

AJAX



- AJAX
- Sada technologií umožňující doplnění stránky bez toho aby se celá obnovila
- JavaScript + XMLHttpRequest + CSS + XHTML

AJAX - Princip



- HTTP dotaz na server na pozadí stránky – spuštěný přes JavaScript
- Odpověď přichází do kódu jazyce JavaScript
- Kód odpověď zpracuje a zařadí do DOM aktuální stránky
 - zobrazí obrázek
 - zobrazí mapu
 - odstraní (skryje) část stránky

Příklad – Subjects a Books



- Seznam skupin knih
- Možnost přidat téma bez nutnosti obnovovat stránku

Příklad – Modely



```
rails generate model Book  
rails generate model Subject
```

Model Book



```
class Book < ActiveRecord::Base
  # attr_accessible :title, :body
  attr_accessible :name, :price, :subject_id,
    :description
  belongs_to :subject
end
```

Model Subject



```
class Subject < ActiveRecord::Base
  attr_accessible :name
  has_many :books
end
```

Migrate



```
rails generate migration books  
rails generate migration subjects
```

```
rm db/migrate/..._create_books.rb  
rm db/migrate/..._create_subjects.rb
```

Migrace Books



```
class Books < ActiveRecord::Migration
  def up
    create_table :books do |t|
      t.column :title, :string, :limit => 32, :null => false
      t.column :price, :float
      t.column :subject_id, :integer
      t.column :description, :text
      t.column :created_at, :timestamp
    end
  end

  def down
    drop_table :books
  end
end
```


Migrate Subjects



```
class Subjects < ActiveRecord::Migration
  def up
    create_table :subjects do |t|
      t.column :name, :string
    end
    Subject.create :name => "Physics"
    Subject.create :name => "Mathematics"
    Subject.create :name => "Chemistry"
    Subject.create :name => "Psychology"
    Subject.create :name => "Geography"
  end

  def down
    drop_table :subjects
  end
end
```

Řadič



rails generate controller Subjects



```
class SubjectsController < ApplicationController
  #layout 'standard'
  respond_to :html, :js
  def index
    @subjects = Subject.find(:all)
  end
  def show
    @subject = Subject.find(params[:id])
  end
  def create
    @subject = Subject.new(params[:subject])
    @subject.save
    respond_with @subject, :location => subjects_url
  end
end
```

Index



- index.html.erb

```
<h1>Listing Subjects</h1>
<ul id="subject_list">
  <% @subjects.each do |c| %>
  <li><%= link_to c.name, :action => 'show', :id =>
  c.id %>
  <%= "(#{c.books.count})" -%></li>
  <% end %>
</ul>
```

Show



- show.html.erb

```
<h1><%= @subject.name -%></h1>
<ul>
<% @subject.books.each do |c| %>
<%= link_to c.title, :controller => "book",
           :action => "show",:id => c.id -%>
<% end %>
</ul>
```

Index - doplnění



```
<h3>Add your subject:</h3>
```

```
<%= form_for Subject.new, :remote => true do |f|  
%>
```

```
<p>
```

```
<%= f.label :name %><br />
```

```
<%= f.text_field :name %>
```

```
</p>
```

```
<p><%= f.submit %></p>
```

```
<% end %>
```

Subject – částečná šablona



- `_subject.html.erb`

```
<li class="subject">  
<strong><%= subject.name %></strong>  
</li>
```

JavaScript



- create.js.coffee

```
$('#<%= escape_javascript(render(:partial =>
@subject))%>')
.appendTo('#subject_list')

$('#new_subject')[0].reset()
```


Použité zdroje



- <http://wowkhmer.com/2011/09/19/unobtrusive-ajax-with-rails-31/>
- <http://www.tutorialspoint.com/ruby-on-rails/rails-and-ajax.htm>