# Rails Girls Léman – Ruby on Rails

EPFL, Lausanne, 13.03.2015 – 14.03.2015



 $\underline{\textbf{railsgirlsleman@gmail.com}} \mid @RG\_Leman \mid www.railsgirls.com/leman$ 



- Introduction
- Speakers
- Sponsor
- Ruby on Rails
- Developing the application
- The basics
- Conclusions





# 01. Introduction

### Wifi



Username : x-railsgirls Password : aniova17

Valid from 12-MAR-2015 until 15-MAR-2015

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Informations pour l'accès Enclair : <a href="http://epnet.epfl.ch/WiFi-Visiteurs">http://epnet.epfl.ch/WiFi-Visiteurs</a>

L'accès EnClair se fait depuis cette page Web(la page de login n'est visible que du réseau d'amarrage):

https://enclair.epfl.ch

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Informations for Enclair access: <a href="http://epnet.epfl.ch/WiFi-Connection-Visitors">http://epnet.epfl.ch/WiFi-Connection-Visitors</a>

EnClair access is available from this Web page(the login page is only reachable from the docking network):

https://enclair.epfl.ch

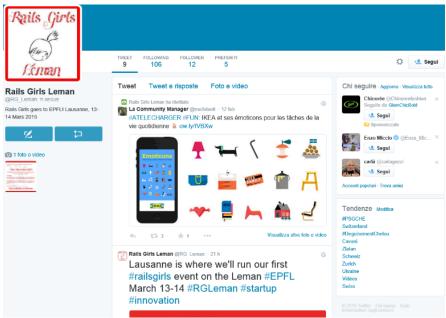
### Social Network





**FACEBOOK:** 

Rails Girls Léman



TWITTER: @RG\_Leman

HASHTAG: #RGLeman15

## Program



### Saturday 14th of March 2015

10:00 -	10:30	Breakfast

10:30 - 11:00 Welcome

11:00 - 12:00 Introduction Ruby on Rails

Developing the application

Speakers.

12:00 - 13:30 Lunch

## Program



### Saturday 14th of March 2015

13:30 - 15:30 Workshop

Developing the application

15:30 - 16:00 Break

Speakers.

16:00 - 17:00 Workshop conclusion

Conclusions and questions.

17:00 - open Afterparty





# 02. Speakers

### Speakers





Nicoletta Casanova

IT eng., startupper and CEO FEMTOprint SA

http://www.femtoprint.ch

http://ch.linkedin.com/pub/nicoletta-casanova/0/249/61b

#### Megha Agarwal

Software Engineer at Cisco Systems

https://ch.linkedin.com/pub/megha-agarwal/17/698/852

### Elise Kay

Software Developer at BBGI Group

https://ch.linkedin.com/pub/elise-klay/a2/4b2/aab





# 03. Sponsor



Nous tenons à remercier tous les sponsors qui ont soutenu Rails Girls Léman. Thank you to our sponsor.



<u>Puzzle ITC</u>, Puzzle ITC is a Swiss Open Source service provider who specializes in individual software (Java and Ruby on Rails) and Linux system engineering projects. Our team is dedicated to interdisciplinary solutions from the operating system to end user experience. We want to build sustainable solutions for our customers based on collaborative software development.

As a Red Hat Premier partner, Puzzle masters the engineering of the complete Red hat stack (Data Center Infrastructure, Enterprise Middleware Solutions and Cloud Instrastructure) and furthermore.

http://www.puzzle.ch/de/home



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<u>Hitobito</u>, hitobito est une application web communautaire qui permet de gérer les membres, les cours, les évènements, et bien plus encore. Son point fort: la gestion simple de structures complexes. Son architecture s'adapte en fonction de chaque organisation, sa hiérarchie, ses différents acteurs et leurs rôles.

Les évènements et les cours peuvent facilement être organisés dans le système, qui permet l'envoie de newsletter et d'email pour les prochaines rencontres, ainsi que la gestion de groupes.

Les composants logiciels sont tous Open-Source (Ruby on Rails, base de donnée MySQL, ...) et développés selon les standards du format ouvert.

hitobito (du japonnais "tout le monde") est une solution Open-Source collective, initiée de concert entre Jungwacht Blauring Schweiz (Jubla) et Puzzle ITC. Notre communauté comprend trois des plus grosses structures pour la jeunesse de Suisse, ainsi qu'une association de parents de personnes mentalement handicapées. Ce sont déjà plus de 80 000 membres qui sont administrés efficacement.

Le design de l'interface est agréable et son utilisation intuitive, elle ne nécessite pas de formation particulière. Tout le monde s'y retrouve, même les utilisateurs qui n'accèdent à la base de données que rarement. http://www.hitobito.ch/



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<u>GitHub</u> is the best place to share code with friends, co-workers, classmates, and complete strangers. Over three million people use GitHub to build amazing things together. https://github.com/



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Scotchati, team specialized in the study and implementation of your advertisement. http://www.scotchati.ch/



<u>Treehouse</u>, Learn HTML, CSS, iPhone apps & more. Learn how to build websites & apps, write code or start a business. http://teamtreehouse.com/

### Partner



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EPFL, École polytechnique fédérale de Lausanne. EPFL is one of the two Swiss Federal Institutes of Technology. It has three missions: education, research and technology transfer at the highest international level. http://www.epfl.ch/

<u>Uber Lausanne</u>, Get a taxi, private car or rideshare from your mobile phone. Uber connects you with a driver in minutes. Use our app in cities around the world.

http://www.uber.com/it/cities/lausanne







The programming language Ruby was creted by Yukihiro Matsumoto in 1993.

The programming language Ruby is:

- open source
- ⊕ general purpose
- interpreted
- \* object oriented

Ruby has borrowed a lot from other programming languages, such as: Smalltalk, Perl, Python, C, C++, PHP, Phyton...

http://www.ruby-lang.org/en/documentation/ruby-from-other-languages/



#### **RUBY ON RAILS IS...**

- With Ruby on Rails, you can develop applications in a simple way minimising the part of coding that is usually repeated in every application.
- The applications developed in Ruby on Rails are especially suited for dynamic, flexible use with a continuous need for updating or future additions.
- Ruby on Rails, or RoR, is an open source MVC (Model View Controller) framework based on Ruby.
- The pattern Model View Controller is a programming convention that makes the distinction between the data representation, the logic of the application and the content more clear.



#### WHY CHOOSE RUBY ON RAILS FOR DEVELOPING?

- ♥ Simple
- ♥ Intuitive
- Scalable
- ♥ Fast
- Minimises code complexity
- The code is self explanatory
- Since it eliminates the dull parts of coding, there's more time to concentrate on the essentials: the user's idea of how the app should be.



RAILS WEBSITE: Twitter, SlideShare, GitHub, Basecamp, Shopify, Scribd, OneHub, Yellow Page, Ask.fm, Cookpad, Hulu, CrunchBase, Zendesk, MedHelp, Freckle, CrazyEgg, 43Things, ...







#### WHO USES RAILS:























# 05. Developing the application

### Developing the application





- http://guides.railsgirls.com/app/
- https://speakerdeck.com/railsgirls/rg-workbook
- Bentobox: learn the language of technology
  - write down terms you don't understand

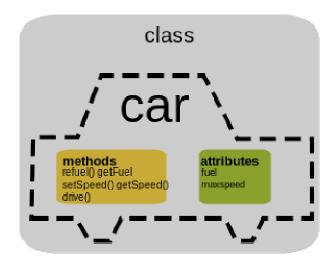






#### Object oriented programming

- In object oriented programming (OOP, Object Oriented Programming) an object may be seen as a container of data with attributes (data) and a group of methods (procedures) defined in its class.
- An object is an instance of a class it is assigned to all the attributes and methods defined in its class.





The Model View Controller pattern
The data (model) is separated from the interface (view)

#### Model

- Maintains the connection between the objects and the database, and is in charge of confirming, connecting, transactions and other processes.
- Access to the data and the logic of the application
- Indipendent of the view and the controller.

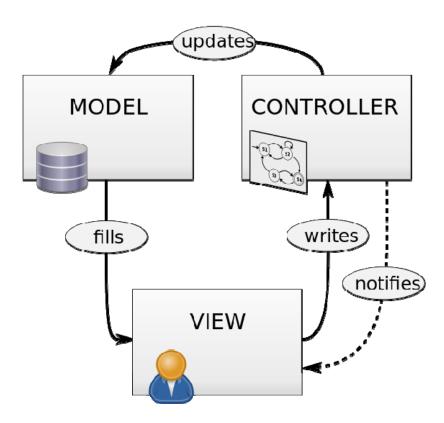
#### **View**

- Presentation of the data and interaction with the user
- Only displays what is in the model

#### Controller

The logic of the application.

- Coordinates the interaction between the user, the view and the model.
- In charge of what is happening





- The applications developed using Rails share a common feature; they are all organised according to the same structure.
- This is because the command rails generates a group of directories and files that follow a guideline that permits Rails to implement various things automatically.
- This common structure also aids in understanding other developers' code easily, as the projects are organised according to the same principles.





Rails has configuration conventions to save the developer the trouble of having to specify e.g. the association between tables and classes.

For the association between tables and classes to work, it's enough that the tables are given the pluralised lowercase names of the classes.

Modèle / Classe Table / Schéma

Post posts

LineItem line\_items

Deer deer

Mouse mice

Person people



# l'm becoming a programmer!

07. Conclusions

### After-event material



### How to continue to develop your webapp...

- DEMONSTRATION: <a href="http://railsgirls.com/materials">http://railsgirls.com/materials</a>
- Other tutorial:

http://railsforzombies.org/

http://ruby.railstutorial.org/

http://railscasts.com/

http://guides.rubyonrails.org/

### How to stay in touch if you have questions...

- Email
- Twitter
- Google Group

### After-event material



Free month teamtreehouse

http://teamtreehouse.com/join/free-month



• Github free subscriptions



### Codeweek



Europe Codeweek 2013: 300 events

Europe Codeweek 2014: + 3000 events

38 countries

100'000 participants



Codeweek is a grass root movement started 2 years ago launched by Neelie Kroes'young advisors with the support from the european commission. <a href="http://codeweek.eu/beambassador/">http://codeweek.eu/beambassador/</a>

Facebook Code Week: <a href="https://www.facebook.com/codeweekswitzerland">https://www.facebook.com/codeweekswitzerland</a>, <a href="https://www.facebook.com/codeEU">https://www.facebook.com/codeEU</a>

Twitter: <a href="https://twitter.com/codeweekeu">https://twitter.com/codeweekeu</a>

Website: <a href="http://codeweek.eu/resources/switzerland/">http://codeweek.eu/resources/switzerland/</a>, <a href="http://codeweek.eu/resources/switzerland/">http:

# Colazione da Tiffany (women in digital)





Facebook: <a href="https://www.facebook.com/pages/Colazione-da-Tiffany/862978297060248">https://www.facebook.com/pages/Colazione-da-Tiffany/862978297060248</a>

Website: <a href="http://www.colazionedatiffany.ch/">http://www.colazionedatiffany.ch/</a>

### Conclusions



# **QUESTIONS**



# Are you ready for.....





# THE #SATURDAYHUG?

# **THANK YOU**



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