

Introduction to Rails

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# Exercise #1

## The Ruby Programming Language

Start practicing your Ruby language skills with this awesome interactive tutorial: <http://tryruby.org/>. Finishing the whole tutorial should take about 2 hours, but you might want to shorten this time. If you do, make sure you at least work with levels 1-4 and 7 before moving on to learning Ruby on Rails.

# Exercise #2

## Creating a Rails Application

1. Create a Github account (if you don't already have one).
2. Use your Github account to create a user on Cloud 9.
3. Create a new Rails development box and start it. Notice that a new Rails application has already been created.
4. Generate a model of a lecture that contains the following information: title (of type string), description (of type text) and difficulty (of type integer).
5. Read and understand the generated migration and model files.
6. Run the migration with the command "rake db:migrate", and make sure that it succeeded.
7. Generate a controller for our lecture with the action "index".
8. Inside the index action, retrieve all the lectures in the database and store them in the variable @lectures.
9. Update the respective view to list all the lectures, their description and their level of difficulty.
10. Start the Rails server.

11. Browse to <http://localhost:3000/lectures/index> and make sure that the lectures list is empty.
12. Start the Rails console.
13. Create a few lectures from within the console.
14. Refresh your browser and make sure that you can see all the lectures that you've just created listed there.

## Exercise #3

### Creating a scaffold

Now we want to have a list of subjects in each lecture.

1. Generate a scaffold of subjects. Each subject has a name (of type string), and a lecture (of type "references").
2. Read and understand the generated migration and model files.
3. Read parts 1, 2.1, 2.2, and 2.3 of the article [Active Record Associations](#).
4. Change the code of the subject model and the lecture model so that a lecture has many subjects, and a subject belongs to a lecture.
5. In the form view file of subjects create a field that will allow to select the lecture to which the subject is belong to. You can do that using this line of code:  

```
<%= f.collection_select(:lecture_id, Lecture.all, :id, :name, :prompt => 'Please select a lecture') %>
```
6. Add an attr\_accessible called "lecture\_id" to the subject model.
7. Run the migration with the command "rake db:migrate", and make sure that it succeeded.
8. Restart the Rails server and browse to <http://localhost:3000/subjects>.
9. Create new subjects and attach them to lectures.