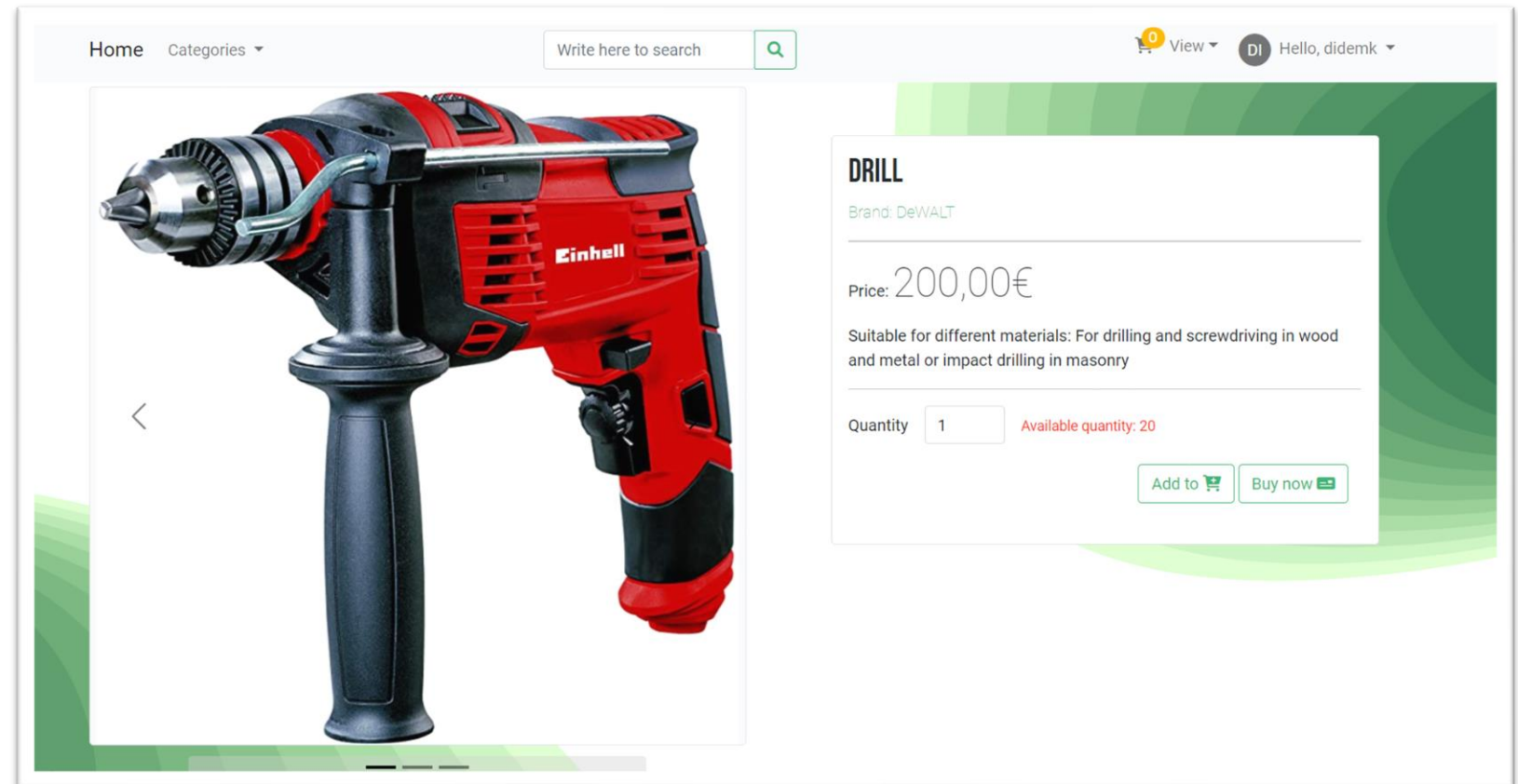


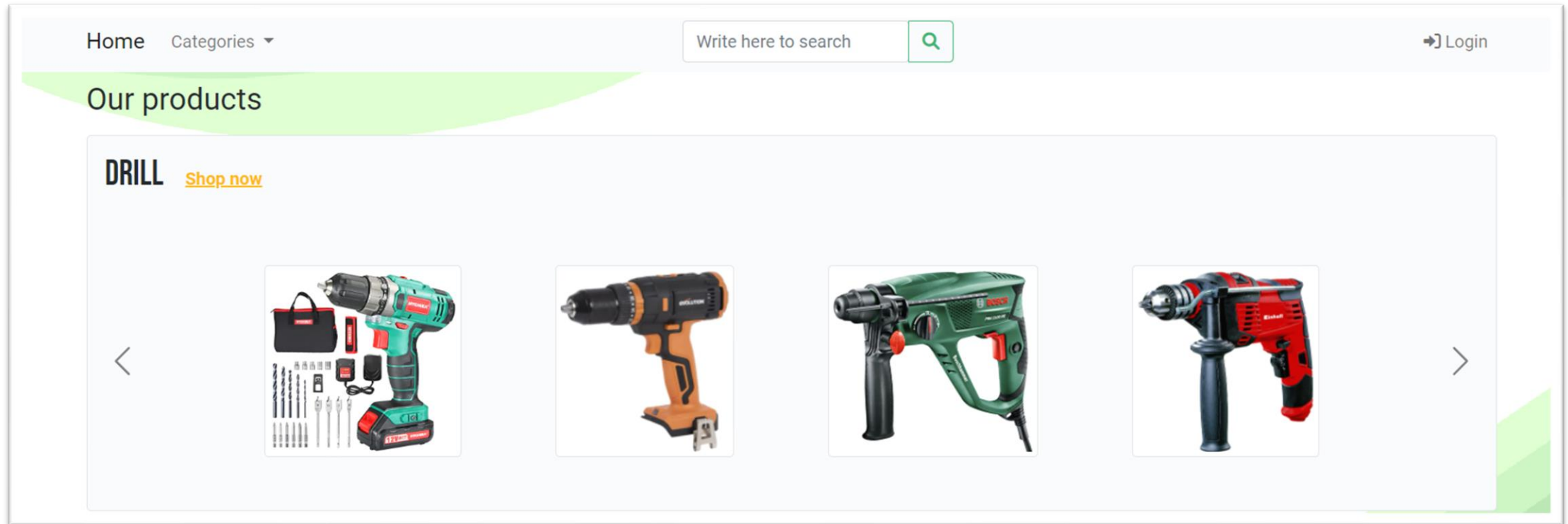


Online Shop

## Single-element carousel

- Implemented using **Bootstrap** and **CSS**
- Applied:
  - In the homepage for the featured products
  - In the detail page of each product to show its pictures





Four-elements carousel:

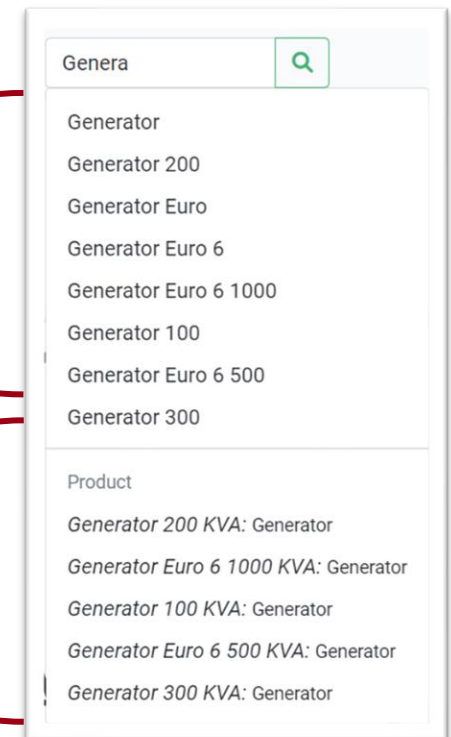
- Implemented using Bootstrap, CSS and **JavaScript**
- Applied in the homepage for every product category

- Through AJAX you can see an autocomplete bar and search suggestions
- The suggestions will show the **main keywords** you can use to complete the search and **products** starting with those particular characters along with their relative brand



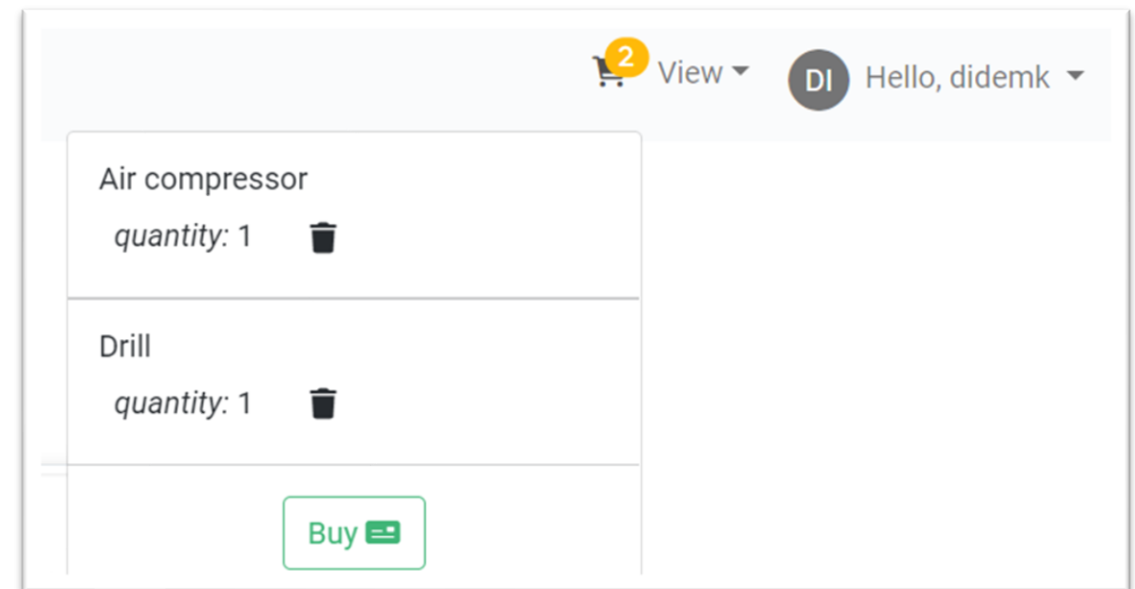
Main keywords

Products





- In addition to the immediate purchase of a single product, the Electromechanics shop allows you to manage a cart containing various products
- On this site we have decided to implement the shopping cart using AJAX





## Drill

Price: 172.00€  
Quantity: 2

[Open Ticket](#)

## Screwdriver

Price: 70.01€  
Quantity: 2

[Open Ticket](#)

Date: 27/05/2022 11:02  
Status: Payment accepted  
Total price: 484.02€

Invoice

Cancel

ID ORDER # 24

[Edit your order](#)

## Drill

Price: 172.00€  
Quantity: 2

## Screwdriver

Price: 70.01€  
Quantity: 2

Date: 27/05/2022 11:02  
Status: Payment accepted  
Total price: 484.02€

ID ORDER # 11

[Edit your order](#)

## Drill

Price: 200.00€  
Quantity: 1

Date: 12/04/2022 18:01  
Status: Open  
Total price: 200.00€

ID ORDER # 4

[Edit your order](#)

## Air compressor

Price: 1090.00€  
Quantity: 10

Date: 24/03/2022 17:13  
Status: Shipped  
Total price: 10900.00€

## ID INVOICE # 14

Transaction ID: 1354748b6e734f6f8ea6ec59679741  
Payment Type: Credit Card  
Date: 27/05/2022 00:00  
Total Price: 484.02€

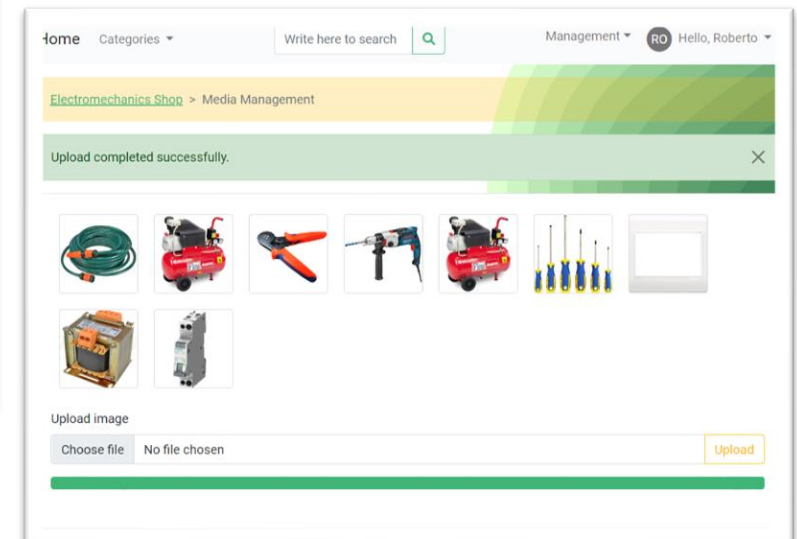
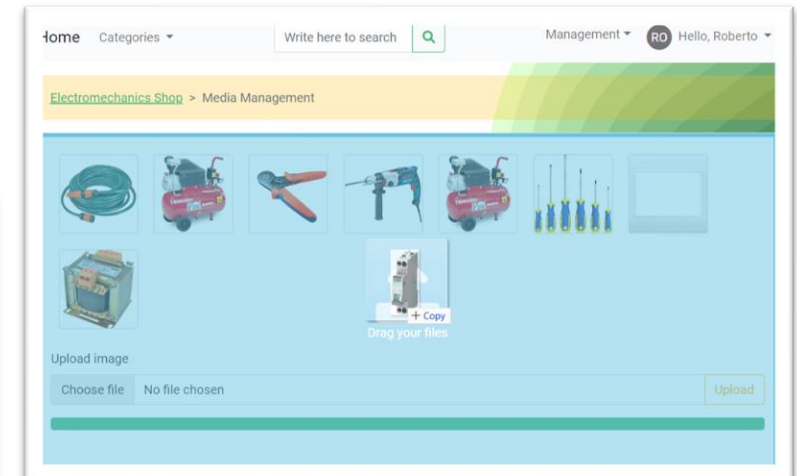
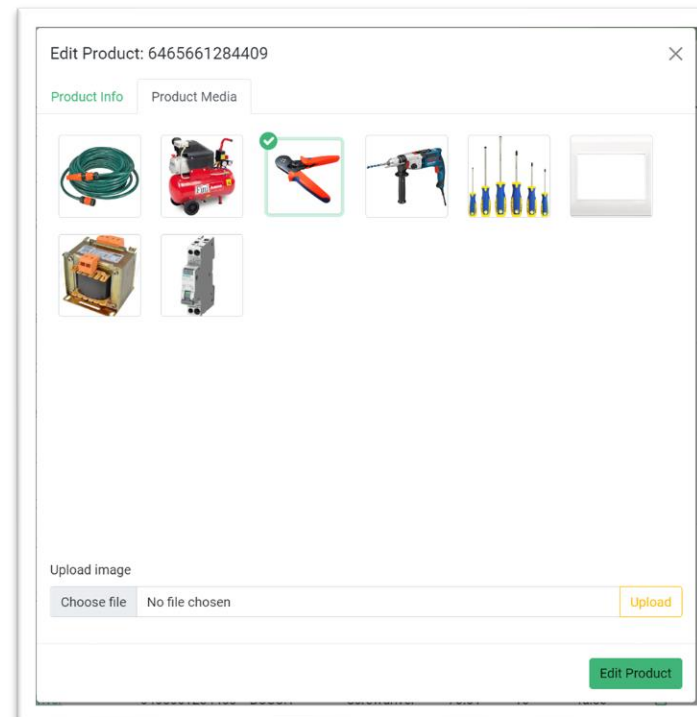
## ID ORDER # 24

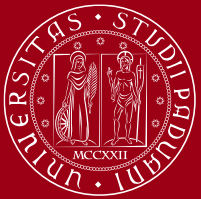
Product name	Price	Quantity	Total price
Drill	172.00€	2	344.00€
Screwdriver	70.01€	2	140.02€

 Print Invoice



- Drag & Drop and Ctrl/Cmd+V pictures upload
- **AJAX technology-based** upload available in both Media Management and Product Management
- Selection that is made through **interactive checkboxes** containing the image
- Media are saved in a database table containing two blob fields: the original file and a 200x200 preview





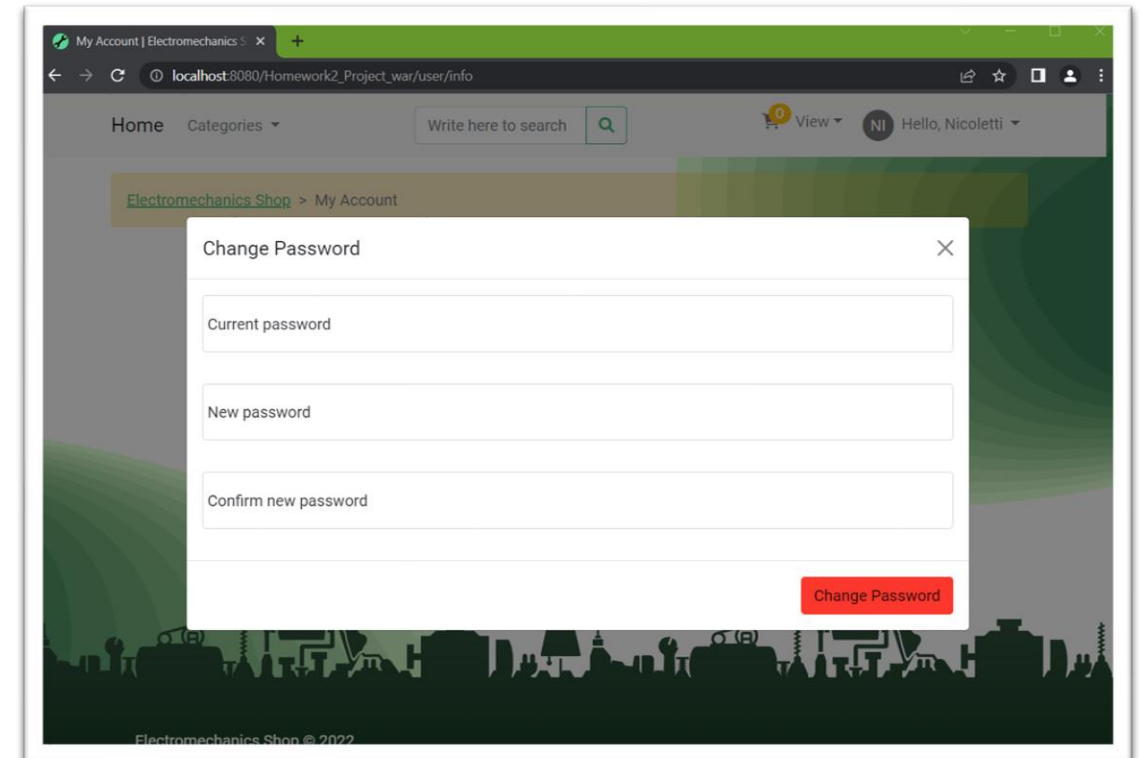
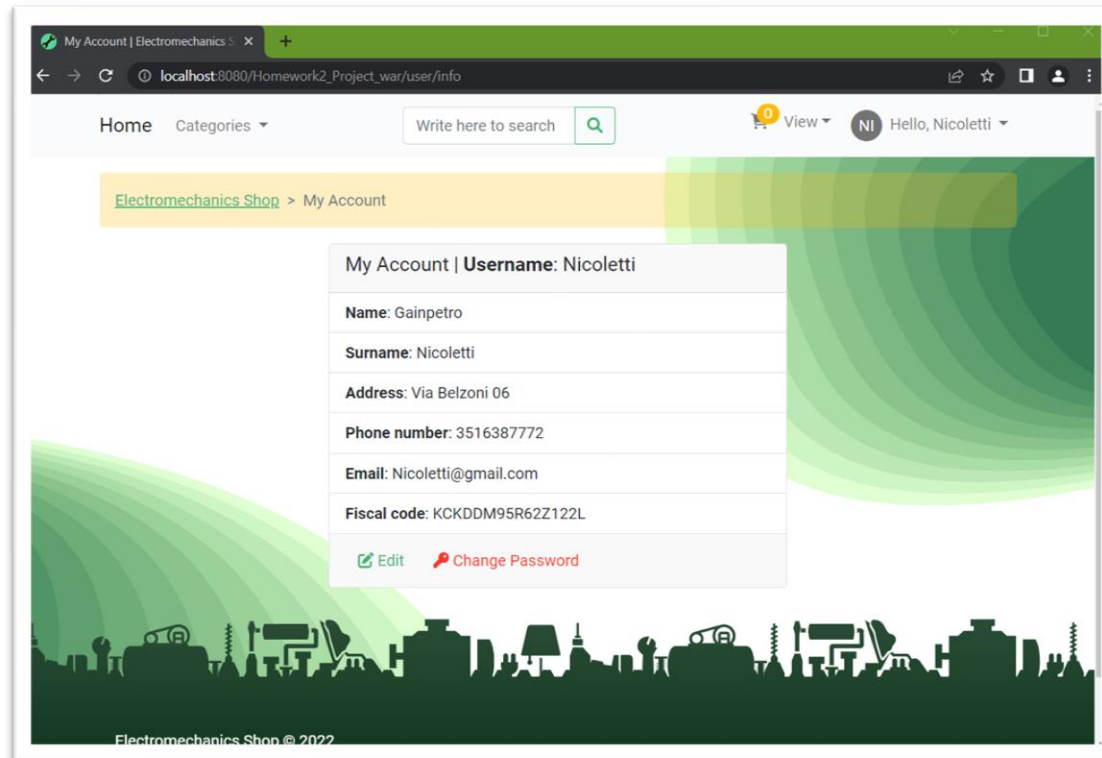
```
function uploadFile(multipartData) {  
  let xmlhttp = new XMLHttpRequest();  
  xmlhttp.open("POST", rootPath + "/rest/media/upload", true);  
  xmlhttp.upload.addEventListener("progress", function (e) {  
    let progress = ((e.loaded * 100.0 / e.total) || 100);  
    updateProgressBar(progress, false);  
  });  
  xmlhttp.onreadystatechange = function () {  
    if (xmlhttp.readyState === XMLHttpRequest.DONE) {  
      ready(xmlhttp, multipartData.get('file').name);  
    }  
  }  
  xmlhttp.send(multipartData);  
  updateProgressBar(0, false);  
}
```

```
function initDropArea(dropArea, ready) {  
  
  ['dragenter', 'dragover', 'dragleave', 'drop'].forEach(eventName => {  
    dropArea.addEventListener(eventName, preventDefaults, false)  
  });  
  dropArea.addEventListener('dragenter', highlight, false);  
  dropArea.addEventListener('dragover', forceHighlight, false);  
  dropArea.addEventListener('dragleave', unHighlight, false);  
  dropArea.addEventListener('drop', handleDrop, false);  
  dropArea.addEventListener('drop', forceUnHighlight, false);  
  dropArea.addEventListener('paste', (event) => {  
    let files = (event.clipboardData || window.clipboardData).files;  
    if(files) {  
      handleFiles(files);  
    }  
  });  
  
  [...]  
  
  function handleDrop(e) {  
    let dt = e.dataTransfer  
    let files = dt.files  
  
    handleFiles(files)  
  }  
  
  function handleFiles(files) {  
    ([...files]).map(file => {  
      let formData = new FormData();  
      formData.append('file', file)  
      return formData;  
    }).forEach(uploadFile);  
  }  
}
```



# Account & Order

How user interact with the web app



The user page allows you to change user informations and password



- **Create ticket** from an order for any kind of problem
- **Ticket list** shows the list of created tickets by the customer updated with ticket status and description by employee

Create ticket for product 6465661284415

Description:

Create

Ticket ID: 26

Description:

The product is faulty.

Product:

[Product 6465661284415](#)

Ticket Status :

**WAITING FOR A RESPONSE**  
One of our staff members will take care of your request soon



- **Ticket list** as the one for customers, in addition there is a respond button
- **Respond ticket** to update the ticket status and description. If the ticket has been closed the button to respond is removed

Ticket ID: 26

Description:	The product is faulty.
Customer:	4
Product:	<a href="#">Product 6465661284415</a>

[Respond](#)

Respond Ticket 26

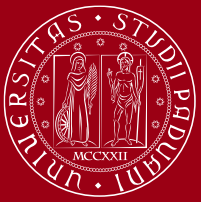
Ticket Status: ☐ Open ☐ Processing ☐ Closed ☐ Return

Description:

[Respond](#)

# Management

How employees interact with the web app



## Tables for managing:

- Products
- Discounts
- Order status
- Employees
- Customers

Username	Name	Surname	Role	
Roberto	Roberto	Grillo	Administrator	
andreFab	Andrea	Fabrello	Seller	
tic1	Ticone	Scatto	Technician	
TommyGua	Tommaso	Guarnieri	Technician	
rosatigaia	Gaia	Rosati	Warehouse Manager	

Electromechanics Shop > Product Management								
Name	Alias	Brand	Category	Sale price	Quantity	Evidence		
<a href="#">Generator</a>	6465661284410	GEN10	Generator	110.0	1	false		
<a href="#">Transformer</a>	6465661284411	TRAUTO	Transformer	350.0	0	false		
<a href="#">Pump</a>	6465661284412	PMO	Pump	25.0	1	false		
<a href="#">Electrical Motor</a>	6465661284413	General Electric	Electrical Motor	150.0	0	false		
<a href="#">Ampermeter</a>	6465661284414	Scheneid	Ampermeter	10.0	100	false		
<a href="#">Multimeter</a>	6465661284415	Siemensu	Multimeter	15.0	100	false		
<a href="#">Copper Cable</a>	6465661284416	Schneider	Cable	15.0	10	false		
<a href="#">Drill</a>	6465661284454	DeWALT	Drill	200.0	20	false		
<a href="#">Screwdriver</a>	6465661284458	BOSCH	Screwdriver	70.0	0	false		
<a href="#">Air compressor</a>	6465661284473	Automan	Compressors	109.0	10	false		



## Use of forms to add/edit/delete data:

- Pre-compiled fields
- Input validation
- Use of modals

## Messages to inform the user of an action

Product 6465561284499 created

+ Add new product

Name	Alias	Brand	Category	Sale price	Quantity	Evidence		
<a href="#">Generator</a>	6465661284410	GEN10	Generator	110.0	1	false		
<a href="#">Screwdriver</a>	6465661284458	BOSCH	Screwdriver	70.0	0	false		
<a href="#">Air compressor</a>	6465661284473	Automan	Compressors	109.0	0	false		
<a href="#">LED Smart Lamp</a>	6465561284499	TP-Link	Lighting	15	30	true		

Home

Electromechanics

+ Add new product

Add Product

Product Info Product Media

Alias: 6465661284499 ✓

Name: LED Smart Lamp ✓

Brand: TP-Link ✓

Description: TP-Link Smart WiFi Bulb Multicolor Smart LED, 806 lumens, 8.7W, Remote Control via APP ✓

Purchase price: € 9.00 ✓

Sale price: € 15.00 ✓

Quantity: 30 ✓

Category: Lighting ✓ +

Evidence: ☒ Yes ☐ No

Add Product

## Ajax functionalities for:

- Adding a row
- Editing a row
- Deleting a row

```
deleteCustomerForm.addEventListener('submit', (e) => {
    if(!deleteCustomerForm.checkValidity()) return;

    e.preventDefault();
    const formData = new FormData(deleteCustomerForm);
    const urlencodedData = new URLSearchParams(formData);
    const xmlhttp = new XMLHttpRequest();

    xmlhttp.open("POST", rootPath + "/rest/management/customerManagement/deleteCustomer/" + username, true);
    xmlhttp.onreadystatechange = function() {
        if (xmlhttp.readyState === XMLHttpRequest.DONE) {
            if(xmlhttp.status === 200) {
                const alertPlaceholder = document.getElementById('liveAlertPlaceholder');
                bootstrapAlert("Customer " + username + " removed", 'success', alertPlaceholder);

                let row = document.querySelector('tr[data-id="'+username+'"]');
                row.children[5].innerHTML = "0";
                bootstrap.Modal.getInstance(deleteCustomerModal).hide();
            } else {
                const alertPlaceholder = document.getElementById('formAlertPlaceholderDelete');
                bootstrapAlert(parseError(xmlhttp), 'danger', alertPlaceholder);
            }
        }
    }
    xmlhttp.send(urlencodedData);
});
```

```
deleteCustomerModal.addEventListener('show.bs.modal', (e) => {
    // Button that triggered the modal
    var button = e.relatedTarget;
    // Extract username from data-id attributes
    username = button.getAttribute('data-id');

    toggleWasValidated(deleteCustomerForm, false);
    deleteCustomerForm.reset();

    document.getElementById('usernameDelete').readOnly = true;
    document.getElementById('nameDelete').readOnly = true;
    document.getElementById('surnameDelete').readOnly = true;
    document.getElementById('fiscalCodeDelete').readOnly = true;
    document.getElementById('emailDelete').readOnly = true;

    const xmlhttp = new XMLHttpRequest();
    xmlhttp.open("GET", rootPath +
"/rest/management/customerManagement/deleteCustomer/" + username, true);
    xmlhttp.onreadystatechange = function() {
        if (xmlhttp.readyState === XMLHttpRequest.DONE) {
            if(xmlhttp.status === 200) {
                const response = JSON.parse(xmlhttp.responseText);
                populateForm(deleteCustomerForm, response);
            } else {
                const alertPlaceholder =
document.getElementById('liveAlertPlaceholder');
                bootstrapAlert(parseError(xmlhttp), 'danger', alertPlaceholder);
                bootstrap.Modal.getInstance(deleteCustomerModal).hide();
            }
        }
    }
    xmlhttp.send();

    let modalTitle = deleteCustomerModal.querySelector('.modal-title');
    modalTitle.textContent = 'Delete Customer: ' + username;
    deleteCustomerButton.textContent = 'Delete Customer';
});
```



# Conclusions



## Achieved features:

- Intuitive user flow
- Responsive design

## Future developments:

- Supplier management
- Infinity scroll
- Table ordering and search

Thanks for your attention