

Technical Documentation

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Team - 06

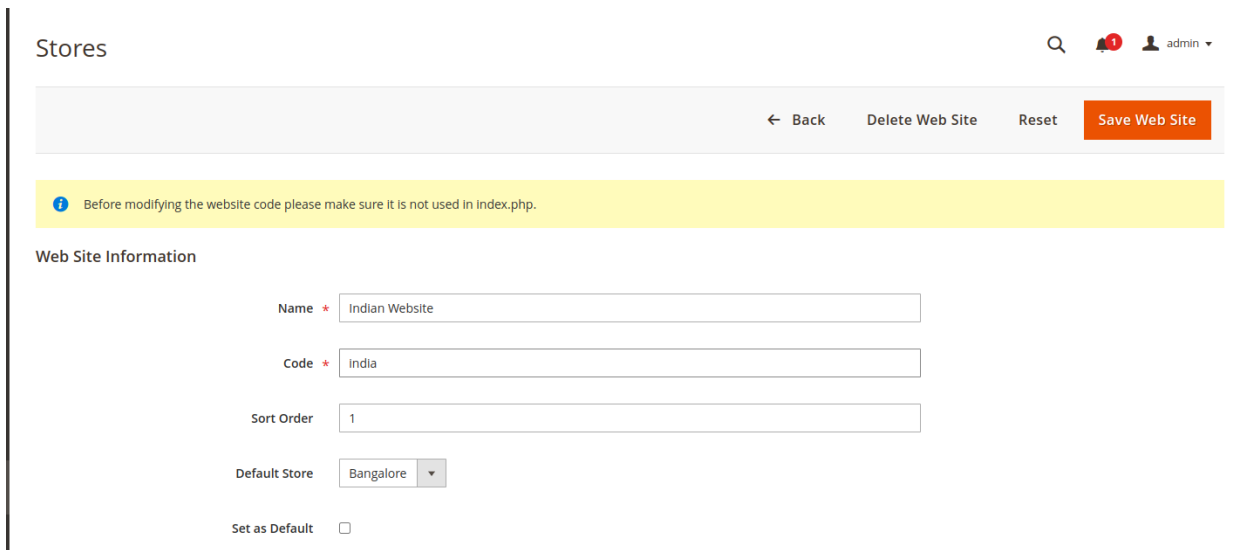
1. Overall Description

This document contains the technical requirement required to complete the mini project. Here we are implementing an e-commerce website using Magento 2. We need to implement multiple website which supports Arabic language in right-to-left (RTL) and English for Saudi, which also supports English and INR for India, and which also supports \$ for USA. And also implementing the Indian GST slab for Indian website.

2. Technical Requirement:

2. 1 Creating New Website: Login into Magento 2 admin, and go to Stores - All Stores. Install a fresh Magento 2 instance that doesn't have a store yet, just one row on the Stores grid including Main Website, Main Store and The Main Store View which are default in Magento 2.

Now, we need to create websites, click on “Create Website” button and fill the information as shown below for magentoproject.india.com and Click “Save Web Site”.



The screenshot shows the 'Stores' page in the Magento 2 Admin interface. At the top, there's a search bar and a user profile dropdown for 'admin'. Below this is a toolbar with buttons: 'Back', 'Delete Web Site', 'Reset', and 'Save Web Site'. A yellow informational banner states: 'Before modifying the website code please make sure it is not used in index.php.' The main section is titled 'Web Site Information' and contains the following form fields:

- Name:** A text input field containing 'Indian Website'.
- Code:** A text input field containing 'india'.
- Sort Order:** A text input field containing '1'.
- Default Store:** A dropdown menu with 'Bangalore' selected.
- Set as Default:** An unchecked checkbox.

- **Name:** Website name (eg. the domain of the new website)
- **Code:** Enter a unique (lowercase) code for the website. The code will be used on the server to point to the domain.
- **(Optional) Sort Order:** determine the sequence in which the site is listed with other sites. Enter a zero to make the site appear at the top of the list.

2. 2 Create a new store

On the Stores page (Stores | Settings | All Stores), click on Create Store and fill the following information as per the requirement:

- **Web Site:** Assign the name of the website we just created above that is the parent of the new store.
- **Name:** Enter a name to identify the store. The name is for internal reference only.
- **Code:** Enter a unique code to identify the store.

- **Root Category:** Set the root category for this store. The root category defines the category structure for the main menu of the store. You can come back and change the Root category later.

Stores

   admin ▾

← Back Reset **Save Store**

Store Information

Web Site *	<input type="text" value="Indian website"/>
Name *	<input type="text" value="Banglore"/>
Code *	<input type="text" value="Bng67"/>
Root Category *	<input type="text" value="Default category"/>
Default Store View	<input type="text" value="English"/>

2.3 Create store views

- On the Stores page (Stores | Settings | All Stores), click on Create Store View and understand the following details:
- **Store:** Set Store to the parent store of this view.
- **Name:** Enter a name to identify this store view. This name will appear in the language chooser in the store header.
- **Code:** Enter a unique (lowercase) name to identify this store view.
- **Status:** set to Enabled option
- **(Optional) Sort Order:** to determine the sequence in which this view is listed with other views
- You can repeat the same steps to create new websites, stores or store views.

Stores

Search   admin

← Back Reset **Save Store View**

 Before modifying the store view code please make sure it is not used in index.php.

Store View Information

Store *

Name *

Code *

Status *

Sort Order

Similar way website, Stores and Storeviews for US and Saudi Arabia is created.

Stores

Create Store View Create Store **Create Website**

Search **Reset Filter** 5 records found 20 per page 1 of 1

Web Site	Store	Store View
Main Website (Code: base)	Main Website Store (Code: main_website_store)	Default Store View (Code: default)
Indian Website (Code: india)	Bangalore (Code: bng)	English (Code: india_english)
US Website (Code: us)	Washington (Code: washington)	English (Code: us_english)
Saudi Website (Code: saudi)	Saudi Arabia (Code: saudi)	Arabic (Code: arabic)
Saudi Website (Code: saudi)	Saudi Arabia (Code: saudi)	English (Code: saudi_english)

2. 4 Configure the Store URL: To map the websites with the domain name here're the steps:

- Configure the base URL. Keeping the default Magento 2 Stores including Main Website, Main Store and The Main Store View unchanged.

Configuration **Save Config**

Advanced Reporting

CATALOG

SECURITY

CUSTOMERS

SALES

MARKETING AUTOMATION

MAGEPLAZA EXTENSIONS

HIDDEN TECHIES

SERVICES

ADVANCED

Use Web Server Rewrites (store view) Yes ☐ Use system value

Base URLs

Any of the fields allow fully qualified URLs that end with '/' (slash) e.g. http://example.com/magento/

Base URL (store view) Specify URL or {{base_url}} placeholder.

Base Link URL (store view) ☒ Use system value May start with {{unsecure_base_url}} placeholder.

Base URL for Static View Files (store view) May be empty or start with {{unsecure_base_url}} placeholder.

Base URL for User Media Files (store view) May be empty or start with {{unsecure_base_url}} placeholder.

Base URLs (Secure)

Default Pages

- Configure the Store URL for the three websites — magentoproject.india.com, magentoproject.saudi.com and magentoproject.us.com.
- Go to Stores | Configuration | (General) Web | Base URLs. Change the Store View scope at the top to the magentoproject.india.com.
- Now uncheck the checkbox called Use system value from the Base URL and Base Link URL fields and commit your domain name. Now click Save Config and continue the same procedure for the other website.

Configuration Save Config

Contacts

Content Management

New Relic Reporting

Advanced Reporting

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SERVICES

ADVANCED

Base URLs

Any of the fields allow fully qualified URLs that end with '/' (slash) e.g. http://example.com/magento/

Base URL [store view] ☐ Use Default
Specify URL or {{base_url}} placeholder.

Base Link URL [store view] ☐ Use Default
May start with {{unsecure_base_url}} placeholder.

Base URL for Static View Files [store view] ☒ Use Default
May be empty or start with {{unsecure_base_url}} placeholder.

Base URL for User Media Files [store view] ☒ Use Default
May be empty or start with {{unsecure_base_url}} placeholder.

Base URLs (Secure)

Any of the fields allow fully qualified URLs that end with '/' (slash) e.g. https://example.com/magento/

Secure Base URL [store view] ☐ Use Default
Specify URL or {{base_url}}, or {{unsecure_base_url}} placeholder.

Secure Base Link URL [store view] ☐ Use Default

- Apply the same steps to configure the base URL for the magentoproject.us.com and magentoproject.saudi.com.

Configuration Save Config

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SERVICES

ADVANCED

Base URLs

Any of the fields allow fully qualified URLs that end with '/' (slash) e.g. http://example.com/magento/

Base URL [store view] ☐ Use Default
Specify URL or {{base_url}} placeholder.

Base Link URL [store view] ☐ Use Default
May start with {{unsecure_base_url}} placeholder.

Base URL for Static View Files [store view] ☒ Use Default
May be empty or start with {{unsecure_base_url}} placeholder.

Base URL for User Media Files [store view] ☒ Use Default
May be empty or start with {{unsecure_base_url}} placeholder.

Base URLs (Secure)

Any of the fields allow fully qualified URLs that end with '/' (slash) e.g. https://example.com/magento/

Secure Base URL [store view] ☐ Use Default
Specify URL or {{base_url}}, or {{unsecure_base_url}} placeholder.

Secure Base Link URL [store view] ☐ Use Default

Configuration

Save Config

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ADVANCED

Base URLs

Any of the fields allow fully qualified URLs that end with '/' (slash) e.g. http://example.com/magento/

Base URL

http://magentoproject.saudi.emb/

Specify URL or {{base_url}} placeholder.

Use Default

Base Link URL

http://magentoproject.saudi.emb/

May start with {{unsecure_base_url}} placeholder.

Use Default

Base URL for Static View Files

May be empty or start with {{unsecure_base_url}} placeholder.

Use Default

Base URL for User Media Files

May be empty or start with {{unsecure_base_url}} placeholder.

Use Default

Base URLs (Secure)

Any of the fields allow fully qualified URLs that end with '/' (slash) e.g. https://example.com/magento/

Secure Base URL

http://magentoproject.saudi.emb/

Specify URL or {{base_url}}, or {{unsecure_base_url}} placeholder.

Use Default

Secure Base Link URL

http://magentoproject.saudi.emb/

Use Default

- Once done, save entire configuration

3. Setup Currency Rates in Configuration.

3.1 Default Website

Scope: Default Config

Save Config

GENERAL

General

Web

Currency Setup

Store Email Addresses

Contacts

Reports

Content Management

New Relic Reporting

Advanced Reporting

Currency Options

Base Currency

Indian Rupee

Use system value

Base currency is used for all online payment transactions. The base currency scope is defined by the catalog price scope ("Catalog" > "Price" > "Catalog Price Scope").

Default Display Currency

Indian Rupee

Use system value

Allowed Currencies

Afghan Afghani

Albanian Lek

Algerian Dinar

Angolan Kwanza

Argentine Peso

Armenian Dram

Aruban Florin

Australian Dollar

Azerbaijani Manat

Azerbaijani Manat (1993-2006)

Use system value

Above image shows the base currency.

3. 2 Currency for Indian Website in INR(Indian Rupee)

✓ Task "Update attributes for 1 selected products": 1 item(s) have been successfully updated.

View DetailsSystem Messages: 3

Configuration

Search1admin

Scope: Indian Website ?

Save Config

GENERAL ^

General

Web

Currency Setup

Store Email Addresses

Contacts

Content Management

New Relic Reporting

Currency Options

Default Display Currency [store view]Indian Rupee☐ Use Default

Allowed Currencies [store view]

Afghan Afghani

Albanian Lek

Algerian Dinar

Angolan Kwanza

Argentine Peso

Armenian Dram

Aruban Florin

Australian Dollar

Azerbaijani Manat

Azerbaijani Manat (1993-2006)

☐ Use Default

3. 3 Currency for US Website in \$ (Dollar)

✓ Task "Update attributes for 1 selected products": 1 item(s) have been successfully updated.

View DetailsSystem Messages: 3

Configuration

Search1admin

Scope: US Website ?

Save Config

GENERAL ^

General

Web

Currency Setup

Store Email Addresses

Contacts

Content Management

New Relic Reporting

Currency Options

Default Display Currency [store view]US Dollar☐ Use Default

Allowed Currencies [store view]

Afghan Afghani

Albanian Lek

Algerian Dinar

Angolan Kwanza

Argentine Peso

Armenian Dram

Aruban Florin

Australian Dollar

Azerbaijani Manat

Azerbaijani Manat (1993-2006)

☐ Use Default

3. 4 Currency for Saudi Website in SR(Saudi Riyal)

✓ Task "Update attributes for 1 selected products": 1 item(s) have been successfully updated. [View Details](#) System Messages: 3

Configuration

[Search](#)
1
admin

Scope: Saudi Website

Save Config

GENERAL

General

Web

Currency Setup

Store Email Addresses

Contacts

Content Management

New Relic Reporting

Currency Options

Default Display Currency

(store view)

Saudi Riyal

☐ Use Default

Allowed Currencies

(store view)

Afghan Afghani

Albanian Lek

Algerian Dinar

Angolan Kwanza

Argentine Peso

Armenian Dram

Aruban Florin

Australian Dollar

Azerbaijani Manat

Azerbaijani Manat (1993-2006)

☐ Use Default

3. 5 Currency Symbols are as follows for the website.

Currency Symbols

[Search](#)
1
admin

Save Currency Symbols

INR (Indian Rupee) *

₹

☒ Use Standard

USD (US Dollar) *

\$

☒ Use Standard

SAR (Saudi Riyal) *

SR

☐ Use Standard

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Magento ver. 2.4.5-p1

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4. Configure a Virtual Host (vhost) NGINX.

4.1 Adding Server in NGINX

```
emb-goutita@emb-ban-415: /var/www/html/magentoproject
upstream fastcgi_backendd {
#   # use tcp connection
#   # server 127.0.0.1:9000;
#   # or socket
server unix:/var/run/php/php-fpm.sock;
}
server {
listen 80;
#listen [::]:80;
server_name magentoproject.dev.emb magentoproject.india.emb magentoproject.us.emb magentoproject.saudi.emb;
set $MAGE_ROOT /var/www/html/magento;
set $MAGE_MODE development;
include /var/www/html/magento/nginx.conf.sample;
}
~
```

4.2 Creating virtual hosts in NGINX

```
emb-goutita@emb-ban-415: /var/www/html/magento
127.0.0.1 localhost icook.loc
127.0.1.1 emb-ban-415 magento.dev.emb
127.0.0.1 magentoproject.dev.emb
127.0.0.1 magentoproject.india.emb
127.0.0.1 magentoproject.us.emb
127.0.0.1 magentoproject.saudi.emb
# The following lines are desirable for IPv6 capable hosts
::1 ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
~
```

4.3 Editing the index.php file

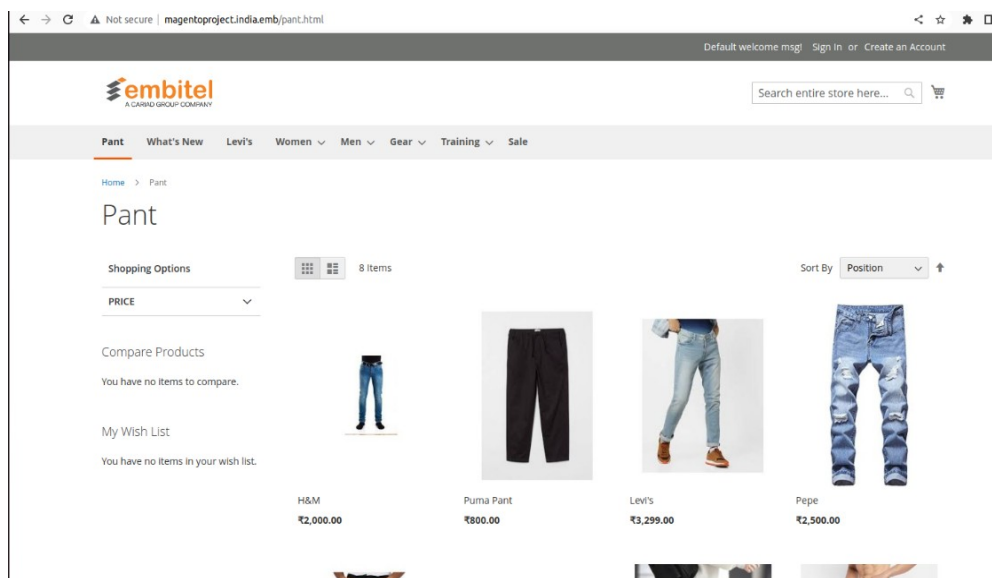
- Open up the file index.php in pub directory of Magento 2 root and add below code before “\$bootstrap = Bootstrap::create(BP, \$_SERVER);” line.
- Case ‘:’ refers to your custom testing domain
- \$runType: The sample setup above uses the \$runType ‘website’ variable. You may change website to ‘store’, at your discretion.
- \$runCode: refers to the unique code for the website that you specify when creating your Website. This code will be used on the server to point to the domain.
- If you set \$runType ‘website’, the \$runCode should be your Website code
- If you set \$runType ‘store’, the \$runCode should be your Store View code.

```

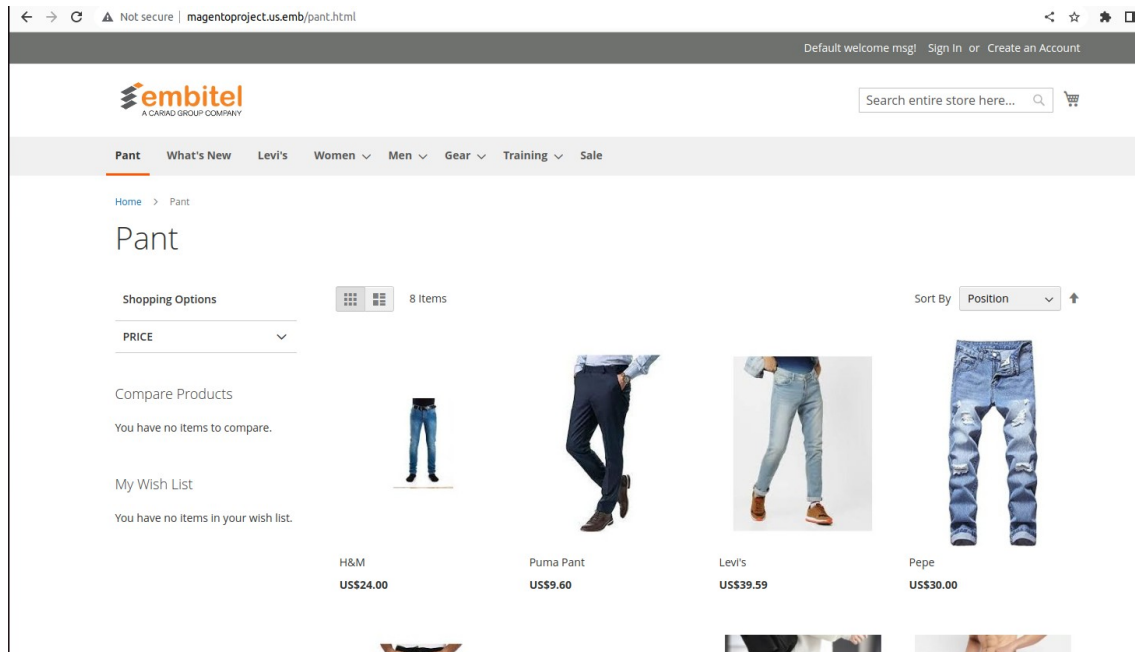
26
27 $params = $_SERVER;
28
29 $domainName = $_SERVER['HTTP_HOST'];
30
31 switch ($domainName) {
32 case 'magentoproject.india.emb':
33 $runType = 'website';
34 $runCode = 'india';
35 break;
36
37 case 'magentoproject.saudi.emb':
38 $runType = 'website';
39 $runCode = 'saudi';
40 break;
41
42 case 'magentoproject.us.emb':
43 $runType = 'website';
44 $runCode = 'us';
45 break;
46
47 default:
48 $runType = 'website';
49 $runCode = 'base';
50 }
51
52
53 $params[\Magento\Store\Model\StoreManager::PARAM_RUN_CODE] = $runCode;
54 $params[\Magento\Store\Model\StoreManager::PARAM_RUN_TYPE] = $runType;
55
56 $bootstrap = \Magento\Framework\App\Bootstrap::create(BP, $params);
57

```

Now lets check the Indian website url in the browser: <http://magentoproject.india.emb>



US Website url in the browser: <http://magentoproject.us.emb>



Installing and Implementing Arabic Language for Saudi Website

- Created custom theme for Saudi website and applied. Vendor name is Embitel and Theme name is theme.
- Path: App/design/frontend/embitel/theme/registration.php

```

default_head_blocks.xml  theme.xml  registration.php
var > www > html > magentoproject > app > design > frontend > embitel > theme > registration.php
1  <?php
2  /**
3   * Copyright © 2015 Magento. All rights reserved.
4   * See COPYING.txt for license details.
5   */
6   \Magento\Framework\Component\ComponentRegistrar::register(
7       \Magento\Framework\Component\ComponentRegistrar::THEME,
8       'frontend/embitel/theme',
9       __DIR__
10  );
  
```

Path: App/design/frontend/embitel/theme/theme.xml

```

default_head_blocks.xml  theme.xml ✕

var > www > html > magentoproject > app > design > frontend > embitel > theme > theme.xml

1  <?xml version="1.0" encoding="UTF-8" ?>
2  <theme xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
3  |      xsi:noNamespaceSchemaLocation="urn:magento:framework:Config/etc/theme.xsd">
4  |
5  |   <title>theme</title>
6  |   <parent>Magento/luma</parent>
7  |   <media>
8  |       <preview_image>web/emb.jpeg</preview_image>
9  |   </media>
10 | </theme>

```

- Installed Arabic language package from internet source to theme of Saudi Website.
- Then implemented in Saudi website from Content > Configuration > Applied Theme.

Design Configuration

10 records found

Default	Website	Store	Store View	Theme Name	Action
Global				Magento Luma	Edit
Global	Main Website			Magento Luma	Edit
Global	Main Website	Main Website Store	Default Store View	Magento Luma	Edit
Global	Indian Website			Magento Luma	Edit
Global	Indian Website	Bangalore	English	Magento Luma	Edit
Global	Saudi Website			Magento Luma	Edit
Global	Saudi Website	Saudi Arabia	Arabic	theme	Edit
Global	Saudi Website	Saudi Arabia	English	Magento Luma	Edit
Global	US Website			Magento Luma	Edit
Global	US Website	Washington	English	Magento Luma	Edit

- Translated English text to Arabic language in CSV File.

File Edit View Insert Format Styles Sheet Data Tools Window Help

Lohit Devanagari 10 pt B I U A

A	B	C	D	E
1	None	module	Magento_AdminGws	
2	Allowed Scopes	module	Magento_AdminGws	
3	More permissions are needed to delete the	module	Magento_AdminGws	
4	You need more permissions to apply some	module	Magento_AdminGws	
5	More permissions are needed to view this	module	Magento_AdminGws	
6	This entity needs to be assigned to a store	module	Magento_AdminGws	
7	This item needs to be assigned to a store	module	Magento_AdminGws	
8	Orders can only be completed in an active	module	Magento_AdminGws	
9	This item needs to be assigned to a store	module	Magento_AdminGws	
10	More permissions are needed to delete this	module	Magento_AdminGws	
11	At least one website or store group needs	module	Magento_AdminGws	
12	More permissions are needed to set All Site	module	Magento_AdminGws	
13	The "%1" website ID is incorrect. Verify the	module	Magento_AdminGws	
14	You need more permissions to access web	module	Magento_AdminGws	
15	The "%1" store ID is incorrect. Verify the	module	Magento_AdminGws	
16	More permissions are needed to save this	module	Magento_AdminGws	
17	Role Scopes	module	Magento_AdminGws	
18	Custom	module	Magento_AdminGws	
19	Read Details	module	Magento_AdminNotification	
20	Mark as Read	module	Magento_AdminNotification	
21	Are you sure?	module	Magento_AdminNotification	
22	Remove	module	Magento_AdminNotification	
23	Messages Inbox	module	Magento_AdminNotification	
24	You have %1 new system messages	module	Magento_AdminNotification	
25	You have %1 new system message	module	Magento_AdminNotification	
26	Incoming Message	module	Magento_AdminNotification	
27	Close	module	Magento_AdminNotification	
28	Notifications	module	Magento_AdminNotification	
29	The message has been marked as Read	module	Magento_AdminNotification	
30	We couldn't mark the notification as Read	module	Magento_AdminNotification	
31	Please select messages.	module	Magento_AdminNotification	

Find ar_SA

Sheet 1 of 1

RTL:

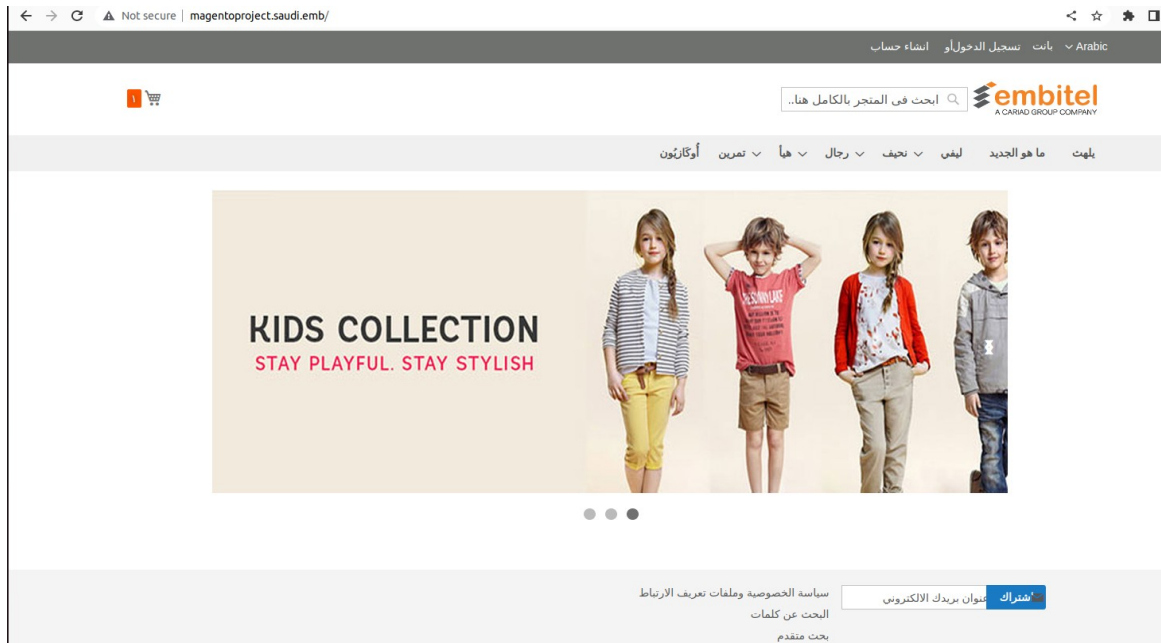
- RTL stands for "right-to-left" and refers to the direction of writing and reading in languages that are written from right to left, such as Arabic, Hebrew, and Persian.
- Applied RTL to the Saudi Website by writing CSS files in the Theme folder.

```
default_head_blocks.xml X
var > www > html > magentoproject > app > design > frontend > embitel > theme > Magento_Theme > layout > default_head_blocks.xml
1 <page xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
2     layout="2columns-left"
3     xsi:noNamespaceSchemaLocation="urn:magento:framework:View/Layout/etc/page_configuration.xsd">
4     <head>
5         <css src="css/custom.css" />
6     </head>
7 </page>
8
```

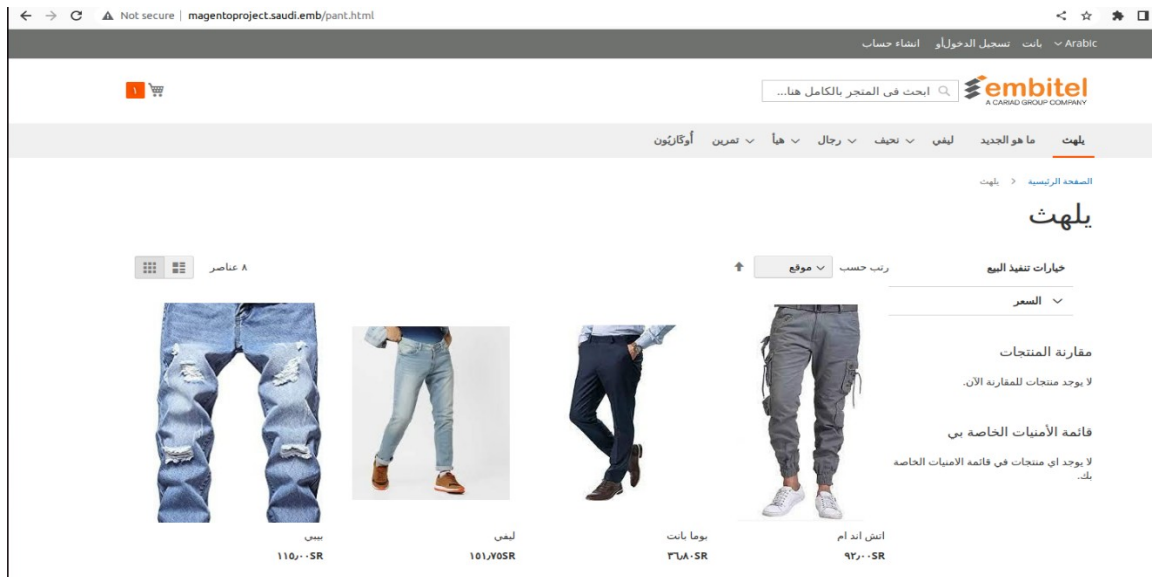
Path: web/css/Custom.css

```
# custom.css X
var > www > html > magentoproject > app > design > frontend > embitel > theme > web > css > # custom.css > body
1 body
2 {
3     direction: rtl;
4 }
5
6
7
8
9
10 .control{
11     float:left;
12 }
13
14 .product-section-title{
15     direction: rtl;
16 }
17
18
19
20
21
22
23 .block-search {
24     float: left;
25 }
26
27
28
29 .cart-summary {
30     float:left;
31 };
32
33 @media only screen and (min-width: 768px){
34     .product-info-main {
35         float: left;
36     }
37 }
38
39 .columns {
40     padding: left;
```

- RTL Site is Shown Below:



- Product Listing Page:



- Set GST settings: Under the "GST" section, can configure the following settings:
- Display Product Prices in Catalog: Choose whether to display product prices in the catalog including or excluding GST.

- **Set GST Classes:** Under the "GST Classes" section, you can create or edit GST classes for products and customers. You can create separate classes for different types of products or customers, such as taxable goods, non-taxable goods.
- **Set GST Rates:** Under the "GST Rates" section, you can set the GST rate for each tax class. Set the rate for different regions or apply a single rate for all regions.
- **Save Configuration:** Once you have configured all the settings, click the "Save Config" button to save the configuration.

[← Back](#) [Delete Rule](#) [Reset](#) [Save and Continue Edit](#) [Save Rule](#)

Tax Rule Information

Name *

Tax Rate *

Q

1 selected

US-CA-* -Rate 1

US-NY-* -Rate 1

US-MI-* -Rate 1

bag11

CGST

✓ SGST

GST

GST1

[Add New Tax Rate](#)

Additional Settings ⌵

Adding Tax Rate:

[← Back](#) [Delete Rate](#) [Reset](#) [Save Rate](#)

Tax Rate Information

Tax Identifier *

Zip/Post is Range ☐

Zip/Post Code *
* - matches any; 'xyz*' - matches any that begins on 'xyz' and are not longer than 10.

State ▼


Country * ▼

Rate Percent *

Indian Website is show below with applied Custom Tax.

← → ↻ ⚠ Not secure | magentoproject.india.emb/checkout/cart/

⏮ ☆ ⚙ □

Item	Price	Qty	Subtotal
<div><div></div><div>Puma Pant</div></div> <div><div></div><div></div><div></div></div>	₹800.00	<div>1</div>	₹800.00

✎ 🗑

Update Shopping Cart

Apply Discount Code ▾

Summary

Estimate Shipping and Tax ^

Enter your destination to get a shipping estimate.

Country

India ▾

State/Province

Karnataka ▾

Zip/Postal Code

560066

Flat Rate

☒ Fixed ₹5.00

Subtotal

₹800.00

Discount

-₹160.00

Shipping (Flat Rate - Fixed)

₹5.00

Tax

₹64.00 ^

Order Total

₹709.00

Proceed to Checkout