Modern PerlCommerce

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14th German Perl-Workshop, 28th February 2012, Erlangen
Interchange

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

My projects

- 20 projects
- 6 countries
- 80% income
Sounds wonderful!
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!
We need a plan!

Modern Perl

Policy

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
We need a plan!

Modern Perl

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

```perl
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')-&gt;add(sku =&gt; 'ORA322', name =&gt; 'Orange',
            price =&gt; 2.00, quantity =&gt; 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

```perl
$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

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

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

- HTML template
- Template::Flute::PDF
Product Class

```perl
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

```perl
package MyShop::Product;

use Moo;
use base 'Nitesi::Product';

has inventory (is => 'rw');

1;
```
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;
post '/login' => sub {
    if (account->login(username => params('body')->{username},
                        password => params('body')->{password})) {
        redirect '/customerservice';
    }
    else {
        redirect '/login';
    }
};
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
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://conferences.yapceurope.org/gpw2012/schedule

Email:

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IRC:

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Question!
Questions

Questions ?
Thanks a lot!