Ruby on Rails

Webentwicklung von morgen?

Matthias Lüdtke, 11. Januar 2007

Wir bauen gleich eine Seite.

Ruby ist nur die Sprache.

- seit 1993 in Japan entwickelt

- beeinflusst von Perl, Lisp, Python, Smalltalk

- dynamisch typisiert

- objektorientiert
- objektorientiert
- objektorientiert

Die Syntax ist einfach.

```ruby
class Greeter

  def initialize(name = "World")
    @name = name
  end

  def say_hi
    puts "Hi #{@name}!"
  end

  def say_bye
    puts "Bye #{@name}, come back soon."
  end
end


g = Greeter.new "IEEE"
g.say_hi
g.say_bye
```

Alles ist ein Objekt.

Beweis per Beispiel

Rails ist das Framework.

- **Model-View-Controller** strikt umgesetzt

- viel Code in wenig Zeit durch

„Convention Over Configuration"

Wer benutzt Rails?

Große Seiten laufen auf Rails.

Deutsche Seiten laufen auf Rails.

Ein Stück Amazon läuft auf Rails.

Hype

Show, don't tell: Seeing is believing

Lean back and enjoy the shows, but be careful: Going back to your former treadmill after being exposed to these movies can prove exceedingly painful. Don't say we didn't try to warn you.

```
def create
  @post = Post.new(params[:post])
  if @post.save
    flash[:notice] = 'Post was successfully
    redirect_to :action => 'list'
  else
    render :action => 'new'
  end
end

def edit
  @post = Post.find(params[:id])
end

def update
  @post = Post.find(params[:id])
  if @post.update_attributes(params[:post])
```

[Creating a weblog in 15 minutes](#)

Creating a weblog in 15 minutes

In 15 minutes, we go from scratch to complete weblog engine: with comments and an administrative interface. But since the actual application only took 58 lines to complete, we also have time left over to do unit testing, examine the logs, and play around with the domain model.

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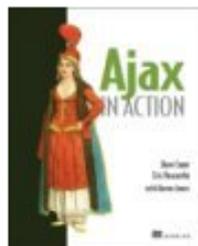
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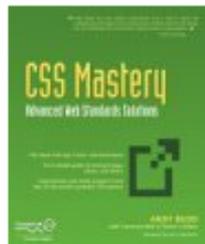
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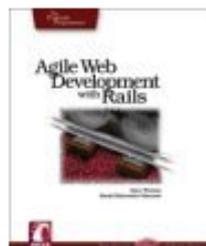
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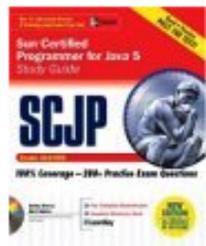
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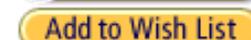
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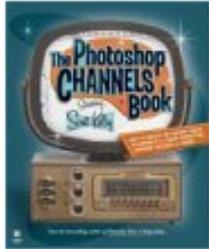
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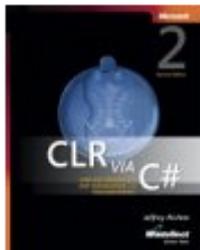
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Vorarbeit

Zuerst Ruby installieren.

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A self-contained installer that includes the Ruby language, dozens of popular extensions, a syntax-highlighting editor and the book "Programming Ruby: The Pragmatic Programmer's Guide". Platforms: Windows NT/2000/XP, (OS X in development).

- Development Status: 5 – Production/Stable
- Environment: Win32 (MS Windows)
- Intended Audience: Developers, End Users/Desktop
- License: OSI Approved, Ruby License
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- Operating System: Windows 95/98/2000, Windows NT/2000
- Programming Language: Ruby
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Developer Info

Project Admins:
Curt Hibbs
Andy Hunt

Developers:
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Danach Rails, Webserver und DB-Treiber.

```
gem install rails
gem install mongrel
gem install postgres-pr
```

DB designen und aufsetzen.

```
CREATE ...;
INSERT INTO ... VALUES(...);
INSERT INTO ... VALUES(...);
```

Controller steuert View und Model.

① Browser sends request
② Controller interacts with model
③ Controller invokes view
④ View renders next browser screen

Controller

View

Model

Database

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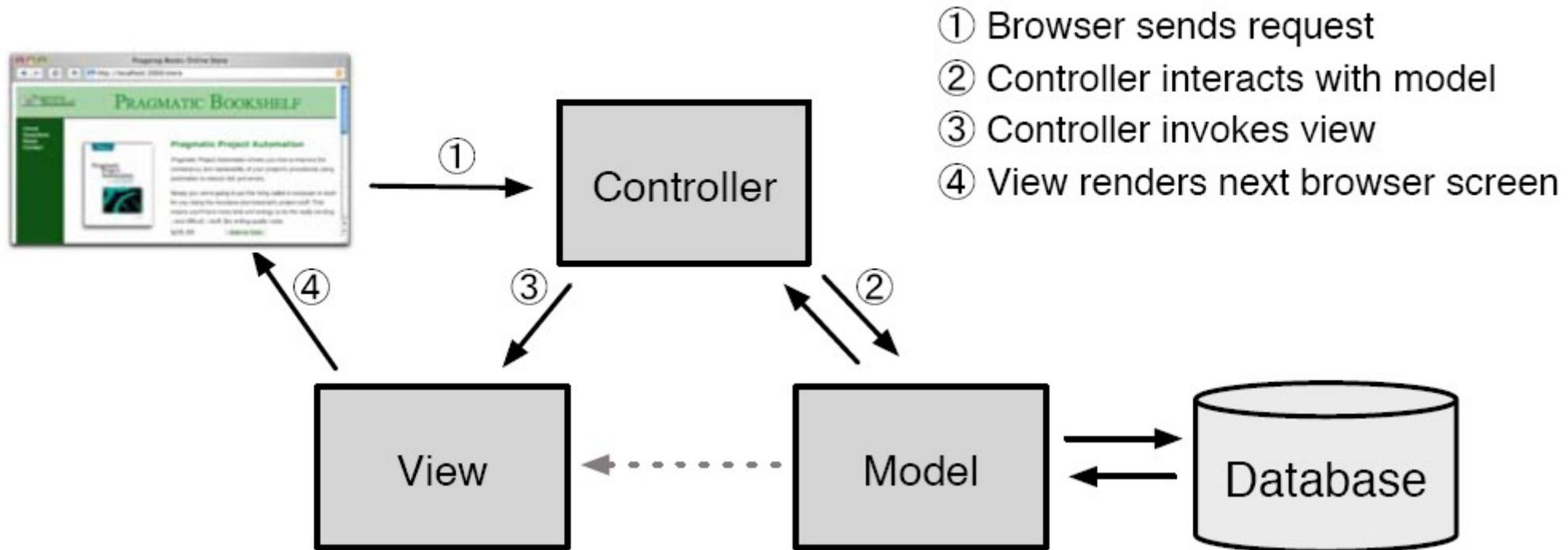
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Der Schlachtplan sieht so aus.

1. **Rails-Projekt** anlegen und konfigurieren.

2. **Eggdropper-Liste** anpassen

3. **Creator-Detailansicht** anpassen

4. **CSS-Datei** einbinden, Titel ändern

5. **Routes** für `/creators/show/Horst` und `/`

URLs werden gemapped auf Controller + Action.

```
http://pragprog.com/online/demo/say/hello
```

1. First part of URL identifies the application

2. Next part selects a controller (say)

3. Last part identifies the action to invoke

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Jeder Request erzeugt eigenen Controller.

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Rails hat viele M, V und C.

① http://my.url/store/add_to_cart/123
② Routing finds Store controller
③ Controller interacts with model
④ Controller invokes view
⑤ View renders next browser screen

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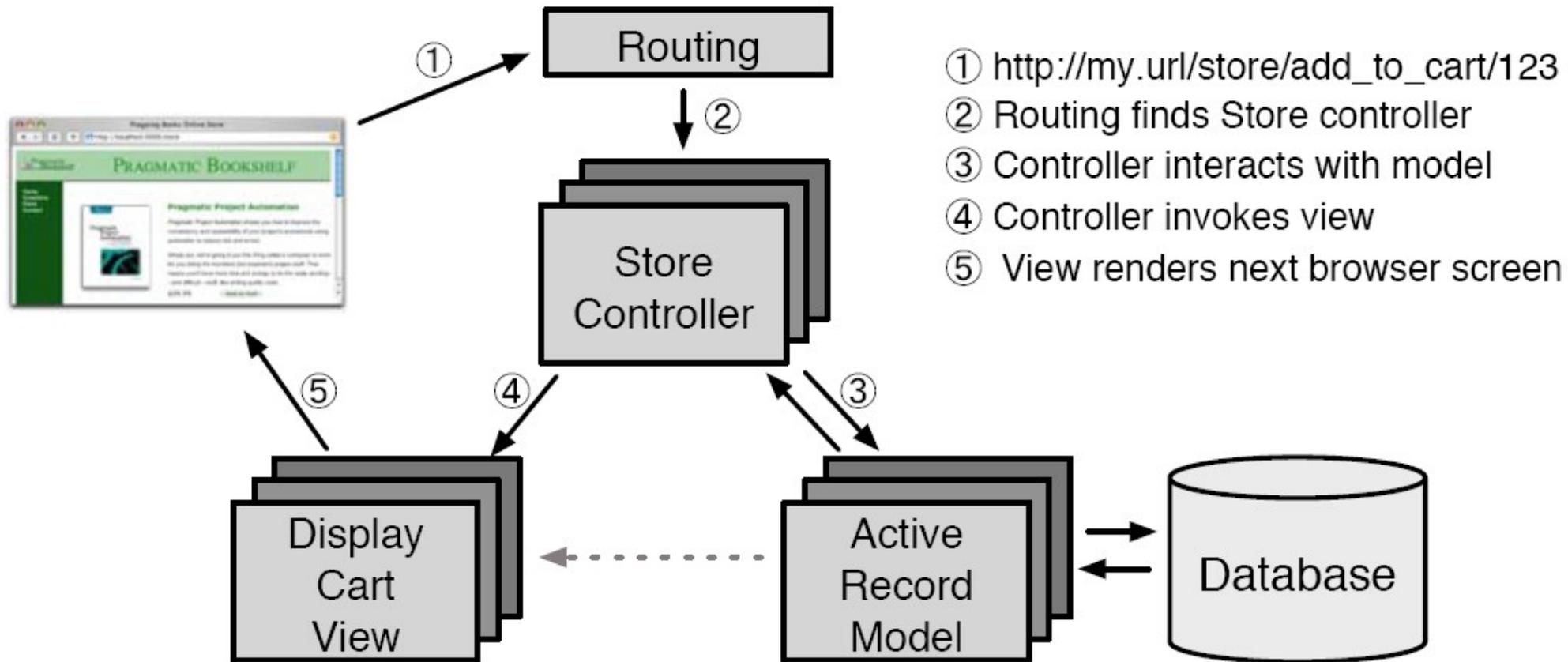
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Wir sahen nur die View des Eisbergs.

- Denn es warten noch

    – Ajax - out of the Box

    – Validations

    – Migrations

    – Testing

    – und noch mehr

Wir haben trotzdem einiges erlebt.

- Überlick Ruby & Ruby on Rails

- Wie bekannt ist Rails eigentlich?

- Website gebaut:

  - Rails-Projekt angelegt, Aufbau verstanden.
  - Scaffolds für die Entities per Script erstellt.
  - View nach eigenem Geschmack angepasst.
  - Eigene Routes definiert.

Heiß emfpohlen zu Ruby und Rails

Backup

Logical Model

Parent
Attributes
. . .

1
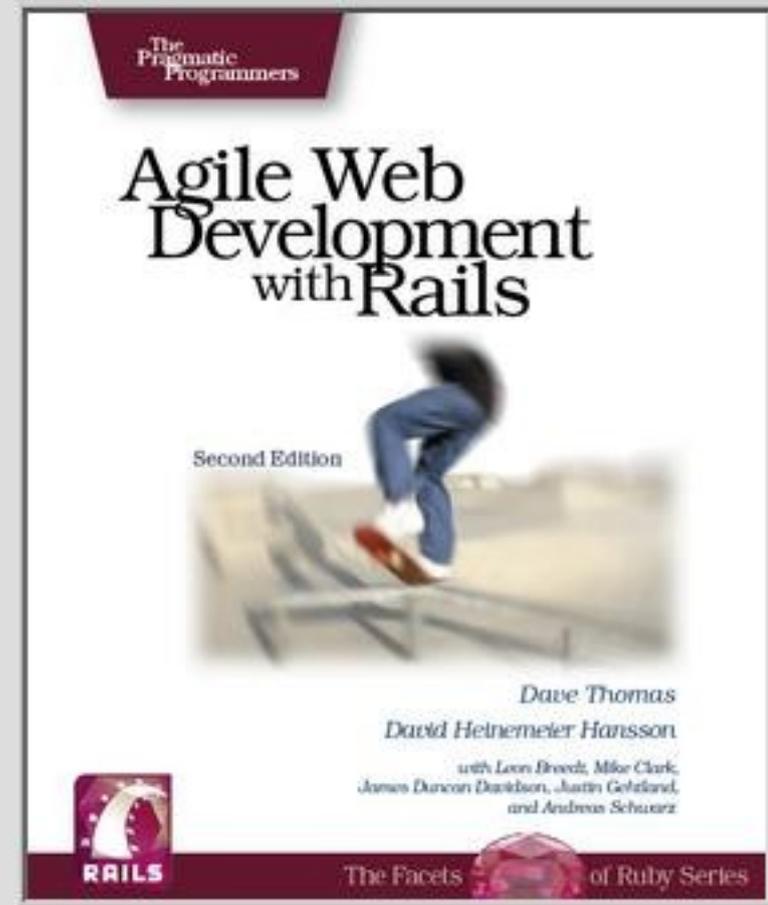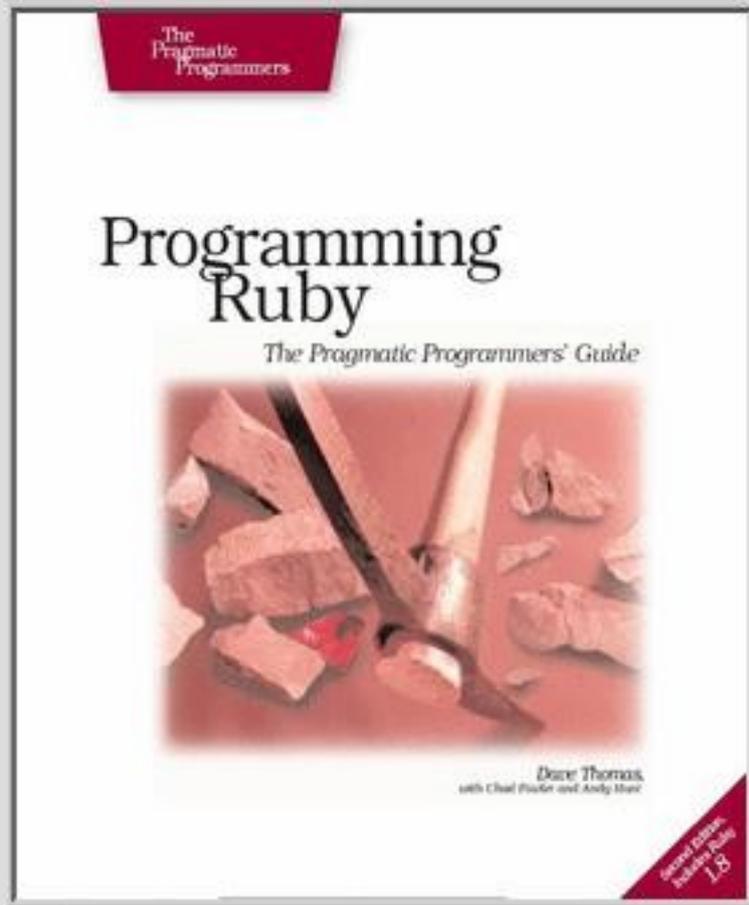
Child
Attributes
. . .

Database Schema

```
create table parents (
    id   int   primary key,
    . . .
);
```

```
create table children (
    id   int   primary key,
    parent_id int references parents(id),
    . . .
);
```
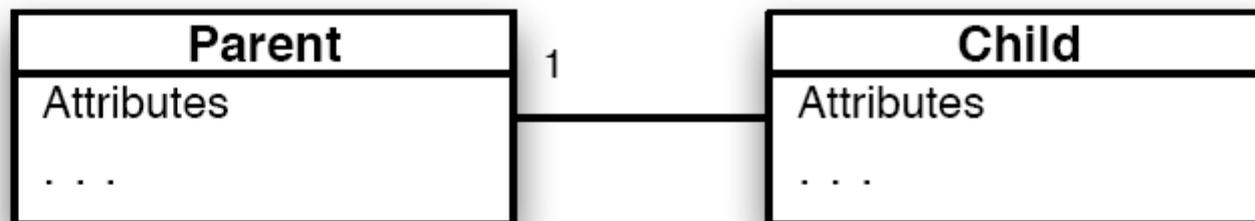
Rails Classes

```
class Parent < . . .
    . . .
end
```

```
class Child < . . .
    belongs_to :parent
end
```

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Convention over Configuration.

Model Naming	
Table	line_items
Class	LineItem
File	app/models/line_item.rb

Controller Naming	
URL	http://.../**store**/list
Class	StoreController
File	app/controllers/store_controller.rb
Method	list()
Layout	app/views/layouts/store.rhtml

View Naming	
URL	http://.../store/**list**
File	app/views/store/list.rhtml (or .rxml)
Helper	module StoreHelper
File	app/helpers/store_helper.rb

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