

No Act on ACT

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YAPC::EU 2008 in Copenhagen



PerlDancer for Perlers (FOSDEM 2011)

PHP – the nonsensical



Sawyer's presentation

Perl Dancer Conference 2014



<http://act.perl.dance/eic2014/>

Using ACT in 2013/2014

- ▶ Managed software
- ▶ Listed in other conferences (Marketing)
- ▶ User database

Modern Perl for web applications

- ▶ PSGI / Plack
- ▶ Web application framework (Dancer2)
- ▶ Web framework (Bootstrap, JQuery)
- ▶ DBIx::Class
- ▶ Moo and friends
- ▶ Testing

mod_perl vs PSGI

- ▶ Apache / mod_perl
 - ▶ slow
 - ▶ memory footprint
 - ▶ deployment related code
- ▶ PSGI
 - ▶ runs on any webserver supporting PSGI
 - ▶ fast (Nginx)
 - ▶ simple configuration (Nginx)
 - ▶ no deployment related code

Apache version

Apache/1.3.42 (Unix) mod_perl/1.31

more than 6 years old

Dancer2 Advantages

- ▶ Clean OO interface
- ▶ Routes
- ▶ Hooks
- ▶ Engines
- ▶ Multiple Applications
 - ▶ Web application
 - ▶ REST API
 - ▶ Admin interface

Manual SQL vs DBIx::Class

- ▶ Manual SQL
 - ▶ error prone
 - ▶ compatibility problems
 - ▶ less secure
- ▶ DBIx::Class
 - ▶ Business logic
 - ▶ works on dozens of RDBMS
 - ▶ usually faster
 - ▶ more secure

More Reasons for "No act on ACT"

- ▶ Single Point of Failure
- ▶ Development

Single Point of Failure

- ▶ Baltimore Perl Workshop
- ▶ Eventbrite

Development

- ▶ Last commit on ACT: July 2015
<https://github.com/book/Act>
- ▶ Last commit on ACT in the box: September 2015

Responsiveness



Figure: Picture by Guillaume Brocker, CC BY-SA 3.0

PERLDANCER 2016

VIENNA, AUSTRIA

SEPT 20 - SEPT 22

<https://github.com/interchange/Perl-Dancer-Conference>

Web Application Features

- ▶ Maps with Leaflet
- ▶ Cropping Photos
- ▶ Administration
- ▶ SEO / Modern Design
- ▶ Dancer2::Debugger

Maps with Leaflet

- ▶ Venue on Frontpage
- ▶ Leaflet library
- ▶ Leaflet code
- ▶ User map

Venue on Frontpage

Conference Venue - [Hotel Schani Wien](#) 21/22 Sep

📍 Karl-Popper-Straße 22, 1100 Vienna, Austria



Leaflet Library

Leaflet Javascript library

User Map

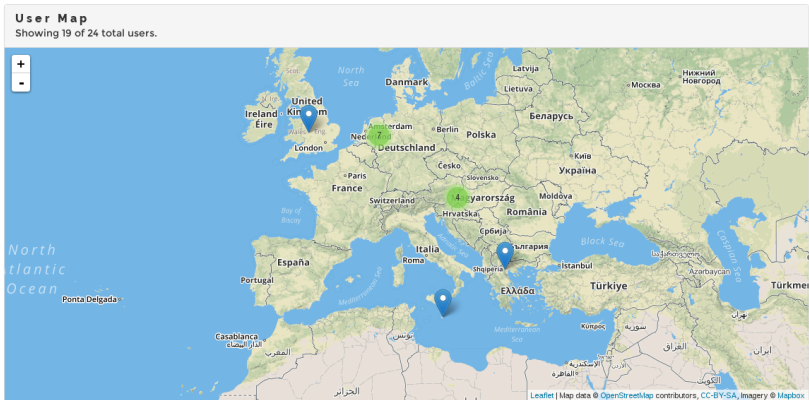


Figure: User Map

Cropping photos

You can drag and drop or upload your photo and crop it in our website.

Current photo

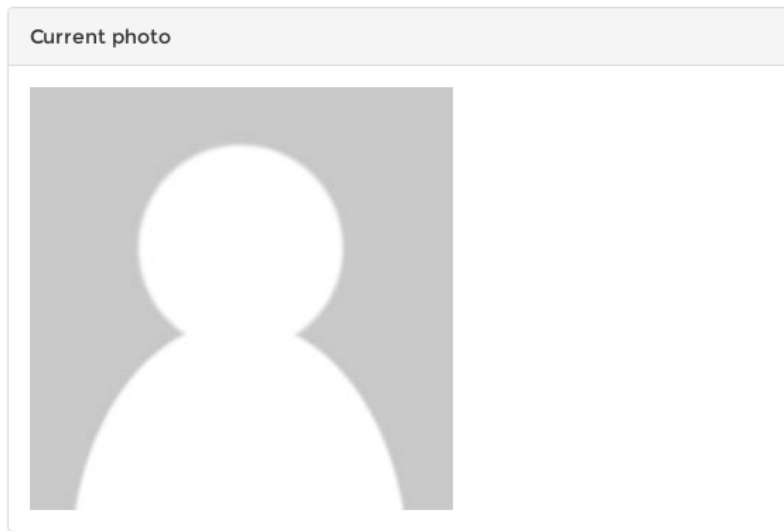


Figure: </profile/photo>

Ballerina



Cropping I

Upload a new photo min 300x300px, max 10MB



ballet-1033163_1280.jpg

 ballet-1033163_1280.j ...  Remove  Upload  Browse ...

Cropping II

Please crop image



Submit

Final Result



Jcrop Library

Jcrop - jQuery Image Cropping Plugin

SEO / Modern Web Design

- ▶ Secure site with HTTPS
- ▶ Speaking links

Secure site with HTTPS

- ▶ More secure and gives users more confidence
- ▶ Small ranking boost with Google
- ▶ Free certificates with Let's Encrypt

Speaking Links I



Figure: No act on ACT

Speaking Links II

ACT <http://act.yapc.eu/ye2016/talk/6780>

PDC <https://www.perl.dance/talks/40-no-act-on-act>

Administration

- ▶ Users
- ▶ Talks
- ▶ Tickets
- ▶ Events
- ▶ News

Navigation

PERLDANCER 2016

TALKS ▾ TICKETS WIKI USERS ▾ SPONSORS ▾ ADMIN ▾ MY ACCOUNT ▾

Name	Type	Scope	URI	Description	Alias	Priority	Active	Edit	Delete	Child
▼ Admin	nav	menu-admin	admin	Administration		0	Yes	✎	✖	+
Navigation	nav		admin/navigation	Navigation Administration		0	Yes	✎	✖	+
Talks	nav		admin/talks	Talks Administration		0	Yes	✎	✖	+
Users	nav		admin/users	User Administration		0	Yes	✎	✖	+
T-shirts required	nav	menu-admin	admin/t-shirts			0	Yes	✎	✖	+
Events	nav	menu-admin	admin/events	Event Admin		0	Yes	✎	✖	+
Products Sold	nav	menu-admin	admin/products			0	Yes	✎	✖	+
▼ News	nav		admin/news	News Administration		0	Yes	✎	✖	+
Talks	nav	menu-main	talks	List of talks		60	Yes	✎	✖	+
Talks	nav		talks			100	Yes	✎	✖	+
Submit a talk proposal	nav		talks/submit			90	Yes	✎	✖	+
Favourite Talks	nav		talks/favourite			80	Yes	✎	✖	+
Talks Schedule	nav		talks/schedule			70	Yes	✎	✖	+
Personal Schedule	nav	menu-main	myschedule	Meet Our Speakers!		68	Yes	✎	✖	+
Speakers	nav		speakers			65	Yes	✎	✖	+
iCal export	nav		talks/timetable.ics			60	No	✎	✖	+
2015 Talks Archive	nav	menu-main	talks/archive/2015	Perl-Dancer Conference 2015 Talks Archive		30	Yes	✎	✖	+
Tickets	nav	menu-main	tickets	Get Your Seat Before It's Too Late		40	Yes	✎	✖	+
Wiki	nav	menu-main	wiki	Wiki		30	Yes	✎	✖	+
▼ Users	nav	menu-main	users	Users		25	Yes	✎	✖	+
Map	nav		users	User Map		100	Yes	✎	✖	+
Search	nav		users/search	User Search		80	Yes	✎	✖	+
Statistics	nav		users/statistics	User Statistics		60	Yes	✎	✖	+
▼ Sponsors	nav	menu-main	sponsors	Sponsors		20	Yes	✎	✖	+
▼ Our Sponsors	nav		sponsors			100	Yes	✎	✖	+
Diamond Sponsor			sponsors/diamond			50	Yes	✎	✖	+
Gold Sponsor			sponsors/gold			40	Yes	✎	✖	+
Silver Sponsor			sponsors/silver			30	Yes	✎	✖	+
Bronze Sponsor			sponsors/bronze			20	Yes	✎	✖	+
Sponsoring	nav		sponsoring	Become a Sponsor!		80	Yes	✎	✖	+
▼ Login	nav	top-login	login	Login or Register		10	Yes	✎	✖	+
Login	nav		login			100	Yes	✎	✖	+
Register for Conference	nav		register			80	No	✎	✖	+
Reset Password	nav		reset_password			70	Yes	✎	✖	+

Dancer2::Debugger

Dancer2::Debugger

- ▶ Result and response
- ▶ Log entries
- ▶ Session
- ▶ Template variables
- ▶ Timers
- ▶ DBIx::Class query log
- ▶ ... more

Log Entries

AJAX Requests	
Dancer2::Logger	1
Dancer2::Session	
Dancer2::TemplateTimer	
0.517985	
Dancer2::TemplateVariables	
DBIC::QueryLog	
Total Time: 0.017228	
Memory Usage	
249,336 KB	
Request Parameters	
Plack Request	
Plack Response	1
Status: 200 OK	
Timer	
1.432615	
Warnings	

DBIx::Class Query Log

```
0.0027869 9.72% SELECT "me"."users_id", "me"."username", "me"."nickname", "me"."email", "me"."password", "me"."first_name", "me"."last_name", "me"."last_login", "me"."fail_count", "me"."reset_expires",
"me"."reset_token", "me"."is_anonymous", "me"."created", "me"."last_modified", "me"."active", "me"."bio", "me"."media_id", "me"."monger_groups", "me"."pause_id", "me"."guru_level", "me"."t_shirt_size",
"addresses"."addresses_id", "addresses"."users_id", "addresses"."type", "addresses"."archived", "addresses"."first_name", "addresses"."last_name", "addresses"."company", "addresses"."address",
"addresses"."address_2", "addresses"."postal_code", "addresses"."city", "addresses"."phone", "addresses"."states_id", "addresses"."country_iso_code", "addresses"."priority", "addresses"."created",
"addresses"."last_modified", "addresses"."latitude", "addresses"."longitude", "country"."country_iso_code", "country"."scope", "country"."name", "country"."priority", "country"."show_states", "country"."active",
"photo"."media_id", "photo"."file", "photo"."uri", "photo"."mime_type", "photo"."label", "photo"."author_users_id", "photo"."created", "photo"."last_modified", "photo"."active", "photo"."media_types_id",
"photo"."priority"
FROM "users" "me"
LEFT JOIN "conference_attendees"."conferences_attended"
ON "conferences_attended"."users_id" = "me"."users_id"
LEFT JOIN "addresses"."addresses"
ON "addresses"."users_id" = "me"."users_id"
LEFT JOIN "countries"."country"
ON "country"."country_iso_code" = "addresses"."country_iso_code"
LEFT JOIN "medias"."photo"
ON "photo"."media_id" = "me"."media_id"
WHERE "me"."users_id" = 86
ORDER BY "me"."users_id"
```

DBIx::Class Techniques

- ▶ Set Based DBIx::Class

<http://www.perladvent.org/2012/2012-12-21.html>

- ▶ Truth of ResultSet
- ▶ Chaining
- ▶ Relationship traversal
- ▶ Predefined searches

- ▶ Hashref Inflation

Truth of ResultSet

This doesn't execute SQL:

```
my $talks = $schema->resultset('Talk')->search(...);
```

This does:

```
my $first_talk = $schema->resultset('Talk')  
                  ->search(...)->first;
```

Chaining

```
my $talks = $schema->resultset('Talk')
  ->search({-bool          => 'accepted'})
  ->search({conferences_id => 1})
  ->search({room           => { '!=' => '' }},
  ->search({start_time     => {
    '>=' => '2015-10-22 00:00:00'
    '<=' => '2015-10-23 00:00:00'
  }}),
);
```


Relationship Traversal

```
# countries dropdown
$tokens->{countries} = [
  $users->search_related(
    'addresses',
    {
      type => 'primary',
    },
  )->search_related(
    'country', undef,
    {
      columns => [ 'country_iso_code', 'name' ],
      distinct => 1,
      order_by => 'country.name',
    }
  )->hri->all
];
```

Hashref Inflator

```
# countries dropdown
$tokens->{countries} = [
    rset('Country')->search( undef,
        { columns => [ 'country_iso_code', 'name' ],
          order_by => 'name' } )
    ->hri->all
];
unshift @{ $tokens->{countries} },
    { country_iso_code => undef, name => "Select Country" };
```

Predefined Searches

User class:

```
sub last_conference_attended {  
    my $self = shift;  
    my $conference = $self->conferences->search({}, {  
        order_by => { -desc => 'start_date' },  
    })->first;  
}
```

Web application:

```
my $conference = $user->last_conference_attended;  
  
;
```

Dancer2

- ▶ Code structure
- ▶ Hooks
- ▶ Plugins
- ▶ Plack::Middleware

Code Structure

- ▶ Main module
- ▶ Multiple modules for routes

Main Module

```
use Dancer2;

use PerlDance::Routes::Account;
use PerlDance::Routes::Admin;
use PerlDance::Routes::Data;
use PerlDance::Routes::PayPal;
use PerlDance::Routes::Profile;
use PerlDance::Routes::Survey;
use PerlDance::Routes::Talk;
use PerlDance::Routes::User;
use PerlDance::Routes::Wiki;
```

Route module I

```
use Dancer2 appname => 'PerlDance';

use Dancer2::Plugin::Auth::Extensible;
use Dancer2::Plugin::DataTransposeValidator;
use Dancer2::Plugin::DBIC;
use Dancer2::Plugin::Email;
use Dancer2::Plugin::Deferred;
use Dancer2::Plugin::Interchange6;
use Dancer2::Plugin::TemplateFlute;

prefix '/profile';
```

Route module II

```
get '/talk/create' => sub {  
  my $tokens = {  
    title => "New Talk",  
  };  
  
  $tokens->{form} = form('create-update-talk');  
  $tokens->{form}->reset;  
  $tokens->{form}->fill( duration => 40 );  
  
  add_durations_token($tokens);  
  
  template 'profile/create_update_talk', $tokens;  
};
```


Hooks used

```
hook 'before_template_render' => sub {  
  my $tokens = shift;  
  
  if ( my $user = logged_in_user ) {  
    $tokens->{logged_in_user} = schema->current_user;  
  }  
  
  $tokens->{conference_name} = setting('conference_name');  
};
```

Plugins used

Dancer2::Plugin::Auth::Extensible User Authentication

Dancer2::Plugin::DataTransposeValidator Form validation

Dancer2::Plugin::DBIC DBIx::Class Wrapper

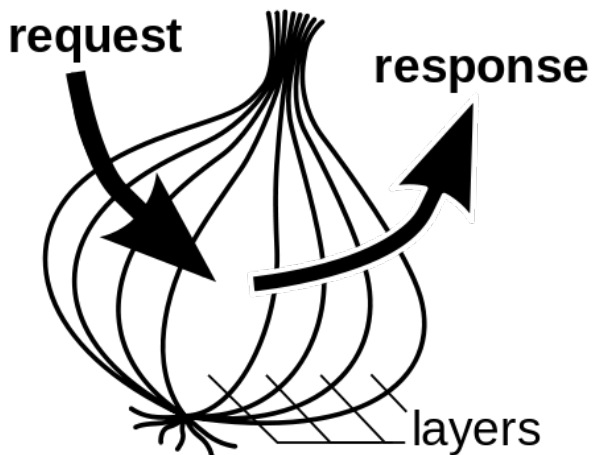
Dancer2::Plugin::Deferred Flash messages after redirect

Dancer2::Plugin::Email Sending emails

Dancer2::Plugin::Interchange6 Cart and other business functions

Dancer2::Plugin::TemplateFlute Form handling

Plack Middleware



Joy of PSGI middleware

xsrftoken

Plack::Middleware::XSRFBlock

```
# bin/app.psgi
```

```
use Plack::Builder;
```

```
use PerlDance;
```

```
my $app = PerlDance->to_app;
```

```
builder {
```

```
    enable 'Session';
```

```
    enable 'XSRFBlock',
```

```
        cookie_name      => 'Perldance-XSRF-Token',
```

```
        meta_tag         => 'xsrftoken',
```

```
        cookie_options => { httponly => 1, };
```

```
    enable 'XForwardedFor',
```

```
        trust => [qw( 127.0.0.1 10.0.0.0/8 172.16.0.0/20 192
```

```
    $app;
```

```
}
```

Summary

- ▶ Modern Perl
- ▶ Missing features
- ▶ Perl Dancer Conference 2016
- ▶ Call for developers
- ▶ Ask questions

Missing features

- ▶ Multilingual GH #8
- ▶ Drag and drop schedule tool
- ▶ Multisite
- ▶ Multiple speakers GH #104

Perl Dancer Conference 2016

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Call for developers

`https://github.com/interchange/Perl-Dancer-Conference`

Questions

Questions?