

# CakePhp

## Desenvolvimento Web Rápido (e Indolor)

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# Roteiro

- A idéia de um Framework
- O que é o CakePHP?
- A estrutura dos diretórios
  - Model – View – Control
  - Componentes, Plugins, Vendors e Helpers
- Bake
- Aplicação Rápida
- Referências

# A idéia de um Framework

- Arquitetura pré-definida
- Classes e bibliotecas auxiliares
- Estrutura de diretórios
- Códigos re-usáveis
- Deve ser fácil de usar, extensível, seguro!

# Por que usar um Framework?

- Agilidade no processo de desenvolvimento
- Aplicações mais estáveis
- Organização no código e nos arquivos
- Comandos SQL esquecidos por um tempo
- Foco na lógica de negócio
- Designer e programador trabalhando em paralelo

# O que é CakePHP

- Framework feito em PHP!
- Baseado no Ruby on Rails
  - MVC (Model – View – Control)
  - Active Record – Mapeamento ER - OO
  - Active Support – Bibliotecas base
  - Convenção e não Configuração
  - Scaffolding
- Atualmente
  - Stable 1.1.19.6305
  - RC 1.2.0.7296 RC2, inclusive no repositório do Debian

# Quem está usando hoje?

- Twinbler - <http://twimbler.com/>
- MapMe - [www.mapme.com](http://www.mapme.com)
- NoseRub - [www.noserub.com](http://www.noserub.com)
- aCoruja - [www.acoruja.com](http://www.acoruja.com)
- Scratch - <http://scratch.mit.edu>
- Mambo 5 CMS - [www.mamboserver.com](http://www.mamboserver.com)
- [www.eberfdias.com](http://www.eberfdias.com)
- Mozilla Addons - <https://addons.mozilla.org/pt-BR/firefox/>

Sistema que se porta como um protocolo de redes sociais descentralizadas

Scratch é uma nova linguagem de programação que torna fácil para você criar suas próprias histórias interativas, animações, jogos, música, e arte - e também compartilhar suas criações na internet.

# Configuração

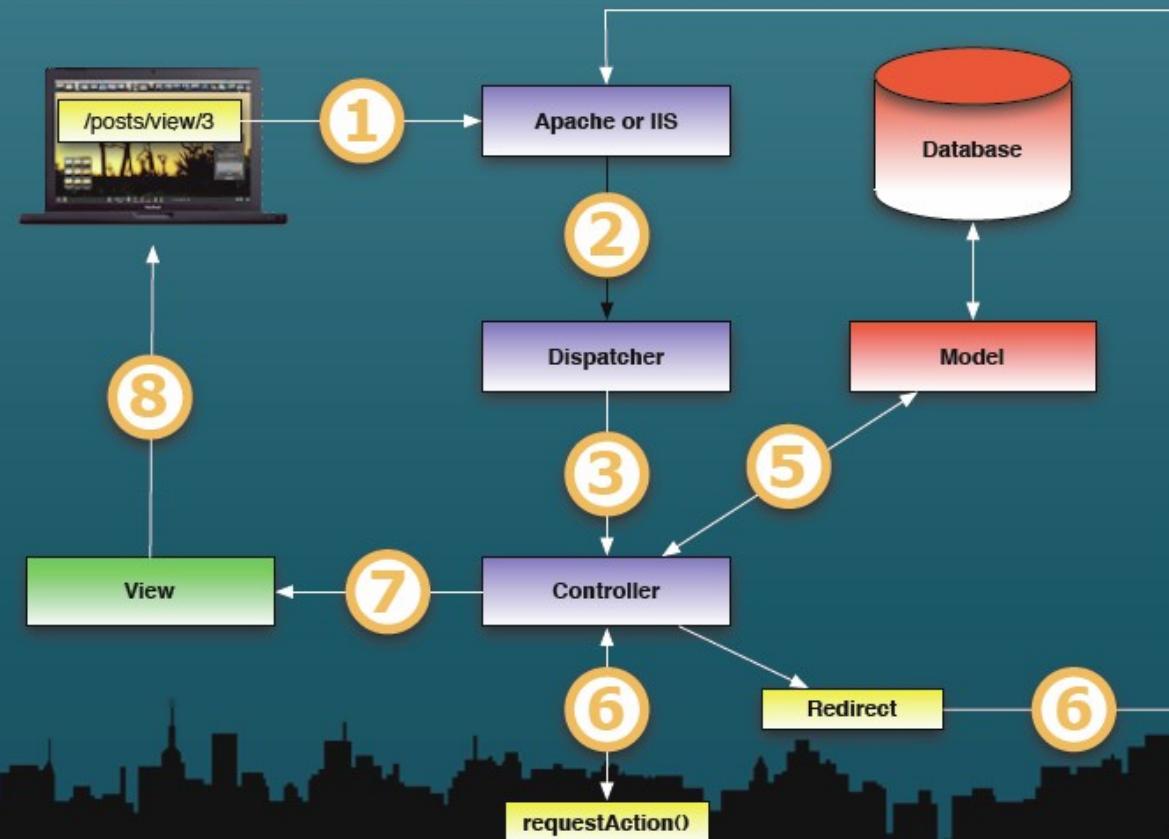
- Mod Rewrite (/etc/apache/apache.conf)
- AllowOverride All(/etc/apache/sites-enable/000-default)
- ex.: localhost/cake/**meucontroller**/**minhaaction**/**1**/**teste**
  - Controller
  - Action
  - Parâmetros

# Estrutura dos Diretórios

- app
  - config
  - **controllers**
  - **models**
  - plugins
  - temp
  - vendors
  - **views**
  - webroot
- cake
- docs
- vendors
- views
  - elements
  - errors
  - helpers
  - layouts
  - pages
- webroot
  - css
  - files
  - img
  - js

# Model-View-Controller

## Request/Response



# Model-Control-View

- A primeira interface lógica da aplicação
- Validação dos dados
- Requisições ao banco de dados
- Salvar arquivo:
  - RAIZ/app/models/exemplo.php
- Por padrão procura a tabela no banco
  - a tabela exemplos

# Model-Control-View

```
<?php  
    class Evento extends AppModel{  
        var $name = 'Evento';  
        var $validate = array(  
            'id' => VALID_NOT_EMPTY,  
            'nome' => '/^.{10,64}$/',  
        );  
    }  
?>
```

# Model-Control-View

- Regras de negócio
- Geralmente requisitamos o banco nos controllers
- Pode ou não ser correlacionado com um Model
- Objetos do Model já estão criados
- Salvar arquivo:
  - RAIZ/app/controllers/exemplos\_controller.php
- Por padrão procura o Model:
  - exemplo.php com a classe Exemplo

```
<?php  
class EventosController extends AppController{  
    var $name = 'EventosController';  
    function verEvento($id){  
        if(!empty($id)){  
            this->set('eventos',findById($id));  
            ...  
        }  
    }  
?>
```

Cada Action ou Função pode ter uma View!



- A interface com o usuário
- Fornece uma maneira de visualizar os dados
- Não é recomendável processar dados nas views
- Podemos ter várias saídas: HTML, PDF, AJAX, XML...
- requisitando: localhost/cake/eventos/verEvento/1  
o arquivo de visualização a ser respondido seria:  
RAIZ/app/views/eventos/ver\_evento.html (.ctp)

# Model-Control-View

```
<h2>Evento <?php echo $eventos['0']['Evento']['id']; ?></h2>

<p>
<?php foreach ($eventos as $evento):
    echo ($evento['Evento']['nome']);
endforeach; ?>
</p>
```

# Estrutura dos Diretórios

- app
  - config
  - controllers
    - **components**
  - models
  - **plugins**
  - temp
  - vendors
  - views
  - webroot
- cake
- docs
- **vendors**
- views
  - elements
  - errors
  - **helpers**
  - layouts
  - pages
- webroot
  - css
  - files
  - img
  - js

# Componentes e Plugins

- Componentes são partes que compõem um conjunto
- Um pedaço de código re-usável
- Tem comportamento esperado
- Sessions, Cookies, Email, ACL (Access Control List), RSS (Feed Articles)

# Componentes e Plugins

- Plugins são adicionados para realizar uma tarefa não nativa
- Comportamento não é predefinido
- PhpGacl, Jquery, Tablesorter...

Name	Major	Gender
Student01	Languages	male
Student02	Mathematics	male
Student03	Languages	female

# Helpers e Vendors

- Helpers são classes que tem funções que são comumente necessários para formatar e apresentar os dados de forma útil.
- São definidos nos controllers e usados nas views
- `$helpers = ('Html','Form','Ajax','Javascript');` (controller)
- `<?php echo $html->submit('Adicionar') ?>` (view)

# Helpers e Vendors

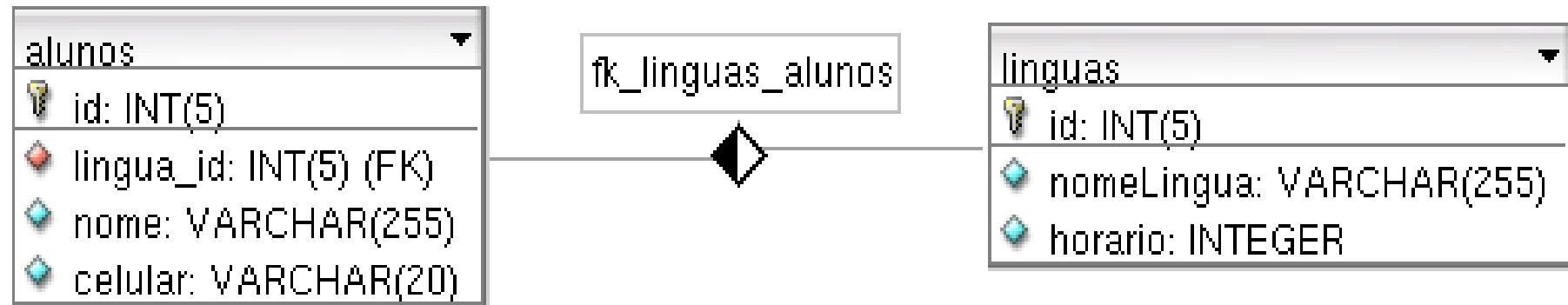
- Vendors são as bibliotecas externas encontradas no diretório /vendor.
- Pode ser tanto para controllers ou views.
- Fornecer o nome do arquivo sem a extensão '.php'
- vendor ('jpgraph/jpgraph\_line');
- vendor ('alisson.h');

# Bake

- Script para criação automática de arquivos entre configuração, models, controllers, views e até a base de uma nova aplicação
- Indicado quando já se tenha uma familiaridade com o CakePhp!
- encontra-se no diretório RAIZ/cake/scripts/bake.php
- Inicialmente executado no Terminal

# Aplicação Simples

- Trabalhando e iniciando no CakePhp com os seus avisos.
- Utilizando o CakePhp Bake!



# Descompactando o Cake...

http://localhost/cake/

## CakePHP Rapid Development

Your database configuration file is not present.

**CakePHP release information is on CakeForge**

[Read the release notes and get the latest version](#)

### Editing this Page

To change the content of this page, create: /app/views/pages/home.html.  
To change its layout, create: /app/views/layouts/default.html.  
[See the views section of the manual for more info](#)  
You can also add some CSS styles for your pages at: app/webroot/css/.

### More about Cake

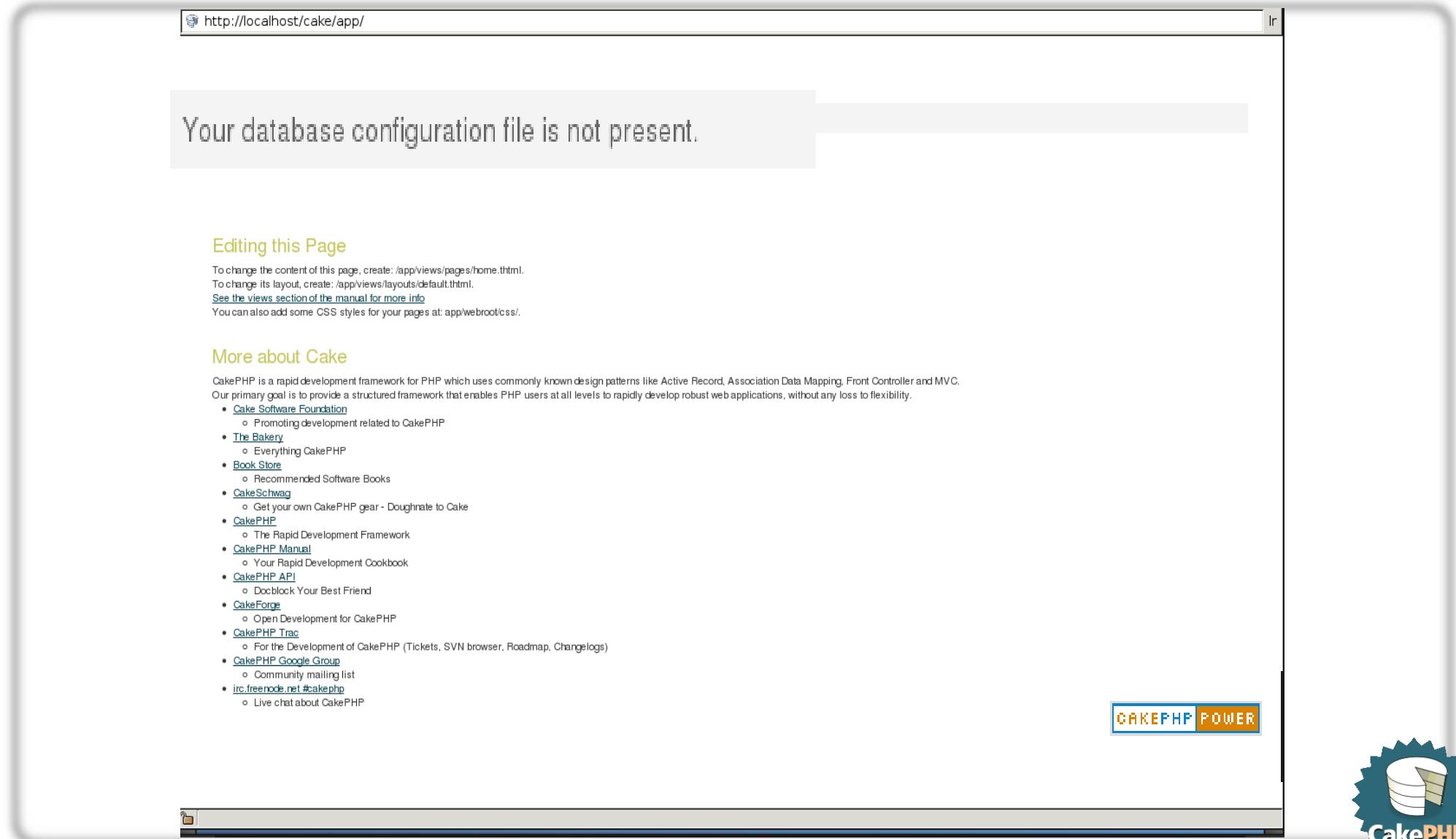
CakePHP is a rapid development framework for PHP which uses commonly known design patterns like Active Record, Association Data Mapping, Front Controller and MVC.  
Our primary goal is to provide a structured framework that enables PHP users at all levels to rapidly develop robust web applications, without any loss to flexibility.

- [Cake Software Foundation](#)
  - Promoting development related to CakePHP
- [The Bakery](#)
  - Everything CakePHP
- [Book Store](#)
  - Recommended Software Books
- [CakeSchwag](#)
  - Get your own CakePHP gear - Doughnate to Cake
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  - The Rapid Development Framework
- [CakePHP Manual](#)
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  - For the Development of CakePHP (Tickets, SVN browser, Roadmap, Changelogs)
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  - Community mailing list
- [irc.freenode.net #cakephp](#)
  - Live chat about CakePHP

[CakePHP\(tm\) : Rapid Development Framework](#)



# Module rewrite ativado...



The screenshot shows a web browser window with the URL <http://localhost/cake/app/> in the address bar. The main content area displays the following message:

Your database configuration file is not present.

**Editing this Page**

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To change its layout, create: /app/views/layouts/default.html.  
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**More about Cake**

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**CAKEPHP POWER**



# Configurando a conexão ao banco

```
class DATABASE_CONFIG
{
    var $default = array('driver' => 'mysql',
                         'connect' => 'mysql_connect',
                         'host' => 'localhost',
                         'login' => 'user',
                         'password' => 'password',
                         'database' => 'project_name',
                         'prefix' => "");

    var $test = array('driver' => 'mysql',
                      'connect' => 'mysql_connect',
                      'host' => 'localhost',
                      'login' => 'user',
                      'password' => 'password',
                      'database' => 'project_name-test',
                      'prefix' => "");

}
?>
```

Salvar como  
database.php no  
mesmo diretório  
RAIZ/app/config



# Depois de configurado

Your database configuration file is present.

Cake is able to connect to the database.

## Editing this Page

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# Criado /app/view/linguas

 http://localhost/palestra/linguas

CakePHP Rapid Development

Missing controller

You are seeing this error because controller *LinguasController* could not be found.

Notice: If you want to customize this error message, create app/views/errors/missing\_controller.thml.

Fatal: Create the class below in file : app/controllers/linguas\_controller.php

```
<?php
class LinguasController extends AppController {
    var $name = 'Linguas';
}
?>
```

Aplicação Do  
CRUD

```
<?php
class LinguasController
extends AppController {
    var $name = 'Linguas';
    var $scaffold;
}
?>
```

# Depois de criado o controle..

 <http://localhost/palestra/linguas>

CakePHP Rapid Development

Missing Model

**No class found for the *Lingua* model**

**Notice:** If you want to customize this error message, create app/views/errors/missing\_model.thtml.

**Fatal:** Create the class below in file : app/models/lingua.php

```
<?php
class Lingua extends AppModel {
    var $name = 'Lingua';
}
?>
```

Adicionado  
\$validate

```
<?php
class Lingua extends AppModel {
    var $name = 'Lingua';
    var $validate = array(
        'id' => VALID_NOT_EMPTY,
        'nomeLingua' => VALID_NOT_EMPTY,
        'horario' => VALID_NOT_EMPTY,
    );
}
?>
```



- Tela inicial e Action ou função padrão

http://localhost/palestra/linguas

CakePHP Rapid Development

List Linguas

<b>Id</b>	<b>NomeLingua</b>	<b>Horario</b>	<b>Actions</b>
1	Portugues	15:13:00	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
2	Inglês	18:00:00	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>

• [New Lingua](#)



# Index(), Add(), Edit(\$id), Del(\$id), View(\$id)

http://localhost/palestra/linguas/add

CakePHP Rapid Development

Add Lingua

**Nome Lingua**

**Horario**  
 :

• [List Lingua](#)

CAKEPHP POWER

http://localhost/palestra/linguas

CakePHP Rapid Development

List Linguas

Id	NomeLingua	Horario	Actions
2	Inglês	18:00:00	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>

- [New Lingua](#)

**CAKEPHP POWER**

**1ª linha deletada a partir desta  
action**

http://localhost/palestra/linguas/view/2/

CakePHP Rapid Development

View Lingua

<b>Id</b>	2
<b>NomeLingua</b>	Inglês
<b>Horario</b>	18:00:00

- [Edit Lingua](#)
- [Delete Lingua](#)
- [List Lingua](#)
- [New Lingua](#)

[Save](#)

http://localhost/palestra/linguas/edit/2/

CakePHP Rapid Development

Edit Lingua

**NomeLingua**

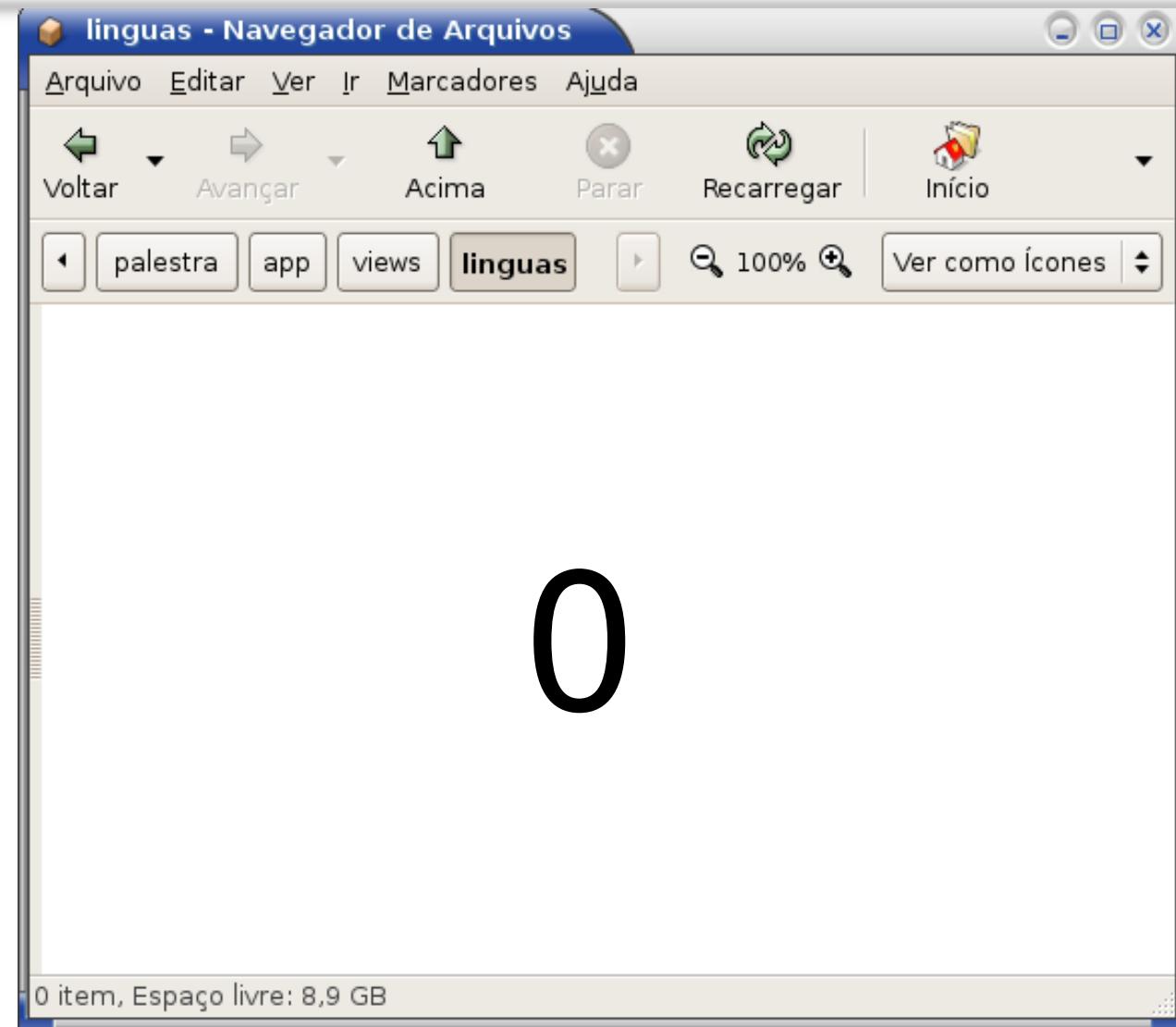
Inglês

**Horario**

18 00



# E sabe quantas views eu criei?



# Criando com CakePHP Bake

```
Terminal
desen4:/var/www/palestra/cake/scripts# ./bake.php

CAKEPHP BAKE
-----
Bake -app in /var/www/palestra/app (y/n)
[y] > y

Baking...
-----
Name: app
Path: /var/www/palestra/app
-----
[M]odel
[C]ontroller
[V]iew

What would you like to Bake? (M/V/C)
> M
-----
Model Bake:
-----
Possible Models based on your current database:
1. Aluno
2. Lingua

Enter a number from the list above, or type in the name of another model.
> 1
```

Se não encontrar o app, o bake pede para criar

# Criando o model Aluno

```
Terminal
Enter a number from the list above, or type in the name of another model.
> 1

Would you like to supply validation criteria for the fields in your model? (y/n)
[y] > y

Name: id
Type: integer
-----
Please select one of the following validation options:
-----
1- VALID_NOT_EMPTY
2- VALID_EMAIL
3- VALID_NUMBER
4- VALID_YEAR
5- Do not do any validation on this field.

... or enter in a valid regex validation string.

[5] >

Name: lingua_id
Type: float
-----
Please select one of the following validation options:
-----
1- VALID_NOT_EMPTY
2- VALID_EMAIL
3- VALID_NUMBER
4- VALID_YEAR
5- Do not do any validation on this field.

... or enter in a valid regex validation string.

[1] >
```

O bake  
perguntará  
um por um

# Determinando Associações

```
Would you like to define model associations (hasMany,hasOne,belongsTo,etc.)? (y/n)
[y] >
One moment while I try to detect any associations...
Done.

Please confirm the following associations:
```

```
Aluno belongsTo Lingua? (y/n)
[y] >
```

```
Would you like to define some additional model associations? (y/n)
[y] > n
```

```
The following model will be created:
```

```
Model Name: Aluno
DB Connection: default
DB Table: alunos
Validation: Array
(
    [lingua_id] => VALID_NOT_EMPTY
    [nome] => VALID_NOT_EMPTY
)
```

```
Associations:
    Aluno belongsTo Lingua
```

Percebam

Belongs To,  
Has One,  
Has Many,  
Has And Belongs To Many

```
Creating file /var/www/palestra/app/models/aluno.php
Wrote /var/www/palestra/app/models/aluno.php
```

```
Cake test suite not installed. Do you want to bake unit test files anyway? (y/n)
[y] > n
desen4:/var/www/palestra/cake/scripts#
```

# Resultado aluno.php

```
<?php
class Aluno extends AppModel {

    var $name = 'Aluno';
    var $validate = array(
        'lingua_id' => VALID_NOT_EMPTY,
        'nome' => VALID_NOT_EMPTY,
    );

    //The Associations below have been created with all possible keys, those that are not needed can be removed
    var $belongsTo = array(
        'Lingua' =>
            array('className' => 'Lingua',
                  'foreignKey' => 'lingua_id',
                  'conditions' => '',
                  'fields' => '',
                  'order' => '',
                  'counterCache' => ''
            ),
    );
}
?>
```

# Criando o Controller no Bake

```
Baking...
-----
Name: app
Path: /var/www/palestra/app
-----
[M]odel
[C]ontroller
[V]iew

What would you like to Bake? (M/V/C)
> C
-----
Controller Bake:
-----
Possible Controllers based on your current database:
1. Alunos
2. Lingua

Enter a number from the list above, or type in the name of another controller.
> 1

Would you like bake to build your controller interactively?
Warning: Choosing no will overwrite controller if it exist. (y/n)
[y] >

Would you like to use scaffolding? (y/n)
[y] > n

Would you like to include some basic class methods (index(), add(), view(), edit())? (y/n)
[n] > y
```



```
Would you like to create the methods for admin routing? (y/n)
[n] >

Would you like this controller to use other models besides 'Aluno'? (y/n)
[n] >

Would you like this controller to use other helpers besides HtmlHelper and FormHelper? (y/n)
[n] >

Would you like this controller to use any components? (y/n)
[n] >

Would you like to use Sessions? (y/n)
[y] >

-----
The following controller will be created:
-----
Controller Name:      Alunos
-----

Look okay? (y/n)
[y] >

Creating file /var/www/palestra/app/controllers/alunos_controller.php
Wrote /var/www/palestra/app/controllers/alunos_controller.php

Cake test suite not installed. Do you want to bake unit test files anyway? (y/n)
[y] > n
```

# Resultado aluno\_controller.php

```
<?php  
class AlunosController extends AppController {  
  
    var $name = 'Alunos';  
    var $helpers = array('Html', 'Form' );  
  
    function index() {  
        $this->Aluno->recursive = 0;  
        $this->set('alunos', $this->Aluno->findAll());  
    }  
  
    function view($id = null) {  
        if (!$id) {  
            $this->Session->setFlash('Invalid id for Aluno.');//  
            $this->redirect('/alunos/index');//  
        }  
        $this->set('aluno', $this->Aluno->read(null, $id));  
    }  
}
```

# Resultado aluno\_controller.php

```
function add() {
    if (empty($this->data)) {
        $this->set('linguas', $this->Aluno->Lingua->generateList());
        $this->render();
    } else {
        $this->cleanUpFields();
        if ($this->Aluno->save($this->data)) {
            $this->Session->setFlash('The Aluno has been saved');
            $this->redirect('/alunos/index');
        } else {
            $this->Session->setFlash('Please correct errors below.');
            $this->set('linguas', $this->Aluno->Lingua->generateList());
        }
    }
}
```

# Resultado aluno\_controller.php

```
function edit($id = null) {
    if (empty($this->data)) {
        if (!$id) {
            $this->Session->setFlash('Invalid id for Aluno');
            $this->redirect('/alunos/index');
        }
        $this->data = $this->Aluno->read(null, $id);
        $this->set('linguas', $this->Aluno->Lingua->generateList());
    } else {
        $this->cleanUpFields();
        if ($this->Aluno->save($this->data)) {
            $this->Session->setFlash('The Aluno has been saved');
            $this->redirect('/alunos/index');
        } else {
            $this->Session->setFlash('Please correct errors below.');
            $this->set('linguas', $this->Aluno->Lingua->generateList());
        }
    }
}
```

# Resultado aluno\_controller.php

```
function delete($id = null) {
    if (!$id) {
        $this->Session->setFlash('Invalid id for Aluno');
        $this->redirect('/alunos/index');
    }
    if ($this->Aluno->del($id)) {
        $this->Session->setFlash('The Aluno deleted: id '.$id.');
        $this->redirect('/alunos/index');
    }
}
?>
```

# Criando As Views Com o Bake

```
[M]odel
[C]ontroller
[V]iew

What would you like to Bake? (M/V/C)
> V
-----
View Bake:

Possible Controllers based on your current database:
1. Alunos
2. Linguas

Enter a number from the list above, or type in the name of another controller.
> 1

Would you like bake to build your views interactively?
Warning: Choosing no will overwrite  views if it exist. (y/n)
[y] >

Would you like to create some scaffolded views (index, add, view, edit) for this controller?
NOTE: Before doing so, you'll need to create your controller and model classes (including associated models). (y/n)
[n] > y

Would you like to create the views for admin routing? (y/n)
[n] > n

Warning: Invalid argument supplied for foreach() in /var/www/palestra/cake/scripts/bake.php on line 910

Creating file /var/www/palestra/app/views/alunos/index.thtml
Wrote/var/www/palestra/app/views/alunos/index.thtml

Creating file /var/www/palestra/app/views/alunos/view.thtml
Wrote/var/www/palestra/app/views/alunos/view.thtml

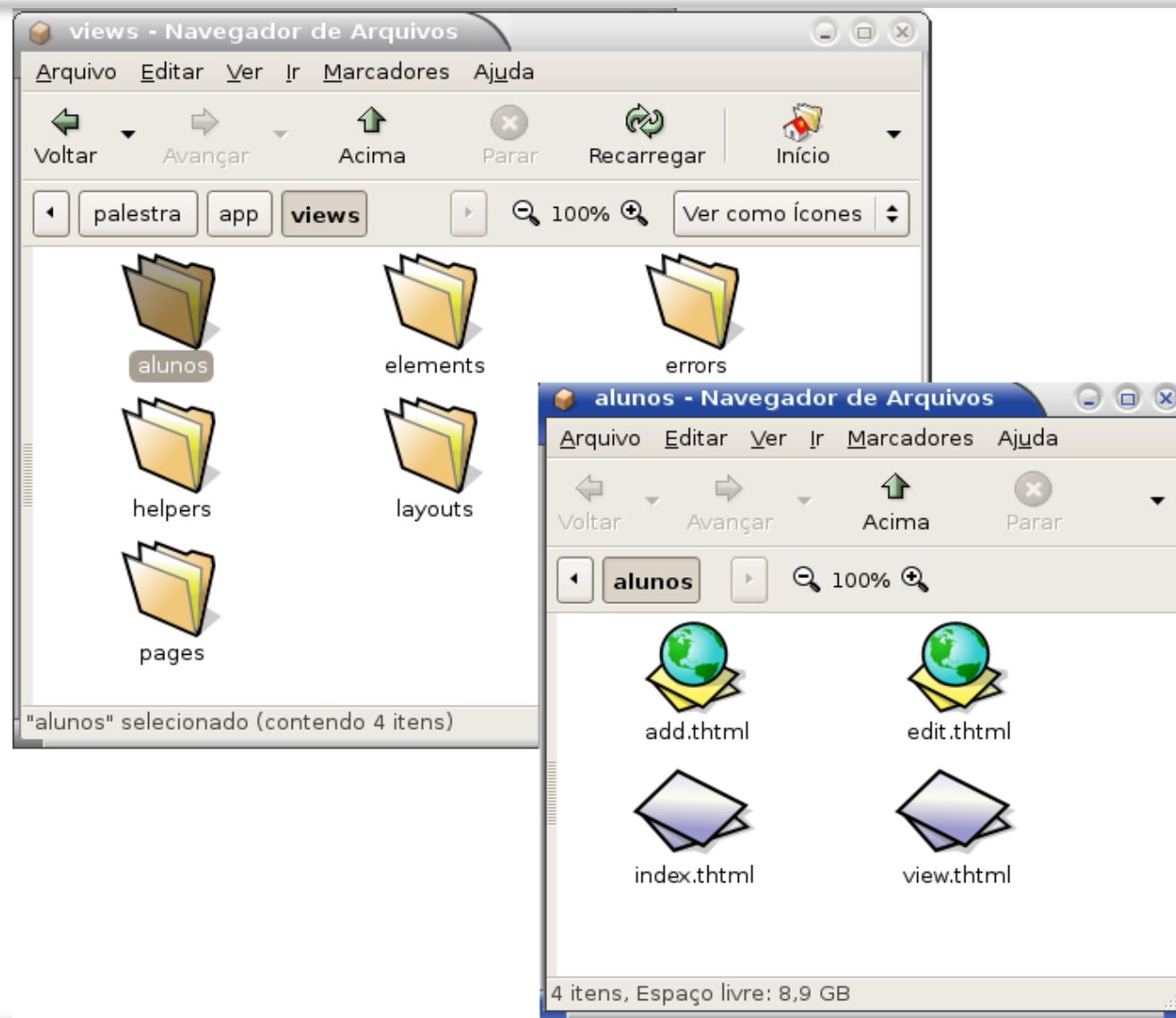
Creating file /var/www/palestra/app/views/alunos/add.thtml
Wrote/var/www/palestra/app/views/alunos/add.thtml

Creating file /var/www/palestra/app/views/alunos/edit.thtml
Wrote/var/www/palestra/app/views/alunos/edit.thtml
-----
View Scaffolding Complete.
```

Dessa vez escreveu  
quatro arquivos



# Dessa vez temos as views



# localhost/palestra/alunos/add

CakePHP Rapid Development

New Aluno

Língua

Nome

Celular

Add

- [List Alunos](#)
- [View Linquas](#)
- [Add Lingwas](#)

**Criado automaticamente  
por causa do tipo da  
associação**

**Por que alguns  
estão em  
negrito e  
'Celular' não?**

# Faturas Telefônicas

Faturas Telefônicas  
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# Perguntas ou mais perguntas

?

# Referências

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- [cakephp.com.br](http://cakephp.com.br)
- [wikipedia](http://wikipedia)
- [tuliofaria.net](http://tuliofaria.net)
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