

An introduction to the **Dancer** web framework

Oliver Gorwits
miltonkeynes.pm

What is Dancer

- Based on Ruby's Sinatra framework
- Plenty of other talks given already
- “Simple, effortless, minimalist”
- Yes, ~10 simple dependencies
- D2 will be based on Moo

DSL

- “A DSL for quickly creating web applications”
- Imports a ton of keywords/functions
- E.g. headers/params/request/status/...
- No god-object like Catalyst
- Plugins for Database/Template/etc support

Example (1)

```
use Dancer;  
get '/' => sub {  
    return 'Hello world!';  
};  
start;
```

Example (2)

```
get '/' => sub {  
  my $db = connect_db();  
  my $sql = 'select id, title, text from entries';  
  my $sth = $db->prepare($sql) or die $db->errstr;  
  $sth->execute or die $sth->errstr;  
  template 'show_entries.tt', {  
    'msg' => get_flash(),  
    'add_entry_url' => uri_for('/add'),  
    'entries' => $sth->fetchall_hashref('id'),  
  };  
};
```

Example (3)

```
get '/logout' => sub {  
  session->destroy;  
  redirect '/';  
};
```

Create new app

```
$ dancer -a Myweb::App
+ Myweb-App
+ Myweb-App/bin/app.pl
+ Myweb-App/config.yml
+ Myweb-App/environments
+ Myweb-App/environments/development.yml
+ Myweb-App/environments/production.yml
+ Myweb-App/views/index.tt
+ Myweb-App/views/layouts
+ Myweb-App/views/layouts/main.tt
+ Myweb-App/lib/Myweb
+ Myweb-App/lib/Myweb/App.pm
+ Myweb-App/public/css/style.css
+ Myweb-App/public/css/error.css
+ Myweb-App/public/images
+ Myweb-App/public/javascripts
+ Myweb-App/public/javascripts/jquery.js
```

PSGI Friendly

```
$ dancer -a Myweb::App
+ Myweb-App
+ Myweb-App/bin/app.pl
+ Myweb-App/config.yml
+ Myweb-App/environments
+ Myweb-App/environments/development.yml
+ Myweb-App/environments/production.yml
+ Myweb-App/views/index.tt
+ Myweb-App/views/layouts
+ Myweb-App/views/layouts/main.tt
+ Myweb-App/lib/Myweb
+ Myweb-App/lib/Myweb/App.pm
+ Myweb-App/public/css/style.css
+ Myweb-App/public/css/error.css
+ Myweb-App/public/images
+ Myweb-App/public/javascripts
+ Myweb-App/public/javascripts/jquery.js
```


YAML Configuration

```
$ dancer -a Myweb::App
+ Myweb-App
+ Myweb-App/bin/app.pl
+ Myweb-App/config.yml
+ Myweb-App/environments
+ Myweb-App/environments/development.yml
+ Myweb-App/environments/production.yml
+ Myweb-App/views/index.tt
+ Myweb-App/views/layouts
+ Myweb-App/views/layouts/main.tt
+ Myweb-App/lib/Myweb
+ Myweb-App/lib/Myweb/App.pm
+ Myweb-App/public/css/style.css
+ Myweb-App/public/css/error.css
+ Myweb-App/public/images
+ Myweb-App/public/javascripts
+ Myweb-App/public/javascripts/jquery.js
```

Environments

```
$ dancer -a Myweb::App
+ Myweb-App
+ Myweb-App/bin/app.pl
+ Myweb-App/config.yml
+ Myweb-App/environments
+ Myweb-App/environments/development.yml
+ Myweb-App/environments/production.yml
+ Myweb-App/views/index.tt
+ Myweb-App/views/layouts
+ Myweb-App/views/layouts/main.tt
+ Myweb-App/lib/Myweb
+ Myweb-App/lib/Myweb/App.pm
+ Myweb-App/public/css/style.css
+ Myweb-App/public/css/error.css
+ Myweb-App/public/images
+ Myweb-App/public/javascripts
+ Myweb-App/public/javascripts/jquery.js
```

Environments

- Separate configurations for
 - Production
 - Development
- Can also manipulate config from within App
- Select env via command line switch

Views

```
$ dancer -a Myweb::App
+ Myweb-App
+ Myweb-App/bin/app.pl
+ Myweb-App/config.yml
+ Myweb-App/environments
+ Myweb-App/environments/development.yml
+ Myweb-App/environments/production.yml
+ Myweb-App/views/index.tt
+ Myweb-App/views/layouts
+ Myweb-App/views/layouts/main.tt
+ Myweb-App/lib/Myweb
+ Myweb-App/lib/Myweb/App.pm
+ Myweb-App/public/css/style.css
+ Myweb-App/public/css/error.css
+ Myweb-App/public/images
+ Myweb-App/public/javascripts
+ Myweb-App/public/javascripts/jquery.js
```

Views

- Basic templating system included
- Or switch to Template::Toolkit
- The TT Plugin sets up accessors for app config, HTTP params, TT stash variables

View Example

```
get '/' => sub {  
  my $db = connect_db();  
  my $sql = 'select id, title, text from entries';  
  my $sth = $db->prepare($sql) or die $db->errstr;  
  $sth->execute or die $sth->errstr;  
  template 'show_entries.tt', {  
    'msg' => get_flash(),  
    'add_entry_url' => uri_for('/add'),  
    'entries' => $sth->fetchall_hashref('id'),  
  };  
};
```

Static Content

```
$ dancer -a Myweb::App
+ Myweb-App
+ Myweb-App/bin/app.pl
+ Myweb-App/config.yml
+ Myweb-App/environments
+ Myweb-App/environments/development.yml
+ Myweb-App/environments/production.yml
+ Myweb-App/views/index.tt
+ Myweb-App/views/layouts
+ Myweb-App/views/layouts/main.tt
+ Myweb-App/lib/Myweb
+ Myweb-App/lib/Myweb/App.pm
+ Myweb-App/public/css/style.css
+ Myweb-App/public/css/error.css
+ Myweb-App/public/images
+ Myweb-App/public/javascripts
+ Myweb-App/public/javascripts/jquery.js
```

Static Content

- Can be placed in .../static
- Javascript
- CSS
- Images

Referencing Static Content

```
get '/page' => sub {  
  # some code...  
  template 'show_entries.tt', {  
    'logo' => uri_for('/static/images/logo.png'),  
  };  
};
```

MyWeb::App

```
$ dancer -a Myweb::App
+ Myweb-App
+ Myweb-App/bin/app.pl
+ Myweb-App/config.yml
+ Myweb-App/environments
+ Myweb-App/environments/development.yml
+ Myweb-App/environments/production.yml
+ Myweb-App/views/index.tt
+ Myweb-App/views/layouts
+ Myweb-App/views/layouts/main.tt
+ Myweb-App/lib/Myweb
+ Myweb-App/lib/Myweb/App.pm
+ Myweb-App/public/css/style.css
+ Myweb-App/public/css/error.css
+ Myweb-App/public/images
+ Myweb-App/public/javascripts
+ Myweb-App/public/javascripts/jquery.js
```

MyWeb::App

```
use Dancer;  
use MyWeb::App::MoreHandlers;  
  
get '/' => sub {  
    return 'Hello world!';  
};  
  
start;
```

AJAX

```
package MyWebApp;
```

```
use Dancer;
```

```
use Dancer::Plugin::Ajax;
```

```
ajax '/check_for_update' => sub {
```

```
    # ... some Ajax code
```

```
};
```

```
start;
```

My Opinion

- A refreshing change from Catalyst
- Python-like “Batteries Included”
- Quickly forgot I was using it and became focussed on the application logic and templates
- Thumbs –up!

Thanks!

Q&A?