### Unit - III

User and Role Management, Customer Group Management, The Magento theme structure, Creative translations, using theme variants, Customizing design themes, Content menu, Content Elements

## **User and Role Management:**

Magento2 user roles allow you to control and restrict access to certain backend areas for different users. Before adding users to your store, you should create user roles in Magento2 for enhanced security measures.

### **Magento2 User Roles**

User roles in Magento2 are a set of permissions and privileges assigned to a specific user. These roles determine user actions on the admin panel, such as managing customers, orders, products, etc. By assigning different user roles, you can limit access to sensitive information and ensure that only authorized personnel have access to it.

## Importance of User and Roles Management in a Magneto Store

Magento's user roles are crucial for maintaining secure and efficient e-commerce operations. They provide the capability to manage and control access rights for each admin user, ensuring that sensitive information is protected.

## Some of the reasons behind the importance of Magento2 user roles are:

### **Security**

By limiting the areas of the Magento2 admin panel that certain users can access, you ensure that sensitive data is only accessible to those who genuinely need it. This greatly reduces the risk of important information falling into the wrong hands.

#### **Efficiency**

Assigning specific roles helps keep the backend operations of your store running smoothly. Each user knows their responsibilities, and there is no overlap or confusion about who is supposed to do what.

### **Control**

User roles allow the store owner or main administrator to maintain control over the store's operations. They can easily manage user roles, add new users, or adjust the current user's permissions.

### **Flexibility**

With the advanced permissions extension, Magento user roles can be customized to suit your store's individual needs. You can create a user role that fits exactly the tasks and responsibilities of each team member.

#### **Audit Trail**

When each admin user has a unique role, tracking activity and changes on the backend is easier. This can be invaluable when trying to trace a problem or understand how a mistake occurred.

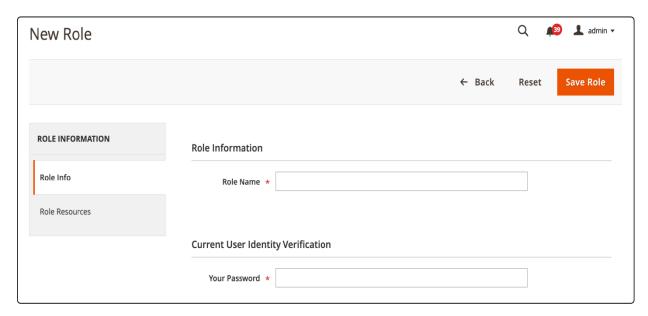
# **Example; How to Create a New User Role in Magento2**

1. Navigate to System -> Permissions and from there, select User Roles.



Next, you will find a list of the user roles currently available to you, which can be modified as needed.

2. To create a new user role, click on the Add New Role button.

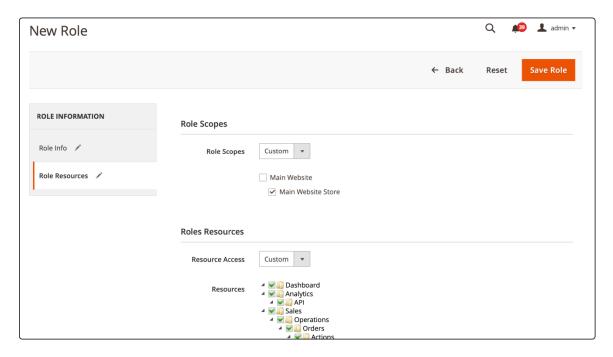


3. Fill in the necessary details for the "Role Information" section.

Enter a name for the user role in the Role Name field.

In the "Your Password" field, provide your current password as a security measure. Once you confirm your password, you can immediately add or edit roles.

4. Navigate to the "Role Resources" tab and select the resources that the administrator user should be able to access.

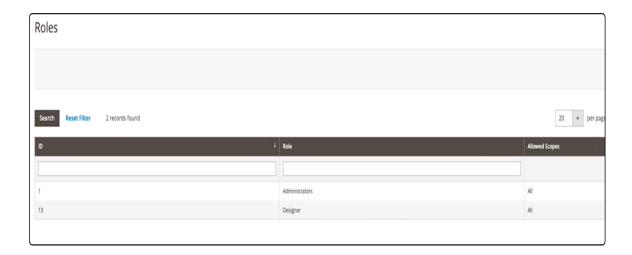


If you want to grant this user access to all pages and functionalities of the admin panel, select 'All' in the 'Resource Access' option.

To be able to choose specific interfaces to provide access, select 'Custom' in the 'Resource Access' field.

After completing your task, remember to click on the "Save Role" button.

Once the new Magento user role is established, you can designate it as the admin user.



# **Benefits of Using User Roles**

Leveraging user roles in Magento2 offers several advantages. It improves your store's backend's efficiency, security, and manageability. These benefits include:

<u>Streamlined Operations</u>: Each team member can focus on their responsibilities by assigning specific user roles. This leads to improved productivity and effectiveness.

**Enhanced Security:** User roles limit access to sensitive information. This reduces the likelihood of accidental data leaks.

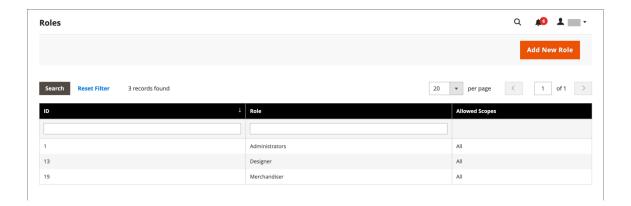
**Accountability:** With individual user roles, any changes made in the system can be traced back to a specific user. This increases accountability among team members.

<u>Customization:</u> Magento2 admin user roles can be customized to meet your store's unique needs. This ensures that team members have appropriate access to their respective roles.

**Ease of Management:** User roles simplify the task of administering a Magento2 store. They make managing current user accounts and privileges easier.

### **Note: User roles**

To give someone restricted access to the Admin, the first step is to create a role that has the appropriate level of permissions. After the role is saved, you can add new users and assign the restricted role to grant them limited access to the Admin.



### **Example: Definition of Role**

### On the Admin sidebar, go to System > Permissions > User Roles.

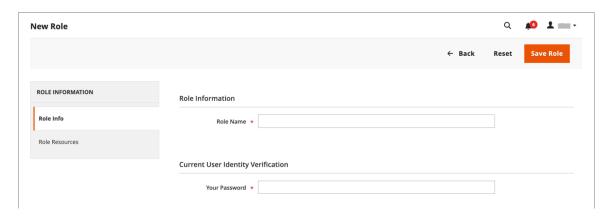
In the upper-right corner, click Add New Role.

Complete the steps to define the role:

## **Step 1:** Add the role name

Under Role Information, enter a descriptive Role Name.

Under Current User Identity Verification, enter your password.



Step 2: Assign resources

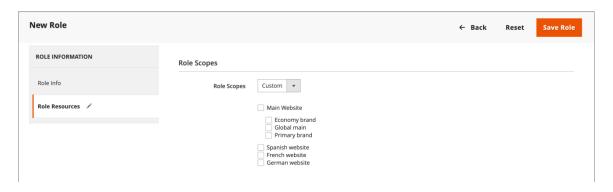
### **IMPORTANT**

When assigning resources, be sure to disable access to the Permissions tool if you are limiting access for a given role. Otherwise, users are able to modify their own permissions.

1. Set Role Scopes to one of the following:

- \* All
- \* Custom

If set to Custom for a multisite installation, select the checkbox of the website and store where the role is to be used.

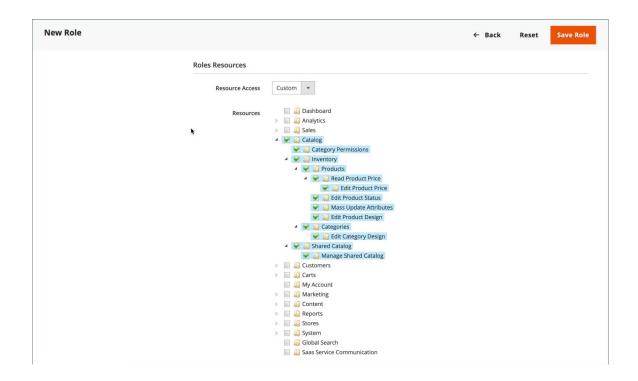


#### Note:

Users with a Custom role scope are not able to create websites and categories, assign products to categories, or edit products at All Store Views scope when they are assigned to restricted stores. These users also cannot perform other global actions that affect scopes where they do not have access.

- 2. Under Roles Resources, set Resource Access to Custom.
- 3. In the Resource tree structure, select the checkbox of each Admin capability that the role can access.

To create an Admin role with access to tax settings, choose both the Sales/Tax and System/Tax resources. If setting up a website for a region that differs from your default shipping point of origin, you must allow access to the System/Shipping resources for the role. The shipping settings determine the store tax rate that is used for catalog prices.



The list of available permissions may include additional options for bundled and installed extensions. By selecting the top-most permission for each feature, you assign all permissions available for the user.

#### Note:

An Admin user must have Sales / Archive permissions for their role scope to see the Invoices, Credit Memos, and Shipments order tabs.

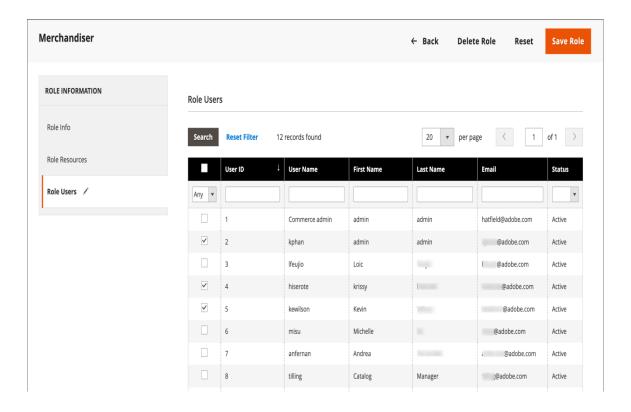
4. When complete, click Save Role.

The role now appears in the grid and can be assigned to user accounts.

# Assign a role to users

From the Roles grid, open the record in edit mode.

- 1. Under Current User Identity Verification, enter your user account password.
- 2. In the left panel, choose Role Users.
- 3. The Role Users option appears only after a new role is saved.



4. To search for a specific user record, do the following:

Enter the value in the search filter at the top of a column and press Enter.

When you are ready to return to the full list, click Reset Filter.

- 5. Select the checkbox of any users to be assigned to the role.
- 6. Click Save Role.

### Edit a role

- 1. On the Admin sidebar, go to System > Permissions > User Roles.
- 2. Locate the role using filters above the grid and click the role name.
- 3. Make needed changes.
- 4. Review the steps for creating a user role for information about the role settings.
- 5. When prompted, enter your password to confirm your identity.
- 6. Click the Save Role.

### Delete a role

- 1. On the Admin sidebar, go to System > Permissions > User Roles.
- 2. Locate the role using filters above the grid and open in edit mode.

- 3. In the upper-right corner, click Delete Role.
- 4. To confirm the action, click OK.

## **Customer Group Management:**

Customer group management refers to the processes, practices, systems, and applications that a company uses to manage its relationships with existing customers and new prospects. It involves grouping customers based on shared characteristics, allowing you to tailor your interactions, marketing efforts, and promotions to specific segments.

In Magento2, this functionality enables you to assign customers to specific groups, making it easier to apply sales discounts, tax classes, or manage content displayed to specific customer groups. By default, Magento2 provides four customer groups: General, Wholesale, Retailer, and Not Logged In. However, you can create additional custom groups based on your business needs.

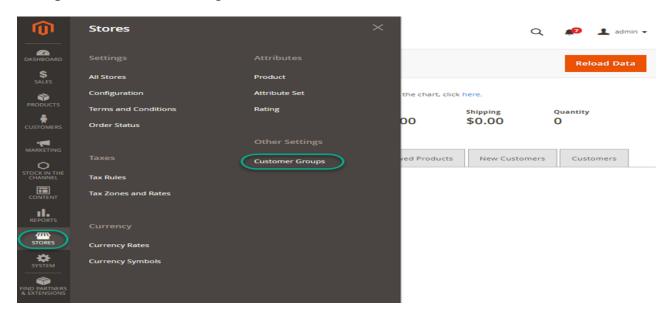
Magento2 provides four distinct customer groups to streamline the shopping and checkout process, each tailored to different types of customers:

- 1. **General**: This group is for the average consumer who visits the online store. For example, John wants to buy a new shirt online, so he browses the store, adds a shirt to his cart, and checks out as a general customer.
- 2. Wholesale: These are customers who buy in bulk, often for resale. For instance, a business owner, Sarah, needs to purchase 100 shirts for her retail store. She would be categorized under the wholesale group and might receive special pricing or discounts.
- 3. **Retailer**: Retailer customers are similar to general but might have a physical storefront or an online platform where they sell products. Alex owns a small boutique and buys products from various online stores (including yours) to sell in his shop.
- 4. **Not Logged In**: These are visitors who browse the online store but haven't created an account or logged in. Emma is looking for a new dress but isn't sure where she wants to buy it from yet. She visits several websites, including your Magento2 store but doesn't log in.

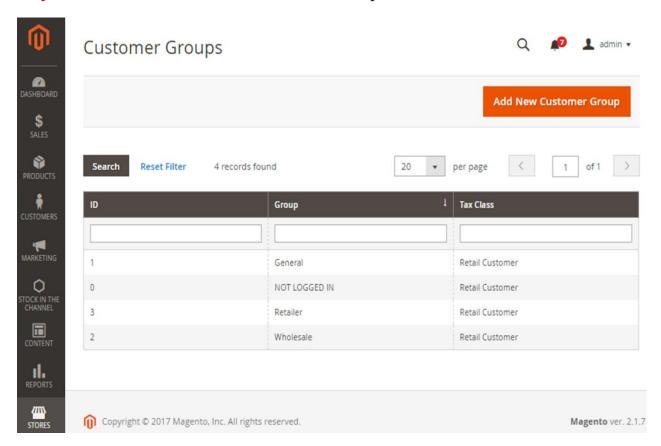
These customer groups allow Magento2 store owners to provide a personalized shopping experience for different types of customers. They can set different pricing levels, discounts, and access permissions for each group. This helps in better customer segmentation and targeted marketing.

# Example: How to Create A New Customer Group In Magento2

Step 1: Go to the admin panel, navigate to STORES, and click on Customer Groups under Other Settings.

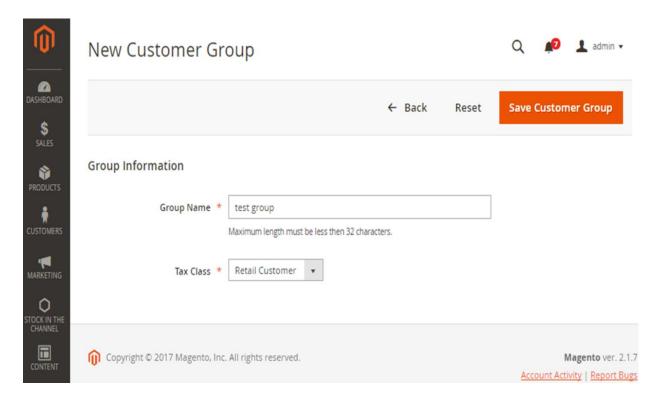


Step 2: Click on the "Add New Customer Group" button.



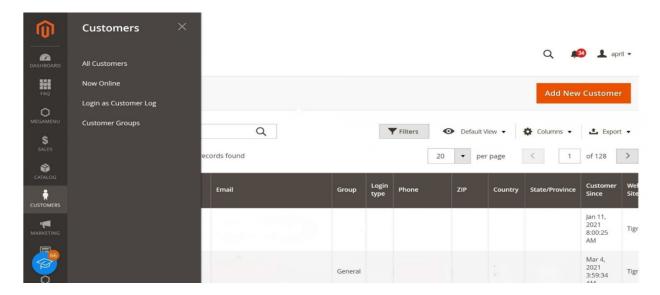
**Step 3:** Add the required information for the new group, such as the group name and tax class. You can also set the group's "Code" and "Price Display Settings" according to your preferences. Once you've filled in the details, click "Save."

Here you need to enter the new group name and then choose the tax class applied for this group. Save to complete the configuration.

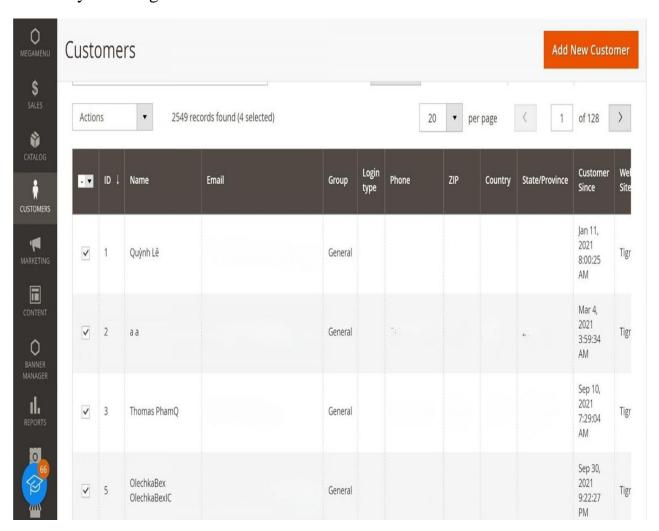


Example: How To Assign Customers To a Specific Customer Group in Magento2

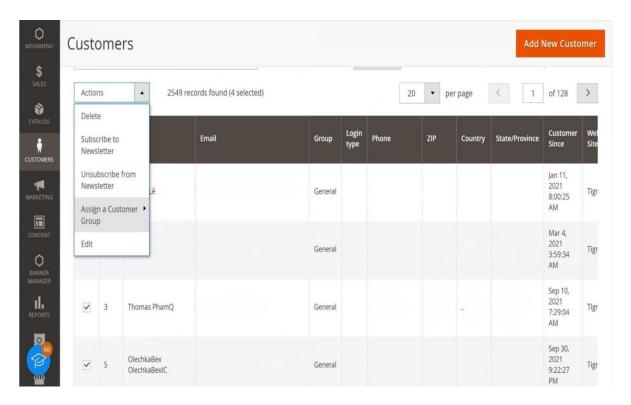
Step 1: Go to the admin panel, navigate to "Customer", and select "All Customers."



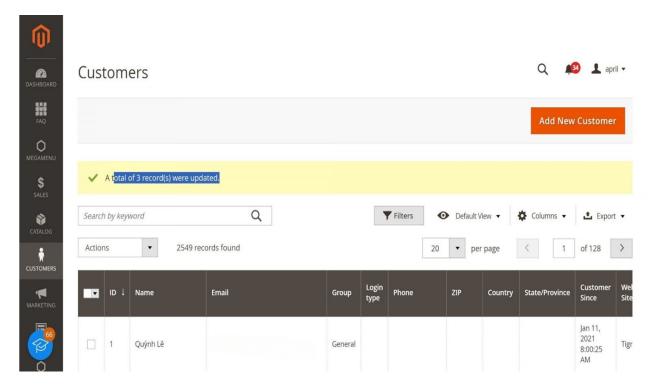
Step 2: Choose the customer you want to assign to a particular group. You can do this by checking the box next to their name



Step 3: From the "Actions" dropdown menu, select "Assign a Customer Group."



Step 4: A pop-up window will appear, allowing you to select the customer group you created earlier. Choose the appropriate group and click "Save Customer."



That's it! You've successfully created a customer group and assigned a customer to it in Magento2. You can now take full advantage of the various benefits offered by customer groups in your e-commerce store.

## The Magento theme structure:

Magento theme structure: Magento theme is a combination of files including CSS, HTML, PHP, XML, and images, all of which contribute to the look and feel of an online store. Magento provides <u>two themes</u>, <u>one is Luma for demonstration</u>, <u>and the second is Blank for custom theme creation</u>.

### **Magento Theme Structure:**

- o Magento themes are essential for maintaining a consistent aesthetic and mood throughout your store. They control the visual appearance of both the **admin panel** and the **storefront**.
- o By combining custom templates, designs, styles, or images, developers can enhance the overall look and feel of their Magento stores.
- Magento provides two default themes:

**Luma:** A demonstration theme. **Blank:** Serves as a foundation for custom theme development.

It's important to note that while you can use the Luma theme for your live store, Magento recommends avoiding direct changes to the default Luma and Blank theme files. Customizations should be done through child themes or by creating your own theme.

### **Custom Magento Theme Advantages:**

**Customization**: Tailor the functionality and design to your specific requirements.

**Relevancy**: Reflect your brand identity through additional changes.

**SEO-optimized**: Control URLs based on SEO needs to drive more traffic.

**Management**: Easier to manage themes created by your developers.

### **Example: Advantages of Custom Magento Theme**

Magento2 theme controls the features and visual appearance of your store, we highly recommend creating a custom theme to bring more conversions.

The custom theme requires specific tech skills; if you have technical development experience, the Magento theme will bring additional changes to your store.

### Let's explore the benefits.

Customization: Customize the functionality and design to your specific requirements.

**Relevancy:** The customized theme can bring and reflect your brand with additional changes.

**Change Theme:** Themes can be changed per store by creating a child theme as the parent theme.

**SEO-optimized:** To bring more conversions to your store, the custom theme can control the URL based on SEO needs, as a result, drive more traffic to the store.

**Management:** Themes created by your developers will be easier to manage.

# A. Luma for demonstration theme structure with example

The Luma theme is the default theme for Magento2, an open-source E-Commerce platform. It's designed to provide a clean, eye-catching, and elegant user interface for online stores. Here's a brief overview of its structure and features:

- 1. **What is Luma Theme?**: A Luma theme is a pre-designed template or group of files that determine the appearance and feel of a Magento-powered store. A theme comprises several aspects that define the visual look of the storefront, such as layout, typography, color scheme, images, and widgets
- 2. <u>Design</u>: The Luma theme features a modern design and includes the functionality of the updated Magento2 engine. It's a great improvement over the Magento 1 default theme, Madison Island
- 3. **Category Pages**: These are the pages where products are listed under a specific category. The design of these pages in the Luma theme is made to be user-friendly and visually appealing
- 4. **Product Pages**: These pages provide detailed information about a specific product. The Luma theme ensures these pages are well-structured and provide all the necessary information about the product
- 5. <u>Cart and Checkout</u>: The Luma theme provides a smooth and straightforward process for customers to add products to their cart and proceed to checkout
- 6. **Customization**: Magento advises against changing or upgrading Luma theme files if you want to change the default or develop the theme. By combining custom templates, layouts, or images, developers may improve the aesthetic appeal of locations like the Magento 2 admin panel and storefront

Remember, while the Luma theme is ready to use out of the box, most merchants will want to tweak it to match their needs. <u>Using a pre-designed collection of templates without customization can restrict success as an E-Commerce retailer</u>

# B. Blank for custom theme creation structure with example

Creating a custom theme in Magento2 based on the Blank theme involves several steps. Here's a step-by-step guide:

1. **Creating Theme Folder**: Navigate to app/design/frontend in your Magento installation directory. Create a new directory named according to your vendor name, for example, app/design/frontend/<Vendor>. Under the vendor directory, create a directory named according to your theme, for example, app/design/frontend/<Vendor>/<theme>

2. **Defining Theme**: In the theme folder you created (i.e., app/design/frontend/<Vendor>/<theme>), create a theme.xml file that defines basic information about the theme such as Name, Parent theme, Preview image, etc Here's an example of what the theme.xml file might look like:

#### **XML**

AI-generated code. Review and use carefully

3. **Composer Package**: Add a composer, json file to the theme directory. This file is used for dependency management in PHP. <u>It allows you to declare the libraries your project depends on and it manages install/update</u> Here's an example of what the composer.json file might look like:

#### **JSON**

```
{
   "name": "<Vendor>/<theme>",
   "description": "N/A",
   "require": {
      "php": "~5.5.0|~5.6.0|~7.0.0|~7.1.0",
      "magento/theme-frontend-blank": "100.0.*",
      "magento/framework": "100.0.*"
},
   "type": "magento2-theme",
```

```
"version": "1.0.0",

"license": [

    "OSL-3.0",

    "AFL-3.0"

],

"autoload": {

    "files": [

        "registration.php"

    ]

}
```

AI-generated code. Review and use carefully.

- 4. **Registration.php File**: Create a registration.php file in your theme directory. This file is used to register your theme with Magento
- 5. **Creating Static Folders and Files**: Create folders for static files like images, CSS, and JavaScript in your theme directory
- 6. **Configure Catalog Product Images**: Configure the size and aspect ratio of product images for your theme
- 7. **Define the Theme Logo**: Define the logo for your theme
- 8. **Activate Theme**: Finally, activate your theme through the Magento Admin

Remember, this is a basic guide and creating a custom theme can get more complex depending on your specific needs. Always test your theme thoroughly to ensure it works as expected.

**Example:** How can I change the Magento theme?

Here's the quickest way to change the Magento theme via the admin panel.

- 1. Log in to the Admin Panel.
- 2. Go to Content  $\rightarrow$  Design  $\rightarrow$  Configuration.
- 3. Click Edit theme.
- 4. In the Applied Theme dropdown, select the theme you want to change.
- 5. Click Save Configuration.

Magento2 themes are a core component of a consistent aesthetic and mood for the whole store. By combining custom templates, designs, styles, or images, developers can improve the visual appeal of areas like the Magento2 admin panel and storefront. By default, there are 2 Magento themes – Luma and Blank – that you can see after successfully installing Magento 2. Luma is a demonstration theme, while Blank acts as a basis for custom Magento theme customization. Magento2 has no restrictions on using the Luma theme for your live store.

Magento strongly recommends not changing or editing the default Luma and Blank theme files if you want to customize the default theme or create your theme. The latest version of Magento can overwrite the changes or edits in the default files while updating it.

### Example: Directory Structure:

Each theme follows this directory structure:

### For example:

### **Example:**

Suppose you're creating a custom theme named "MyTheme" under the vendor "Mageplaza." The directory structure would be:

In this example, the web directory contains CSS, fonts, images, and JavaScript files specific to your theme.

Remember that creating a custom theme allows you to tailor your store's appearance to your unique brand and requirements. Happy theming!

## **Creative translations:**

Magento2 is a powerful E-Commerce platform that supports multiple languages, making it a top choice for international retailers. Here's how you can add creative translations in Magento2

- Language Packages: A language package is used to translate any or all words and phrases in the Magento application. Each language pack contains translation files for different text content on your Magento2 website, such as standard phrases and email templates. You can create your own language packs by adding translations to the CSV file
- **2. Translation Dictionaries:** Magento2 allows the creation of translation dictionaries for both modules and themes
- **3. Translation Extensions:** There are extensions available that can help with the translation process.

For example, the LangShop translation extension for Magento2 or the Translation Center Magento2 extension

Here is an example of how you can use theme translation files to translate the same element in different ways for different pages

#### **PHP**

"Mage\_Catalog:Add to Cart","Add to Basket"

"Mage\_Checkout:Add to Cart","Add to my shopping cart"

#### AI-generated code. Review and use carefully.

In this example, the "Add to Cart" button text is translated differently depending on whether the user is on a Catalog page or a Checkout page

Remember, the translation process in Magento2 involves both translating your website and changing the design or style of the website based on the language chosen. This is especially important for E-Commerce, as providing more languages makes the store available globally

Please note that you should have Magento2 installed and working before you start the translation process. If not, please follow the guideline from Magento2's official documentation

## **Example:** How to configure multiple languages in Magento2?

## 1. Language Packages:

### 1. Add a New Store Views

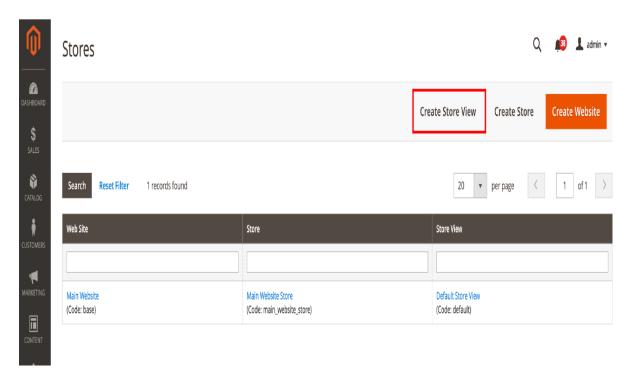
To create a new store view for a specific language, follow these steps:

- Go to the Admin Panel > Stores > All Stores.
- Click on the 'Create Store View' button.
- Fill in the required information. It includes the store the store-view will be linked to, the name, code, and status.
- Once completed, click on the 'Save Store View' button.

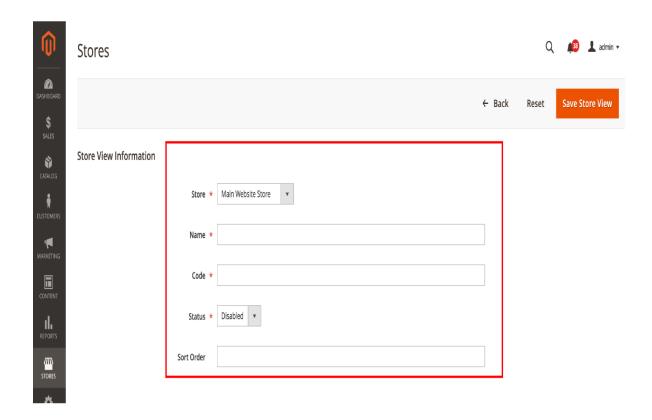
### 2. Editing Store Views

To edit a store view:

### Go to the Admin Panel > Stores > All Stores



- Choose a store view in Magento you want to edit.
- Make the necessary changes and click 'Save Store View'.

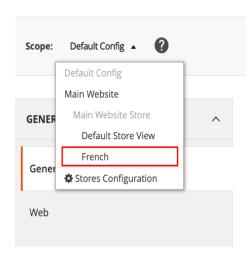


## 3. Setting Locales

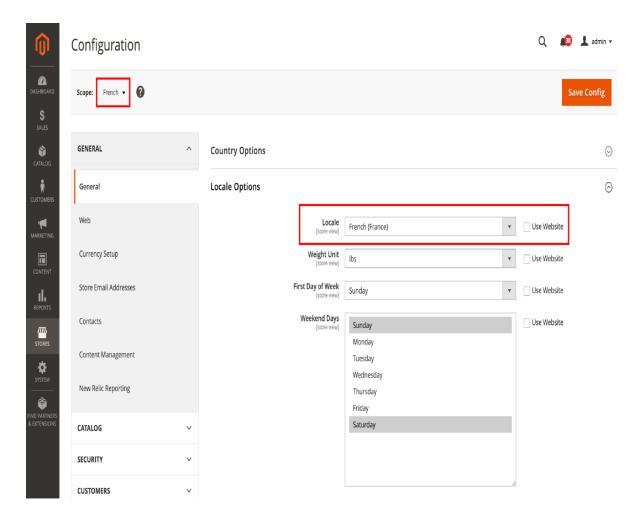
After creating a new store view, set the locale for the store view by:

• Navigating to Admin Panel > Stores > Configuration > Store View > [Store View Name].

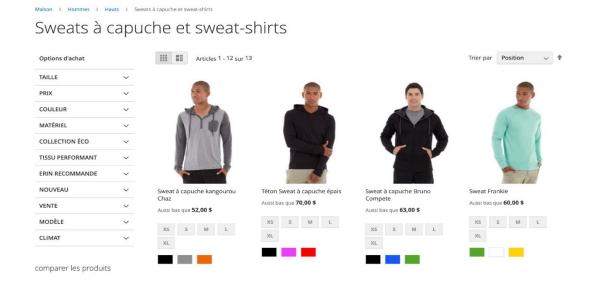




In the General section, find 'Locale Options' and set the desired language for the store view.



 Click 'Save Config' once done. You will see the added language for your new store view.



# Note: Configuring Language Packs

To download and install language packs, follow these steps:

- Visit the **Magento-110n** repository to find language packs for various languages.
- Download the desired language pack. Install it via composer or manually.
- Clear the Magento cache after installation.

### **Example: Translating Store Content with CSV Translation Files**

You have to translate various elements of your store, such as product names, descriptions, categories, CMS pages, and blocks. Magento2 language packs contain CSV translation files. It stores translations for different interface elements like buttons, labels, and links.

- Download and install your store's desired language pack. It includes the relevant CSV translation files.
- Configure the store view to use the new language mentioned in the previous steps.
- The <u>Magento2 platform</u> automatically applies the translations from the CSV files. It is added to the corresponding store view.

### 2. Translation Dictionaries:

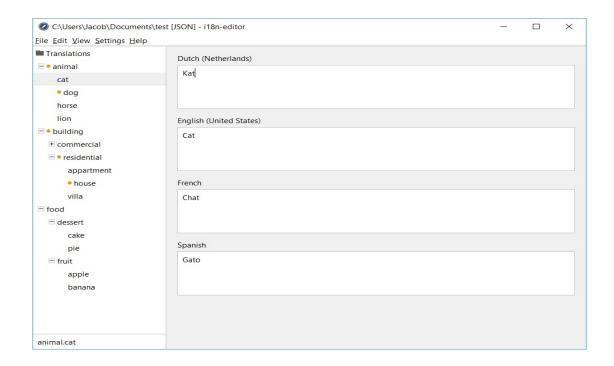
**Example:** Translation dictionaries for Magento2

Magento2 allows the creation of translation dictionaries for both modules and themes.

Translation dictionaries in Magento2 work by extracting translatable words and phrases from enabled components using the translation collection command. Once the words and phrases have been extracted with i18n tool to CSV file, they can be translated. The translation dictionaries then can be packaged into a language pack and provided to the Magento store administrator, who will configure the translations in the Magento Admin.

When translating words and phrases in Magento, it's important to follow these guidelines:

- Only modify the contents of the second column, which contains the translations from English (US) to the desired language.
- When creating dictionaries for locales, stick to the default Magento strings.
- Pay close attention to placeholders like %1, %2, etc. during the translation process.
   Placeholders are used by Magento to insert contextual values and should not be translated.



## 3. Translation extension:

### **Example: Magento2 Translation Extension**

- To run the business successfully, you require to reach a wide target audience across the globe. While doing so, you may end up connecting with people speaking varied languages. More often, people are likely to connect or make a purchase, only if the provided product information is in their known language. To overcome such challenges, Magento2 Language Switcher comes into a role!
- Magento2 Translate extension allows you to translate your E-Commerce store into multiple languages within no time. You can easily integrate with all online store pages such as category page, product page, contact page, etc. Offer a personalized shopping experience using the Magento2 Google Translate extension that supports multiple languages. Establish brand credibility and increase customer experience by providing translation services!

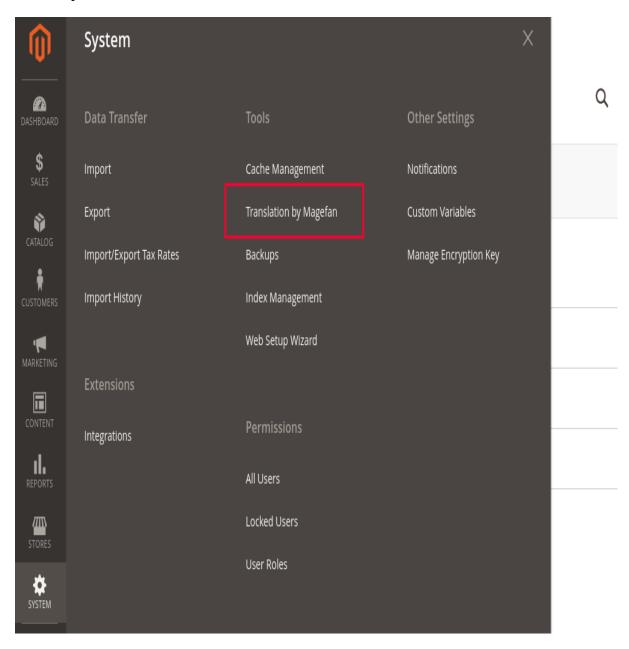
Magento2 Google Language Translator Extension Let the customers translate words, phrases or text into their preferred or native language using Magento2 Translation extension. Enhance the user experience by offering product information in their native language.

- Quick and easy translation from the admin panel.
- Showcase the language translator bar on various pages.
- Seamless integration with Google Translation API.

Magento2 Translation extension is a powerful tool that facilitates you to translate your Magento2 store into multiple languages. Reach a wider audience and increase customer experience by offering content in the language of their choice.

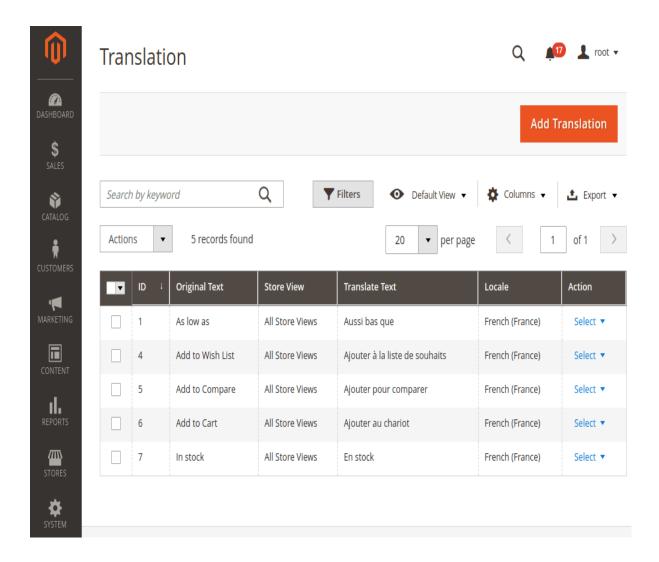
### Example:

Note: Once you install the Translation Extension, new section will be added to your Magento 2 admin panel. So.



To add a new translation in Magento 2:

- 1. Go to System > Tools > Translation by Magefan.
- 2. Once on the translations page, press Add Translation button.

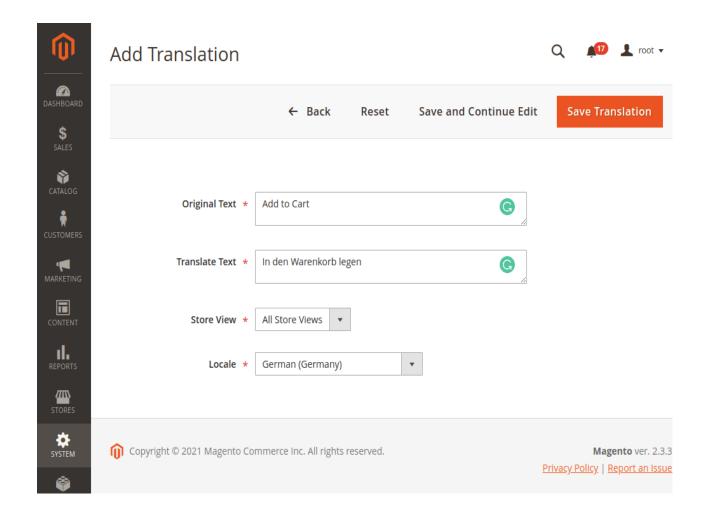


- 3. Add Original Text you want to translate for some of your store views and add the Translated Text.
- 4. Choose the Store View to add this translation to.

Note: you select store views only in case you have a multi-website with 2 store views in the same language and want to add different translations for each of them.

- e.g. you have German (Germany) store view on Website #1 and German (Germany) store view on Website #2 and want to have different translations for each of these store views.
- 5. Choose the language you add the translation for in the Locale dropdown.

Note: make sure you set different locales for each of your store views when <u>creating store</u> <u>views</u>. If you don't set the locale translations won't be applied.



Don't forget to Save the Translation.

6. Flush Magento cache and go to the storefront to check the translation.

# Using theme variants:

Magento themes are flexible and allow for a variety of customizations. You can use theme variants to change the look and feel of your store for different seasons, events, or promotions.

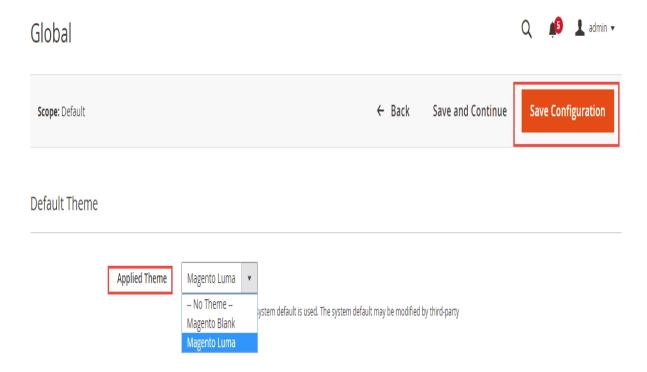
Here's a general guide on how to use Magento theme variants:

- 1. **Choose a Theme**: Look for a theme that matches the industry and niche of your e-commerce store. Consider the features you need, such as product sliders, menu styles, and product page layouts
- 2. **Create a Theme Directory**: Create a directory for your theme within the app/design/frontend directory in your Magento installation
- 3. **Theme Configuration**: Create a theme.xml file to specify the parent theme and other theme information

- 4. **Theme Layout**: Customize the layout of your store by creating or modifying layout XML files in your theme directory
- 5. **Templates and Styles**: Create or modify templates, CSS, and JavaScript files to achieve the desired look and functionality
- 6. Activate the Theme: In the Magento Admin Panel, go to Content > Design > Configuration and set your new theme as the default for your website<sup>2</sup>. Remember, each design package in Magento can contain any number of theme variants. You can include these variants within a design package and use them for different purposes, such as seasonal changes

## **Example: How to Change Theme in Magento 2?**

- 1. Log in to Admin Panel
- 2. Navigate to Content > Design > Configuration
- 3. Click Edit theme
- 4. In Applied Theme dropdown, select the theme that you want to change to.



### 5. Click Save Configuration.

After you have followed these steps, you can check that the Luma theme is now applied:

# **Customizing design themes:**

A custom Magento theme is one that has been designed and developed specifically for your online store, based on your unique business needs, brand identity, and user experience goals.

Example: How to create a customize design themes in Magento2.

Here are the steps:

**Step 1: Create a Theme Directory** Go to /app/design/frontend in your Magento root directory and create a new directory for your theme, for example, MyTheme.

**Step 2: Declare your Magento Theme** You can declare the theme you've created by creating a theme.xml file under app/design/frontend/MyTheme/theme.xml. Here's an example of what this file might look like:

#### **XML**

AI-generated code. Review and use carefully.

In this example, MyTheme is the name of your theme, and it's a child theme of the Magento/blank theme

**Step 3: Add a Composer Package** Create a composer.json file in the root of your theme directory. This file is used to manage dependencies for your theme

**Step 4: Add Registration.php File** Create a registration.php file in the root of your theme directory. This file is used to register your theme with Magento

**Step 5: Configure Custom Theme** Now you can start customizing your theme. This could involve creating custom layouts, templates, and styles

**Step 6: Configure Image Properties** You can also customize image properties for your theme. This could involve changing the size, resolution, or format of images

**Step 7: Declare Logo in Custom Theme** You can declare a custom logo for your theme in the default.xml file located in the Magento\_Theme/layout directory of your theme<sup>1</sup>

These are just basic steps. Customizing design themes can be a complex task depending on the requirements.

## **Example-1: Customizing Design Themes in Magento**

By following these best practices, you can ensure that your custom Magento theme design is well-optimized, consistent, and functional for your users.

### 1. Carefully Choose Color Schemes & Typography

Choosing the right color scheme and typography is important to ensure your custom Magento theme matches your brand's identity.

In fact, research has shown that colors alone are responsible for  $\underline{60\%}$  of user's acceptance of a certain product.

Use colors that complement your brand logo and typography that is easy to read and fits with your brand's style.

## 2. Follow Key Responsive Theme Guidelines

Responsive design is a must-have for any website today, and your custom Magento theme should be no exception. Ensure that your theme is optimized for all devices, including mobile phones and tablets.

Use responsive design best practices, such as using fluid grids, flexible images, and media queries, to ensure your website looks great on all devices.

Studies show that <u>75%</u> of mobile users are more likely to leave a website that isn't optimized for mobile, so it's essential to follow responsive design guidelines.

### 3. Customize Elements Of Your Magento Theme

Customizing the header, footer, and other elements of your Magento theme can help you create a unique and personalized user experience.

Consider adding custom navigation menus, social media icons, or a search bar to the header. In the footer, you might add links to important pages, contact information, or copyright information.

Customizing these elements can help you create a theme that is tailored to your business needs and provides a better user experience for your customers.

### 4. Test & Debug Your Custom Magento Theme

Once you have created your custom Magento theme, it's important to test it thoroughly to ensure it functions correctly and is bug-free. Test your theme on multiple devices and browsers to ensure it works as intended.

You can use Magento's built-in developer tools, such as the <u>Magento Profiler</u> and the <u>Magento Debugger</u>, to help you identify and fix any issues.

Testing and debugging your theme can help you avoid potential problems and ensure a smooth user experience for your customers.

# **Benefits of Customizing Design Themes in Magento**

Custom Magento themes can have overarching benefits for businesses and E- commerce web development projects.

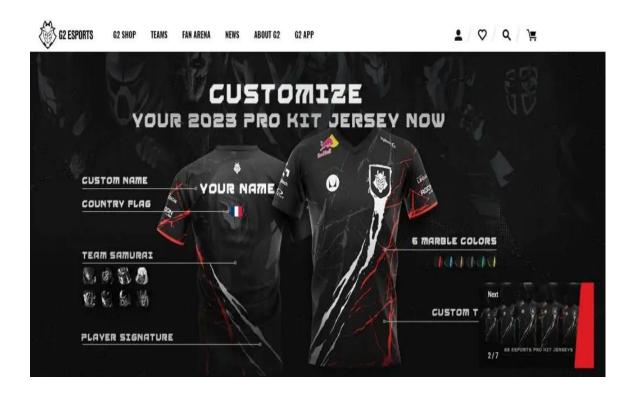
## 1. Improve Branding With A Unique Design

Custom **designing for Magento** can result in a unique and branded look that stands out from competitors.

With a custom theme, you have complete control over the look and feel of your store and can tailor it to match your brand's personality and values.

For example, imagine you have a fashion e-commerce store that sells trendy clothing items for young adults. You want to create a custom Magento theme that reflects your brand's unique style and appeals to your target audience.

To achieve this, you could work with a **professional branding agency** to create a custom homepage layout that showcases your **brand elements** such as colors, fonts and imagery.



We created an online store for G2 eSports and included their brand elements [Source: G2 eSports]

### 2. Enhance UX & UI Experience

Custom Magento themes are designed with the user experience (UX) and user interface (UI) in mind.

By creating a custom theme, you can ensure that your store is easy to navigate and provides a seamless shopping experience for your customers.

For example, a custom theme can be designed with responsive design principles, meaning it adjusts to different screen sizes and devices.

This is important for mobile users, who make up an increasing percentage of online shoppers.

### 3. Improve Website Performance

Custom themes are often optimized for performance, which means that they load faster and provide a smoother browsing experience for users.

This can lead to improved search engine rankings, higher conversion rates, and increased customer satisfaction.

### 4. Integrate Third-Party Tools

Custom Magento themes are compatible with third-party extensions and plugins, allowing you to add additional features and functionality to your store as needed.

Some third-party integrations that are most common are:

- Payment Gateways: A custom Magento theme can be designed to integrate with various payment gateways such as PayPal, Stripe, or Authorize.net to allow customers to easily make purchases on your site.
- **Shipping Providers**: Custom Magento themes can be designed to integrate with popular shipping providers like FedEx or UPS to provide customers with accurate shipping rates and tracking information.
- Analytics and Reporting Tools: Custom Magento themes can be designed to integrate with analytics and reporting tools like Google Analytics or Kissmetrics to provide insights on website traffic, sales, and customer behavior.
- Social Media Integration: A custom Magento theme can be designed to integrate with social media platforms like Twitter or Instagram to allow customers to share products, leave reviews, and connect with your brand on social media.

This ensures that your store can grow and adapt to changing business needs over time.

### 5. Improve Search Engine Optimization

Custom Magento themes can be optimized for search engines, which means that they can help improve your store's visibility in search. They are usually built with clean, optimized code that is easier for search engine crawlers to read and index. This can improve your website's search engine rankings and visibility.

# **Content Menu in Magento2:**

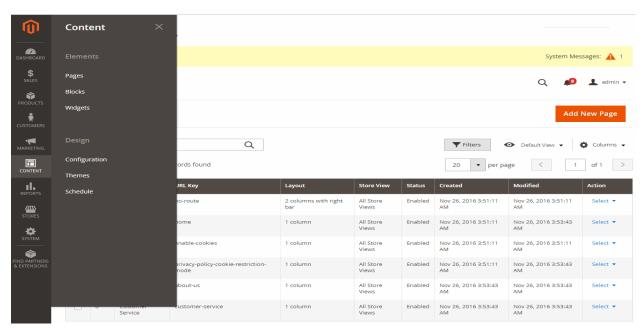
"Content is King" – a very well-known saying that proves the huge importance of **content** for any fields. Content is one of the most effective ways to transmit information via words, images or video and express emotions, opinions as well as evaluation of authors to all readers.

For E-commerce, **content** has become more significant than ever because it is the only mean to communicate with customers, provide them necessary information about products or anything related to business and build trust and credibility in customers' mind. Besides, **content** also helps an E-commerce site get a good visibility to search engines, which makes customers easier to find it out and click to read more.

Therefore, developing a complete and adequate **content** system is extremely indispensable and requires all stores having a particular strategy for it. This is a reason why default Magento2 supports a specific configuration section called **Content** Menu to allow Magento users to flexibly create and customize **content** for their business. This menu is the most fundamental basement for a Magento2 store to build primary elements for later **content**.

Let see navigate to **Admin** => **Content** in the left sidebar of Magento2 backend.

# Content Menu is divided into 2 small section: Elements and Design



### **Elements**

Elements section contains 3 methods to create **content** in a Magento2 sites: Pages, Blocks and Widgets In Pages, you can create as many pages as you want and also customize these pages with text, images blocks, variables, and widgets to make them more visual to customers. Moreover, pages are configured to be displayed in the side navigation of a website and can be linked to other pages which have relevant **content**.

### Example:



# Customer Service

# Luma Delivery and Returns

We hope you love shopping with Luma. Here are our delivery and returns policies to help make sure we meet your expectations. Contact Us.

# Shipping and Delivery

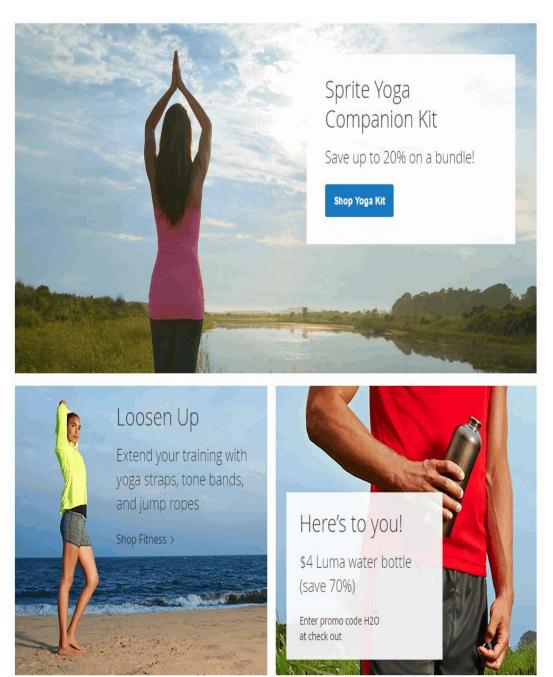
Shipping and Delivery is the charge for internet order processing, item selection, packaging, transport and handling. We don't guarantee delivery times, but we do our best to provide accurate estimates

Deliveries occur only on weekdays. Shipping and Delivery charges are subject to change and are determined when you order. Estimated delivery time assumes orders are placed before 12:00 noon (PST). Orders you place with Luma late on Friday or on Saturday will not be processed until Monday. Charges may be added to orders with Priority, Overnight and International shipping if we try unsuccessfully to deliver your order more than once.

Delivery addresses in Alaska, Hawaii, Puerto Rico, and Guam should add an additional \$5.00 charge for standard Shipping & Delivery. Orders arrive in 7 to 9 business days when ordered before 12:00 noon (PST).

Merchandise total *	<b>STANDARD</b> 5—7 day shipping **	<b>PRIORITY</b> 2—3 day shipping **	<b>OVERNIGHT</b> Next business day **
Up to \$200	\$16	\$26	\$33
\$200.01—500.00	\$21	\$31	\$38

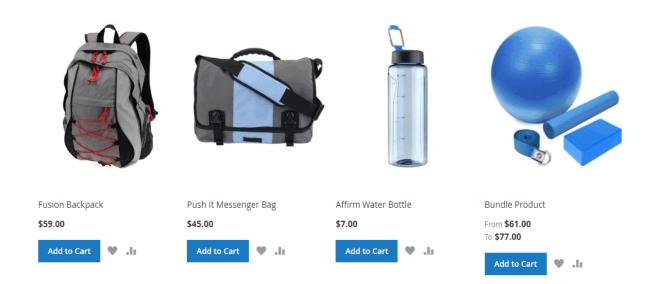
In Blocks, you can easily create blocks of **content** without using any code or depending on any coders or programmers. Therefore, you also customize these blocks with images, text or video by your own and then assign blocks to any part of page layout.



In Widgets, you can show dynamic data and put any blocks, links, and interactive elements into anywhere in the store.

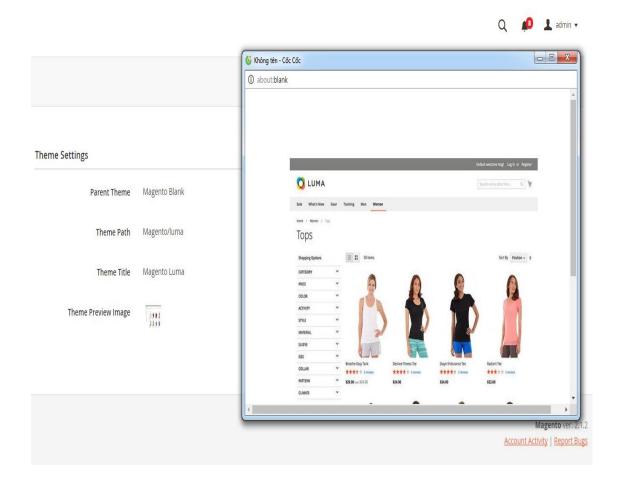
# Hot Sellers

### Favorites from Luma shoppers



# **Design**

Design section includes settings of visual display of your store such as how to choose a suitable theme for your store or how to schedule design changes.



# Content Elements in Magento2:

Content elements in Magento2 are the various components that make up the content of your website. They include pages, images, videos, and other types of media.

Here's a brief explanation of these elements with examples:

- 1. Creating Pages: Pages are one of the primary ways to manage content on your Magento website. Here's how you can create a page:
  - Login to your Magento admin panel.
  - o Navigate to the Content menu and select Pages.
  - o Click on the "Add New Page" button.
  - o Fill in the required fields, such as Page Title and URL Key.
  - Enter the content in the WYSIWYG editor. You can format the text, add links, and use various other editing options.
  - Set the page status and visibility.
  - Optionally, you can assign the page to a specific store view or add custom design updates.
  - o Click on the "Save" button to create the page
- 2. **Adding Images and Videos**: Images and videos enhance the visual appeal of your Magento website. Here's how you can add them:
  - o Login to your Magento admin panel.
  - o Navigate to the Content menu and select Elements.
  - Click on the "Pages" option.
  - o Select the page where you want to add images or videos.
  - In the WYSIWYG editor, place the cursor where you want to insert the image or video.
  - Click on the "Insert Image" or "Insert Video" icon in the editor toolbar.
  - Upload the image or provide the video URL.
  - o Configure the image settings, such as alt text, caption, and alignment.
  - o Click on the "Insert" button to add the image or video to the page.
  - Save the page to apply the changes

- 3. Optimizing Content for Search Engines: To improve the visibility of your Magento website on search engines, it's essential to optimize your content Here are some steps to do it:
  - o Conduct keyword research to identify relevant keywords for your content.
  - Use the identified keywords in the page title, headings, and throughout the content naturally.
  - o Optimize meta tags, including meta title and description, for each page.
  - o Create unique and descriptive URLs for your pages.
  - Optimize images by adding descriptive alt tags and compressing them for faster loading.
  - o Use internal linking to connect relevant pages within your website.
  - Ensure your website has a responsive design for mobile devices.
  - o Improve page load speed by optimizing image sizes, enabling caching, and using a content delivery network (CDN).
  - o Leverage schema markup to provide structured data to search engines<sup>1</sup>.

Remember, managing content effectively is crucial for creating an engaging and optimized online presence

# Example: How do I create custom content elements in Magento2?

Creating custom content elements in Magento2 involves creating custom layouts, blocks, and templates.

Here's a step-by-step guide on how to do it:

- 1. **Create a Controller**: The controller is an integral part of the Magento module for handling the requests rendering on the page. Create a new controller to add a new page in Magento2
- 2. **Create a Layout File**: The layout creates a link between the Block class & the template to manage and describes the page's structure. The layout file is an XML file containing multiple layout instructions
- 3. **Create a Block**: Blocks in Magento2 are PHP classes that contain the logic needed to present data from the database or other sources
- 4. **Create a Template File**: Templates are pieces of code in PHTML (PHP) files that add features and contents you see on the front page<sup>1</sup>.

- 5. **Flush Magento Cache**: After making changes, you need to flush the Magento cache to see the changes on the frontend
- 6. **Run a Test**: Finally, test your changes to ensure everything works as expected

Remember, creating custom content elements allows you to customize your Magento2 store to fit your specific needs. Always ensure to follow best practices for Magento development to maintain the integrity and security of your store.

#### Part - A

- 1. What is user role in Magento?
- 2. What is Magento theme?
- 3. What is Luma theme?
- 4. What is Blank for custom theme?
- 5. What is XML?
- 6. What is JSON?
- 7. What is translation dictionaries in Magento?
- 8. What is elements in Magento?

#### Part - B

- 1. Explain the importance of user and roles management in Magneto store
- 2. What are benefits of using user roles in Magento?
- 3. Write short notes about the custom Magento theme of advantages
- 4. Explain the creative translations in Magneto with example
- 5. Explain the Magento theme variants of uses.
- 6. Write a short notes about the content menu in Magento.
- 7. Explain the content elements in Magento

### Part - C

- 1. Explain the customer group management system in Magento
- 2. Explain the Magento theme structure concept.