Shopit Documentation

Release 0.5.2

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A fully featured shop application built on djangoSHOP framework.

This project aims to provide a **quick & easy** way to set up a fully featured shop without much hassle.

CHAPTER 1

Features

Shopit comes with the most useful features that a classic shops needs, out of the box.

Here's what you can expect:

- Easily manage Products and their variations with custom Attributes.
- Attach images, videos & files on products.
- Set Up-sell, Cross-sell and other customized Relations between products.
- Create custom checkbox **Flags** for products and categorization.
- Group products in Category, Brand and Manufacturer groups.
- Create discounts and promotional codes with Modifiers.
- Add custom Taxes for categories and products.
- Enable customer **Reviews** on products.

CHAPTER 2

Contents

2.1 Getting started

Get started with installing and configuring Shopit.

2.1.1 Requirements

- Django 1.11
- django-shop as shop framework.
- django-cms for placeholders.
- django-parler to translate everything.
- django-mptt for tree management.
- django-admin-sortable2 to sort stuff.
- django-measurement to add measurements.

2.1.2 Installation

Install using **pip**:

```
pip install django-shopit
```

You should follow django-cms & django-shop installation guide first, and then add the following to your settings:

Urls

There are two ways to configure the urls. First would be to add to your urls.py:

```
urlpatterns = [
    url(r'^shop/', include('shopit.urls')),
    ...
]
```

The second option is to use django-cms apphooks. **Shopit** comes with a couple of those for different application parts. ShopitApphook is the main one, and one that should always be attached to a page (if the urls are not already added). Then there are other optional apphooks for *account*, *categorization* & *products*. If you want to keep it simple, and not have to set every application part individually. You can add to your settings:

SHOPIT_SINGLE_APPHOOK = **True**

This will load all the neccesary urls under the ShopitApphook.

2.2 Product

About the **Product** model.

2.2.1 Type of Products

There are 3 kinds of products:

- SINGLE are products without variations.
- GROUP are products that hold variants and their common info, they cannot be added to cart.
- VARIANT are variations of a product that must select a Group, and set their unique attributes.

Each of the kinds have their set of rules, and a different validation in admin.

Single products

A simplest form of a **Product**. Only requirement is to set the name, slug, code & unit_price.

Group products

Group products hold common info of their variations and are not considered an actual product that can be added to the cart. They have to specify availible_attributes for the variants to use. Variants of a group that don't use those attributes will be considered *invalid*.

Variant products

Variants must specify a group, as well as their unique set of attributes. All attributes specified in availible_attributes of a group, need to be added. Variants are best added through the custom *variants* field in products admin. Every combination of a variant can be created automatically, and invalid variants deleted as well.

VARIANTS:

Variant products and their attributes for a group T-Shirt.

Name	Color	Size	Price	Code	Quantity	Languages	Actions
T-Shirt red S	red	S	300.00 kn	14	~	EN HR	🔗 Change 🛛 🗙 Delete
T-Shirt red M	red	Μ	270.00 kn	15	~	EN HR	🧨 Change 🛛 🗙 Delete
T-Shirt red L	red	L	-	-	~		+ Create
T-Shirt red XL	red	XL	300.00 kn	17	~	EN HR	🧨 Change 🛛 🗙 Delete
T-Shirt green S	green	S	300.00 kn	18	~	EN HR	🧨 Change 🛛 🗙 Delete
T-Shirt green M	green	Μ	300.00 kn	19	~	EN HR	🔗 Change 🛛 🗙 Delete
T-Shirt green L	green	L	300.00 kn	20	~	EN HR	🔗 Change 🛛 🗙 Delete
T-Shirt green XL	green	XL	300.00 kn	21	~	EN HR	🔗 Change 🛛 🗙 Delete
T-Shirt blue S	blue	S	300.00 kn	22	~	EN HR	🔗 Change 🛛 🗙 Delete
T-Shirt blue M	blue	Μ	300.00 kn	23	~	EN HR	🔗 Change 🛛 🗙 Delete
T-Shirt blue L	blue	L	300.00 kn	24	~	EN HR	🔗 Change 🛛 🗶 Delete
T-Shirt blue XL	blue	XL	300.00 kn	25	~	EN HR	🔗 Change 🛛 🗙 Delete

+ Create all

Variants can leave most of their fields empty to inherit them from a group. Or choose to override them.

2.2.2 Categorization

Categorization is separated into Category, Brand & Manufacturer models. Tree management is handled by the django-mptt project. Modifiers and in case of category, Tax can be set in categorization to apply to a group of products.

2.2.3 Pricing & availability

Product pricing section consists of a unit_price, discount, tax & summary fields. Discount and tax field are ment for per products use. When different taxes or discounts are required on a product. These values are embedded into a price, when for example you want to have tax included in a price. A summary field shows calculated values in a custom admin field, for convenience.

Stock

quantity field is used to keep a record of available units to ship. Leave empty if product is always available, or set to 0 if product is not available.

2.2.4 Flags

Custom checkbox flags can be added to the **Product** or to a categorization layer. This allows to easily separate a group of products to display in a different way on site.

2.2.5 Measurements

Measuements fields are powered by the django-measurement project. width, height, depth, and weight is available.

2.2.6 Attributes

Attribute model lets you design custom attributes with their choices. These attributes are then selected in availible_attributes field on a group product, and used to create product variations.

2.2.7 Other inlines

Product model has couple of inline models like Attachment that allows you to add **image**, **video** & **file** attachments to a product. Relation that allows you to add customized relations between products. Review that let's you manage product customer reviews.

2.3 Modifier

Modifiers allow you to create different cart and cart item modifications on a specific set of **Products**. You can assign them to any **Categorization** model and to a **Product**.

There are 3 kind of **Modifiers**:

• STANDARD affects the product regardles. Usefull for taxing specific set of products.

- DISCOUNT checks for a "Discountable" flag on a product and should be negative.
- CART will affect an entire cart.

Modifiers allow you set either the amount or the percentage with what the price will be modified. Those values should be negative when creating discounts.

2.3.1 Modifier Conditions

Conditions can be created for a modifier that then must be met to make the modifier valid. You can use the default ones, or create custom conditions.

Default conditions

Shopit comes with a couple of simple conditions available for use. When creating a **Modifier** in admin, you'll get to choose from:

- PriceGreaterThanCondition
- PriceLessThanCondition
- QuantityGreaterThanCondition
- QuantityLessThanCondition

They all accept a value. Quantity conditions control only modifiers on cart items.

Create custom conditions

To create a custom conditions you must extend from shopit.modifier_conditions. ModifierCondition and then you can implement methods cart_item_condition and cart_condition. They both accept an optional value argument as decimal number that can be passed in when selecting the condition.

```
from datetime import datetime
from shopit.modifier_conditions import ModifierCondition
class DayIsOddCondition(ModifierCondition):
    name = 'Day is odd'
    def cart_item_condition(self, request, cart_item, value=None):
        return self.day_is_odd()
    def cart_condition(self, request, cart, value=None):
        return self.day_is_odd()
    def day_is_odd(self):
        return datetime.today().day % 2 == 1
```

Now with the condition above, when selected on a modifier it will only be active when the day is odd. Since both methods cart_item_condition and cart_condition are overriden, the condition will control the modifier in cases both when it's applied to a cart item, or an entire cart. By default when not overriden those methods return True.

Last thing do to is add the path to your condition to SHOPIT_MODIFIER_CONDITIONS list.

```
SHOPIT_MODIFIER_CONDITIONS = [
    'shopit.modifier_conditions.PriceGreaterThanCondition',
    'shopit.modifier_conditions.PriceLessThanCondition',
    'shopit.modifier_conditions.QuantityGreaterThanCondition',
    'shopit.modifier_conditions.QuantityLessThanCondition',
    'myapp.modifier_conditions.DayIsOddCondition',
]
```

2.3.2 Discount codes

Other than conditions, modifiers can be limited to a set of discount codes that makes them valid. To achive that you need to create a DiscountCode and assign it to a modifier. When active discount codes exist on a modifier, it is no longer active without one of those codes applied to the cart.

Discount codes can also be limited for the specific customer to use only.

2.4 Templates

You can use django-cms cascade plugins provided by django-shop to generate your cart, watch, checkout, account & catalog pages. But if don't want to add the plugins yourself, **Shopit** comes with prebuild html templates for those pages. Barebones and with simple jQuery implementation of front-end actions for you to easily override. This will help you have a clean & simple starting boilerplate to build apon.

2.4.1 Account

Account templates are located in templates/shopit/account/* and consist of:

- account_detail.html
- account_login.html
- account_order_detail.html
- account_order_list.html
- account_register.html
- account_reset.html
- account_reset_confirm.html
- account_settings.html

2.4.2 Catalog

Catalog templates are located in templates/shopit/catalog/* and consist of:

- categorization_detail.html
- categorization_list.html
- product_detail.html
- product_list.html

There are general categorization templates that handle all categorization views by default. Categorization objects and lists are passed into context as categorization and categorization_list as well as an actual model name representation, for example **Category** views will also have category and category_list accessible. You can also create a template for a specific categorization by using it's model name. For eg. for **Brand** model you can create brand_detail.html and brand_list.html.

2.4.3 Shop

Shop templates are located in templates/shopit/shop/* and consist of:

- cart.html
- checkout.html
- thanks.html
- watch.html

2.4.4 Templatetags

To use the Shopit templatetags library. Put {% load shopit_tags %} in your templates.

Filters

```
# Cast a number to a Money format.
{{ number | moneyformat }}
```

Simple tags

```
# Update the querystring maintaining the existant keys.
{% query_transform color 'black' size='XL' %}
# Fetch a set of products.
{% get_products 3 categories=3 brands='apple, samsung' flags='featured, awesome' as...
\rightarrow products \%
{% get_products categories='phones' price_from=120 as products %}
# Fetch a set of categorization objects.
{% get_categorization 'category' limit=3 level=1 depth=2 as categories %}
{% get_categorization 'brand' limit=3 level=1 depth=2 as brands %}
{% get_categorization 'manufacturer' products=product_list limit=3 level=1 depth=2 as_
→manufacturers %}
# Fetch a single flag, or a set of flags.
{% get_flags 'featured' as featured_flag %}
{% get_flags products=product_list level=1 parent='featured' as featured_flags %}
# Fetch a single modifier, or a set of modifiers. Setting filtering to True
# returns only the modifiers eligible for filtering.
{% get_modifiers 'special-discount' as special_discount_mod %}
{% get_modifiers products=product_list filtering=True %}
# Fetch attributes for the set of products.
```

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```
{% get_attributes product as attributes %}
# Get min and max price with the steps in between for a set of products.
{% get_price_steps 3 product as price_steps %}
```

Inclusion tags

These are the templates to be included with inclusion tags. They are located in templates/shopit/includes/ * and consist of:

- add_to_cart.html
- cart.html
- order.html

To include the templates you can write the following:

```
# Show add to cart button for the 'product' in context.
{% add_to_cart %}
# Show add to cart button for specified product with watch button included.
{% add_to_cart product watch=True %}
# Show editable cart.
{% cart %}
# Show static cart.
{% cart editable=False %}
# Show latest order.
{% order number="2018-00001" %}
# show specific order.
{% order instance %}
```

2.5 Settings

Available settings to override.

2.5.1 Error messages

A dictionary with error messages used in Shopit.

```
SHOPIT_ERROR_MESSAGES = {
    'duplicate_slug': _("This slug is already used. Try another one."),
    'group_has_group': _("Only variant products have a group."),
    'variant_no_group': _("Variants must have a group selected."),
    'variant_has_category': _("Variant products can't specify categorization. It's_
    inherited from their group."),
    'varinat_group_variant': _("Can't set group to variant."),
```

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```
'not_group_has_variants': _("This product has variants, you need to delete them.
→before changing it's kind."),
   'not_group_has_available_attributes': _("Only group products can have Availible_
↔attributes specified."),
   'group_no_available_attributes': _("Group product should have Availible_
↔attributes specified."),
   'variant_has_tax': _("Variant products can't specify tax, their group tax.
→percentage will be used instead."),
   'variant_no_attributes': _("Variant must have their unique set of attributes_
⇔specified."),
   'variant_already_exists': _("A Variant with this attributes for selected group_
→already exists."),
   'not_variant_has_attributes': _("Only Variant products can have attributes."),
   'attribute_no_choices': _("Choices must be specified."),
   'attribute_duplicate_choices': _("Attribute can't have duplicate choices."),
   'incorrect_attribute_choice': _("Selected choice doesn't match the seleced_
\rightarrowattribute."),
   'no_attachment_or_url': _("Missing the attachment or url."),
   'wrong_extension': _("File extension not allowed for this attachment kind."),
   'discount_not_negative': _('A discount should be subtracting the price, amount or_
→percent needs to be negative.'),
   'variant_has_relations': _('Only Single and Group products can have relations.'),
   'relation_base_is_product': _("You can't set relation to self."),
   'modifier_no_condition_path': _("You have to select a condition."),
   'cart_discount_code_exists': _("Code is already applied to your cart."),
   'cart_discount_code_invalid': _("Code is invalid or expired."),
   'cart_discount_code_wrong_customer': _("Code is invalid or expired."),
```

2.5.2 Address

Country choices used in checkout address forms. If empty all countries are used from shopit.models.address. ISO_3166_CODES.

```
SHOPIT\_ADDRESS\_COUNTRIES = ()
```

A primary address to be used in a checkout proccess. Can be 'shipping' or 'billing'. Depending on wich address is selected, the other one will get the option to use the primary one instead of having to fill it out.

```
SHOPIT_PRIMARY_ADDRESS = 'shipping'
```

2.5.3 Customer

A flag to control if customer's phone number is required.

```
SHOPIT_PHONE_NUMBER_REQUIRED = False
```

2.5.4 Product

A list of base serializer fields for a common product.

```
SHOPIT_PRODUCT_SERIALIZER_FIELDS = [
    'id', 'name', 'slug', 'caption', 'code', 'kind', 'url', 'add_to_cart_url', 'price
    ', 'is_available',
]
```

Above is the default config, here's a list of all available fields:

A list of serializer fields for a product detail.

Template choices used when rendering an attribute.

```
SHOPIT\_ATTRIBUTE\_TEMPLATES = ()
```

Relation kind choices on a ProductRelation model.

```
SHOPIT_RELATION_KINDS = (
   ('up-sell', _('Up-sell')),
   ('cross-sell', _('Cross-sell')),
```

Rating choices for product reviews.

SHOPIT_REVIEW_RATINGS = ()

Is review active by default when created.

SHOPIT_REVIEW_ACTIVE_DEFAULT = True

A boolean that enables you to optimize ProductListView and CategoryDetailView when products are fetched asynchronously (ajax).

SHOPIT_ASYNC_PRODUCT_LIST = False

A boolean to control if product_list is added to context when accessing ProductListView or CategoryDetailView.

SHOPIT_ADD_PRODUCT_LIST_TO_CONTEXT = **not** SHOPIT_ASYNC_PRODUCT_LIST

A default product list ordering. Must be on of 'namel-namelpricel-price'.

```
SHOPIT_DEFAULT_PRODUCT_ORDER = None
```

2.5.5 Flag

Template choices used when rendering a Flag.

```
SHOPIT\_FLAG\_TEMPLATES = ()
```

2.5.6 Modifier

A list of ModifierCondition classes that will be used as choices for conditions in a Modifier.

```
SHOPIT_MODIFIER_CONDITIONS = [
    'shopit.modifier_conditions.PriceGreaterThanCondition',
    'shopit.modifier_conditions.PriceLessThanCondition',
    'shopit.modifier_conditions.QuantityGreaterThanCondition',
    'shopit.modifier_conditions.QuantityLessThanCondition',
]
```

2.5.7 Text editor

A text editor widget used to render a rich textarea in Shopit.

SHOPIT_TEXT_EDITOR = 'djangocms_text_ckeditor.widgets.TextEditorWidget'

2.5.8 Single apphook

Load urls under a single ShopitApphook, or leave the ability to add apps separately.

```
SHOPIT_SINGLE_APPHOOK = False
```

2.5.9 Filter attributes

Designates if products of kind VARIANT should be included in attribute filtered results.

```
SHOPIT_FILTER_ATTRIBUTES_INCLUDES_VARIANTS = False
```

2.6 Release notes

Release notes for Shopit.

2.6.1 0.5.2

• Fix setup requirement.

2.6.2 0.5.1

- Drop Django 1.10 support.
- In ProductDetailView, check for renderer format before adding django-cms menu related items.
- Remove *PhoneNumberField* from the project, use simple *CharField* instead.
- Lock requirements.

2.6.3 0.5.0

• Rename package from *djangoshop-shopit* to *django-shopit*.

2.6.4 0.4.3

- Fix encoding error in product admin *get_name* method.
- Add phonenumbers library to requirements.

2.6.5 0.4.2

• Fixes #7 - "unhashable type: 'MoneyInEUR'" error in *get_price_steps* templatetag.

2.6.6 0.4.1

- Small fixes in admin.
- Fix indentation in admin help text for djangocms-admin-style.
- Refactor tests.

2.6.7 0.4.0

- Add support for Django 1.11 & DjangoSHOP 0.12.x.
- Handle tousand separator when displaying money in admin.
- Add ability to pass in order_number to order templatetag.
- Add num_uses to list display for Discount Code.
- After order was populated with cart data, delete discount codes.
- Add ability to send *validate* key when updating the cart via POST. In which case the promo code gets validated without applying it to cart.
- Add setting SHOPIT_DEFAULT_PRODUCT_ORDER to control default ordering of products.
- Add ability to override ProductSerializer fields through the fields GET property.
- Add attribute_choices to product serializer fields.
- Add template field to Flag model, adn a SHOPIT_FLAG_TEMPLATES setting.
- Add path to the Flag serializer.
- Include categorization flags on a product.

- Fix flag serializer field.
- Use attachment subject_location when generating a thumbnail.
- Add ability to pass in get_count as boolean through the request.GET object when in ProductListView and CategoryDetailView. This applies in non HTML formated response and returns the count of all (filtered) products as { 'count': 300}.
- Simplify urls into a single urls.py since https://github.com/divio/django-cms/pull/5898 was merged.
- Separate admin modules into multiple files.
- Move settings from settings.py to conf.py and re-format based on *djangoSHOP's* settings pattern.
- Add SHOPIT_ASYNC_PRODUCT_LIST and SHOPIT_ADD_PRODUCT_LIST_TO_CONTEXT settings to optimize ProductListView and CategoryDetailView.
- Bump django-cms requirement to 3.5.
- Set default prices to zero.
- Fix field indentation in models and forms to follow Django's style guide.
- Various bugfixes.

Attention: Requires python manage.py migrate shopit to set default price and amount Money fields, and add a template field to the Flag model.

2.6.8 0.3.0

- Handle InvalidImageFormatError error when generating thumbnails.
- Add support for djangoSHOP 0.11.

2.6.9 0.2.3

- Add never_cache decorators to account, review and watch views.
- Optimize get_flags templatetag when filtering by products.
- Add content field as PlaceholderField to categorization models.
- Force setting priority on address form, order existant addresses by priority.
- Update query_transform templatetag to remove empty values.
- Add missing FlagModelForm to FlagAdmin.
- Fix Flag unicode error in ___str___.
- Re-work the reviews, making them non-translatable. Not compatible with the old reviews, make sure to save them (if you have any) before upgrading. A way for adding reviews was not provided before so this should not be the case.
- Add setting SHOPIT_REVIEW_ACTIVE_DEFAULT. This decides if created reviews are active by default.
- Handle updating shopping cart via ajax, add success messages to it.
- Remove CartDiscountCode's from cart when emptying it, make last applied code appears as active.
- Add *PhoneNumberField* field to the customer, add setting SHOPIT_PHONE_NUMBER_REQUIRED that defaults to False.

- Refactor address forms, enable using either 'shipping' or 'billing' form as primary. added setting SHOPIT_PRIMARY_ADDRESS.
- Fix address country choices.
- Add and track num uses on a *DiscountCode*, alter the admin to display new values.
- Enable frontend editing of categorization and product models.
- Fix AccountOrderDetail view not returning the correct order.
- Handle NoReverseMatch for add_to_cart_url in a Product serializer.

Attention: Requires python manage.py migrate shopit to add/remove fields on a Review model, as well as add phone_number field on Customer model, content field on Categorization models and max_uses, num_uses on *DiscountCode*.

Note: If migrating with categorization models already added. You'll need to save each models again for the content PlaceholderField to appear.

2.6.10 0.2.2

- Add filtering by modifiers.
- Update django-shop requirement to 0.10.2.

2.6.11 0.2.1

• Fixes problem with migrations.

2.6.12 0.2.0

- Add support for *Django 1.10 & DjangoSHOP 0.10.x*.
- Alter templates to use Bootstrap 4 by default.
- Create example project, move tests.
- Rename description & caption fields to start with underscore.

Attention: Requires python manage.py migrate shopit to add a product code to the CartItem, rename description & caption fields, as well as adding an additional setting SHOP_PRODUCT_SUMMARY_SERIALIZER = 'shopit.serializers.ProductSummarySerializer'.

2.6.13 0.1.4

- Add *description* field to categorization models.
- Move variant generator methods from admin to the model. Now create_all_variants and create_variant are available on the model.

• Update add to cart get_context to ensure correct product translation is returned.

Attention: Requires python manage.py migrate shopit to create description field on categorization models.

2.6.14 0.1.3

- Bugfixes.
- Fix get_object and get_queryset in product views returning inconsistant results.
- Add get_view_url to product detail view to return correct translated url.

2.6.15 0.1.2

- Add price range filtering in get_products templatetag.
- Move product filtering to a manager.
- Allow mutiple flags to be passed to the get_products templatetag.
- Optimize attribute filtering with *prefetch_related*.
- Enable sorting the products.
- Don't fetch flags from categorization on a product. Categorization flags are used separately to mark categorization and the don't affect the products.
- · Fix templatetags.
- Add option to limit get_categorization templatetag to a set of products.
- Enable filtering categorization and flags via querystring. Change price range querystrings.
- Add get_flags templatetag.
- Make Flag model an mptt model with a parent field.
- Show flags as filter_horizontal instead of CheckboxInput in product admin.
- · Show localized amounts in product admin summary field.
- Use as_decimal when displaying price steps in template instead of floatformat.

Attention: Requires python manage.py migrate shopit to create mptt fields on a Flag model.

2.6.16 0.1.1

- Ensure customer is recognized before registering a new account. This works around an error "Unable to proceed as guest without items in the cart" when registering without a cart.
- Make fields in product serializer editable through settings, set optimized defaults.
- Fix error when mergin dictionaries in python3.
- Remove redundant code.
- Fix trying to generate image thumbnail on attachment when *file* is None.

• Fix weight setter setting width instead of weight.

2.6.17 0.1.0

• Initial release.

chapter $\mathbf{3}$

Indices and tables

- genindex
- modindex
- search