

Modern PerlCommerce

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Interchange

- ▶ Around since 1995.
- ▶ Fast and stable.
- ▶ Flexible and extensible.

Showcases

- ▶ Backcountry <http://www.backcountry.com/>
- ▶ FragranceNet <http://www.fragrancenet.com/>

My projects

- ▶ 20 projects
- ▶ 6 countries
- ▶ 80% income

Interchange

Sounds wonderful!

Interchange

Sounds wonderful! Really?

Community

- ▶ Small group of developers
- ▶ Little activity
- ▶ Same people
- ▶ Not part of CPAN

Developer

- ▶ Monolithic
- ▶ Same codebase
- ▶ Hard to find things

User

- ▶ Obscure templating
- ▶ Missing extensions
- ▶ Bad demo

Past



Alternatives to Interchange

- ▶ Handel
- ▶ Agora
- ▶ Business::Cart::Generic

Future

- ▶ Problem with Existing Codebase

Future

- ▶ Problem with Existing Codebase
- ▶ Missing alternatives

Future

- ▶ Problem with Existing Codebase
- ▶ Missing alternatives
- ▶ Strong competitors

Future

We need a plan!

Future

- ▶ Rewrite from scratch ?

Future

- ▶ Rewrite from scratch ?
- ▶ Too much work ?

Future

- ▶ Rewrite from scratch ?
- ▶ Too much work ?
- ▶ Modern Perl to the rescue!

Modern Perl

- ▶ Plack/PSGI
- ▶ OO
 - ▶ Moose
 - ▶ Moo
- ▶ Web Frameworks
 - ▶ Dancer
 - ▶ Catalyst
 - ▶ Mojolicious

Delegated Tasks

- ▶ Dispatching requests
- ▶ Parameter parsing
- ▶ Session handling
- ▶ Template engine

Extensions

- ▶ Bundles
- ▶ Plugins
- ▶ Hooks

Policy

- ▶ KISS
- ▶ Components
- ▶ Assumptions
- ▶ Expressive

Future



Assumptions

Cart

- ▶ Session
- ▶ DBI
- ▶ Webservice *

Assumptions

Account Manager

- ▶ DBI
- ▶ LDAP *
- ▶ OpenID *

Assumptions

Templating Engine

- ▶ Template::Toolkit
- ▶ Template::Flute

Assumptions

Web framework

- ▶ Catalyst
- ▶ Dancer
- ▶ Mojolicious

Preferences

- ▶ `Dancer`
- ▶ `Template::Flute`
- ▶ `DBI`

Features

- ▶ Navigation
- ▶ Cart
- ▶ Checkout
- ▶ Accounts

Cart

- ▶ SKU, Name, Quantity, Price
- ▶ Price > 0
- ▶ Combines automatically
- ▶ Multiple carts
- ▶ Storage everywhere
- ▶ Price caching

Nitesi::Cart Methods

```
use Dancer::Plugin::Nitesi;
```

```
cart->add(sku => 'POM253', name => 'Pomelo',  
         price => 3.00, quantity => 10);
```

```
cart->remove(sku => 'POM253');
```

```
cart->count();
```

```
cart->clear();
```

```
cart->total();
```

```
cart->subtotal();
```

Everything is a Cart

- ▶ Saved Carts
- ▶ Wishlists
- ▶ Collections

Multiple Carts

```
cart('wishlist')->add(sku => 'ORA322', name => 'Orange',  
    price => 2.00, quantity => 5);
```

Cart Backends

- ▶ Session
- ▶ DBI

Inventory Check

```
MinQuantityField min_quantity  
MaxQuantityField inventory : quantity
```

Inventory Check Hook

```
hook 'before_cart_add' => sub {  
  my ($cart, $item) = @_;  
  my ($inventory);  
  
  $inventory = query->select_field(table => 'products',  
                                   field => 'inventory',  
                                   where => {sku => $item->{sku}});  
  
  if ($item->{quantity} > $inventory) {  
    $item->{error} = 'Out of stock';  
  }  
};
```

Cart Hooks

- ▶ before_cart_add
- ▶ after_cart_add
- ▶ before_cart_update
- ▶ after_cart_update
- ▶ before_cart_remove
- ▶ after_cart_remove

Checkout

- ▶ Taxes
- ▶ Shipping
- ▶ Payment
- ▶ Invoice

Payment

- ▶ `Business::CreditCard`
- ▶ `Business::OnlinePayment`

charge Keyword

```
$tx = charge(gateway => 'Braintree',  
            amount => cart->total,  
            card_number => $values->{cc_number},  
            expiration => $expiration,  
            cvc => $values->{cvc_number});
```

```
if ($tx->is_success()) {  
    ...  
}  
else {  
    ...  
}
```


Tax Modules on CPAN

- ▶ `Business::Tax::Canada`
- ▶ `Business::CA::GST`
- ▶ `Business::Tax::VAT`
- ▶ `Business::Tax::VAT::Validation`

Shipping

- ▶ Simple Shipping
- ▶ Crazy Shipping
- ▶ Shipping API

Costs

- ▶ Tax
- ▶ Shipping
- ▶ Coupons

Absolute Costs

```
$cart->apply_cost(amount => 5,  
                 name => 'shipping',  
                 label => 'Shipping');
```

Relative Costs

```
$cart->apply_cost(amount => 0.19,  
                 relative => 1,  
                 name => 'tax',  
                 label => 'Salestax');
```

Inclusive Costs

```
$cart->apply_cost(amount => 0.19,  
                 relative => 1,  
                 inclusive => 1,  
                 name => 'tax',  
                 label => 'Salestax');
```

PDF Invoices

- ▶ HTML template
- ▶ `Template::Flute::PDF`

Product Class

```
package Nitesi::Product;  
  
use Moo;  
  
has sku => (is => 'rw');  
has name => (is => 'rw');  
has description => (is => 'rw');  
has price => (is => 'rw');  
has weight => (is => 'rw');  
has priority => (is => 'rw');  
has inactive => (is => 'rw');  
  
1;
```


Product Subclass

```
package MyShop::Product;  
  
use Moo;  
use base 'Nitesh::Product';  
  
has inventory (is => 'rw');  
  
1;
```

Product Backend

```
package Nitesi::Product::Backend::DBI;  
use Moo;  
  
has dbh => (is => 'rw');  
  
has query => (  
    is => 'ro',  
    lazy => 1,  
    default => sub { Nitesi::Query::DBI->new(dbh => shift->dbh);}  
);  
  
sub load { ... };  
  
sub save { ... };  
  
1;
```

Accounts

```
post '/login' => sub {  
    if (account->login(username => params('body')->{username},  
                        password => params('body')->{password})) {  
        redirect '/customerservice';  
    }  
    else {  
        redirect '/login';  
    }  
};
```

Accounts

```
get '/mywishlist' => sub {  
  if (account->acl(check => 'create_wishlists')) {  
    return template 'mywishlist';  
  }  
  
  account->status(login_info => 'Please login to view wishlist.',  
                 login_continue => 'mywishlist',  
                 )  
  
  redirect '/login';  
};
```

Account manager

- ▶ Account Providers
- ▶ Login/Logout
- ▶ Account Information
- ▶ Login status
- ▶ Forgot password
- ▶ Registration

Account Provider

- ▶ DBI
- ▶ LDAP *
- ▶ Htpasswd *
- ▶ OpenID *
- ▶ OAuth *

Access Control

- ▶ User
- ▶ Roles
- ▶ Permissions

Forms

- ▶ Display
- ▶ Validation
- ▶ Storage

Web Services

- ▶ REST
- ▶ XML-RPC
- ▶ SOAP

Nitesi



Vienna Shopping Cart

`https://vsc.state.gov/`

Demo Shop

- ▶ Templates
- ▶ Navigation
- ▶ Database
- ▶ Payment Tests

CPAN/GitHub

- ▶ `https://metacpan.org/module/Nitesi`
- ▶ `https://metacpan.org/module/Nitesi::DBI/`
- ▶ `https://metacpan.org/module/Dancer::Plugin::Nitesi/`

- ▶ `https://github.com/racke/Nitesi`
- ▶ `https://github.com/racke/Nitesi-DBI`
- ▶ `https://github.com/racke/Dancer-Plugin-Nitesi`

Slides and Contact

Slides:

- ▶ <http://www.linuxia.de/talks/perlcommerce/perlcommerce-beamer.pdf>
- ▶ <http://conferences.yapceurope.org/gpw2012/schedule>

Email:

- ▶ racke@linuxia.de

IRC:

- ▶ [#interchange irc.freenode.net](irc://irc.freenode.net/#interchange)
- ▶ [#dancer irc.perl.org](irc://irc.perl.org/#dancer)

Questions

▶ Question !

Questions

▶ Questions ?

The End

Thanks a lot!