Nitesi Shop Machine Today and in the Future

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Nitesi Shop Machine

- ▶ Motivation
- ▶ Today
- ▶ Future

Motivation & Separation
Today
Future
The End

Motivation
Separation
Template::Flute

Motivation

- ▶ Modern Perl
- ▶ Plugins
- ▶ Hooks
- ▶ Engines

Motivation & Separation
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Principle of Separation

- Data
- Template
- Layout

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ITL example

```
[fly-list code="[data session arg]"]
<div>
<p>[L]Description[/L]: [item-description]</p>
<p>[L]Price[/L]: [item-price]</p>
</div>
[query ...]
[/query]
[/fly-list]
```

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ITL problems

- ▶ Eierlegende Wollmilchsau
- ▶ Code duplication
- ▶ ITL deserts
- ▶ Queries inside ITL
- ▶ Interaction with designers

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Solutions

- ▶ Fetch data inside code / embed with JSON
- ▶ Better templating engine

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Solutions

- ▶ Template::Flute
- ▶ Data: Values, Iterators
- ▶ Template: HTML, Specification

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Data

```
$values{cart} = cart−>items;
```

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Specification

```
<specification>
<list name="cart" class="cartitem" iterator="cart">
<param name="name"/>
<param name="price" filter="currency"/>
<param name="qty" field="quantity"/>
</list>
</specification>
```

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Layout

```
<tr class="cartitem">
    <td class="name">Simms replacement laces</td>
    <td>
        <input class="qty" value="2" />
    </td>
    <td class="td-right price">$24.55</td>
    <td class="td-right ">$49.10</td>
</tr>
```

Nitesi Projects

```
https://eshop.state.gov
```

Today

- ► Eco System
- ► Navigation, Products, Carts
- ► Routes
- ► ...

Eco System

- ▶ Modern Perl
- ▶ Dancer
- ▶ Template engine

Dancer

- ▶ PSGI
- ▶ Keywords
- ▶ Routes
- ▶ Hooks
- ▶ Engines
- ▶ Plugins

Navigation

- ▶ Unlimited depth
- ▶ Different types
- ▶ Nice URLs
- ▶ Support for multiple languages

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Eco System
Navigation & Products
Carts
Routes
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Nitesi::Product

```
$product = shop_product ( 'WBSG2003' ) ;
$product ->name ;
$product ->description ;
$product ->price ;
$product ->inactive ;
```

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Subclass Nitesi::Product

```perl
package Angler::Product;

use warnings;
use strict;

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

has image => (
    is => 'rw',
);

1;
```

Subclass Nitesi::Product

```
plugins :
  Nitesi :
    Product :
      class :  Angler :: Product
```

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Subclass Nitesi::Product

```
plugins:
  Nitesi:
    Product:
      class: Angler::Product
      attributes:
        name: description
        short_description: comment_short
        description: comment
```

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Pricing

- price field

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Variants

- ▶ Main product without attributes
  `WBSF10043`
- ▶ Each variant is a separate product
  `WBSF10043-434-20`
    - ▶ size S
    - ▶ color Sky Blue
- ▶ GTIN (ISBN, EAN, UPC)
- ▶ Data in product attributes

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Eco System
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Cart

- ▶ Multiple carts
- ▶ Storage in session or database
- ▶ Combines automatically
- ▶ Price caching

Cart Validation

- SKU, Name, Quantity, Price
- Price > 0

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Using cart keyword

```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();
```

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Routes

- ▶ Routes in Web Frameworks
- ▶ Interchange "Routes"
- ▶ Nitesi Routes

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Interchange "Routes"

- ▶ ActionMap
- ▶ AutoPage
- ▶ FlyPage
- ▶ MissingPage

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Nitesi Routes

Cart `/cart`

Checkout `/checkout`

Navigation `/Citrus/Lemon`

Product `/Citrus/Lemon/X1234` `/X1234`

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Product/Flypage route

- ▶ sku and uri fields
- ▶ sku redirects to uri
- ▶ 404 page for inactive products

Nitesi Routes

```perl
package MyShopApp;

    use Dancer ':syntax';
    use Dancer::Plugin::Nitesi;
    use Dancer::Plugin::Nitesi::Routes;


    ...


    shop_setup_routes;
```

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Route Hooks

- ► before_product_display
- ► before_cart_display
- ► before_checkout_display
- ► before_navigation_display

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Accounts

- User
- Roles
- Permissions

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Accounts

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

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Accounts

```
get '/mywishlist' => sub {
    if (account->acl(check => 'create_wishlists')) {
        return template 'mywishlist';
    }

    account->status(login_info => 'Please login to view v
                    login_continue => 'mywishlist',
                    )

    redirect '/login';
};
```

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Account manager

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

Payment

- Business::OnlinePayment

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Payment: charge Keyword

```
$tx = charge(provider => 'Braintree',
             amount => cart->total,
             first_name => 'Test',
             last_name => 'Tester',
             card_number => '4111111111111111',
             expiration => '0714',
             cvc => '222');
```

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Payment: Configuration

```
plugins:
  Nitesi:
    Payment:
      default_provider: Braintree
      providers:
        Braintree:
          merchant_id: sai8eicieki8aehe
          public_key: vetheifaezaigh8u
          private_key: oov8keiquiughie0
#         test_transaction: 1
```

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Forms and Validation

- Dancer::Plugin::Form
- Data::Transpose

API

See presentation tomorrow!

Query

- Nitesi::Query::DBI
- SQL::Abstract(::More)

Query

```perl
$query = Nitesi::Query::DBI->new(dbh => $dbh);

$query->select(table => 'products',
               fields => [qw/sku name price/],
               where => {price < 5},
               order => 'name',
               limit => 10);

$query->insert('products',
    {sku => '9780977920150', name => 'Modern Perl'});
$query->update('products',
    {media_format => 'CD'}, {media_format => 'CDROM'});
$query->delete('products', {inactive => 1});
```

Query

```
$query->select(join => 'user_roles rid=rid roles',
    where => { roles.name => {-ilike => 'adm%' } },
    fields => [qw/roles.rid roles.name],
    );
```

Future

- ▶ Features
- ▶ Development
- ▶ Demo
- ▶ Admin
- ▶ Dancer2

Features

- ▶ Search & Filters
- ▶ Reviews
- ▶ Gift Certificates, Coupons
- ▶ Shipping
- ▶ Caching

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Features
Development
Demo & Admin
Dancer2

Search & Filters

- ► Basic Search
- ► Product Filters
- ► Solr

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Features
Development
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Development

- ▶ Dancer::Plugin::Auth::Extensible
- ▶ DBIx::Class

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Features
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Demo

See talk tomorrow.

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Features
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Dancer2

Admin

- ▶ Bootstrap

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Features
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Dancer2

- Dancer2::Plugin::Nitesi

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Features
Development
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Dancer2

Migration

- ▶ Database triggers
- ▶ Keep Interchange Admin

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

Shop break

Slides: `http://www.linuxia.de/talks/eic2013/`
`nitesi-today-future-beamer.pdf`