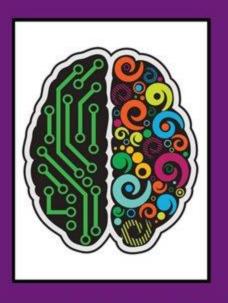


CoderDojo and Perl Evangelism
A call to action...



nerd grrls and Area 515



Prairie Nyx

nerd grrls PO Box 555 Indianola, IA 50125

http://www.nerdgrrls.com

(515) 961-0100 (515) 961-0101 Fax

Programmer, Web Developer, Editor, Maker, Artist, Musican



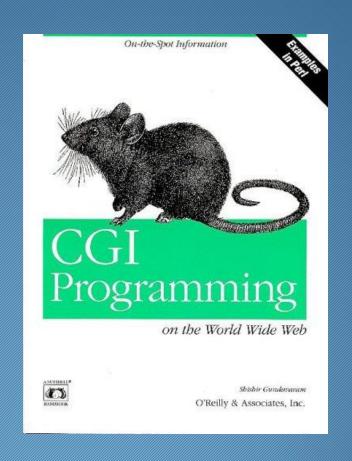


Prairie Nyx

In a previous life... @unixengineer













The global network of free computer programming clubs for young people.







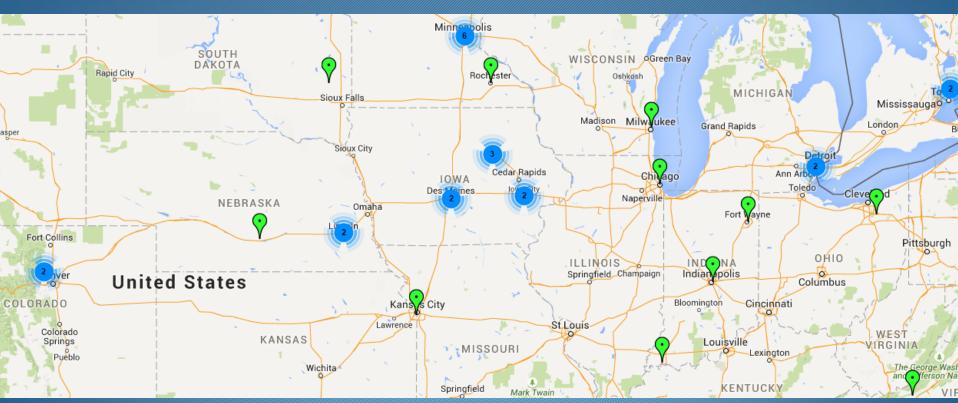
The global network of free computer programming clubs for young people.







The global network of free computer programming clubs for young people.





http://www.coderdojo.com





The CoderDojo Foundation



WHAT WE DO

WHO WE ARE

OUR SUPPORTERS

DONATE TODAY

NEWS

What we have done

What We Do

The Foundation's work is focused on both supporting new and existing Dojos through Resource and Community Development, while also scaling CoderDojo through partnerships and creating awareness.

Resources

We're currently focused on building tools and resources to help the community collaborate and communicate. We are also piloting Best Practice Standards with the CoderDojo Recommended Practice.

Partnerships

We're negotiating and managing international partnerships that will both benefit the CoderDojo community or spread the CoderDojo brand & philosophy of Open, Free, Child Centric learning around the world.

Community

We're supporting the CoderDojo Community through dealing with support requests, verifying Dojos to appear on the website, and facilitating spaces for knowledge sharing and discussion.

Awareness

We're building awareness about CoderDojo and the benefit of learning code through representing the community at some international and major national events. We also facilitate the two annual CoderDojo events DojoCon and Coolest Projects .



Kata is an open forum for the CoderDojo community to share resources with one another and work together to grow the knowledge of the members within the movement.



Dojo Sushi



Dojo Sushi is a method of communicating programming concepts in easy-to-digest, bite-sited chunks (hence Sushi). Dojo Sushi is delivered on double-sided laminated cards known as Sushi Cards. One card = one concept.

ScratchTastic!



MIT's massively popular visual educational programming language designed for 6-14 year olds and used by schools and dojos across the world as a great way of introducing young people to computer programming.



Alliance Resources



Alliance Resources

There are lots of great organisations around the world making free platforms and resources for young people to learn computer programming. You can see more on these resources in our Alliance Resources section.

Tutorials



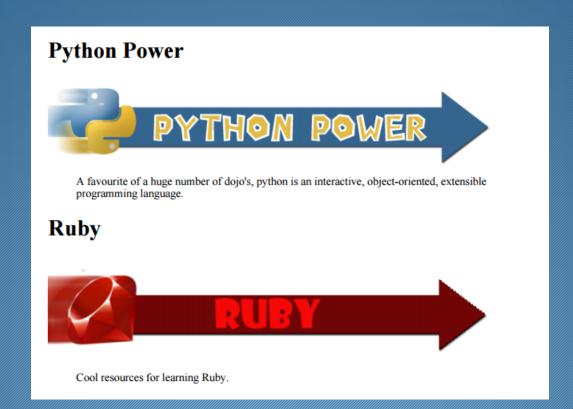
Here you will find a variety of tutorials and projects created by the CoderDojo Community.

The Arcade



A collection of games for CoderDojo Ninjas to play and learn to build!









For learning to program motivated by MINECRAFT!

The Hardware Laboratory



Robots, Arduinos, Raspberry Pis, Electronic kits, NodeJs copters, Kinects and other controllers.

The Studio



Audio/Visual tools, programming languages and digital art projects.



GitHub



GitHub is a web-based Git repository hosting service, which offers all of the distributed revision control and source code management (SCM) functionality of Git as well as adding its own features. Unlike Git, which is strictly a command-line tool, GitHub provides a web-based graphical interface and desktop as well as mobile integration. It also provides access control and several collaboration features such as wikis, task management, and bug tracking and feature requests for every project.

GitHub offers both paid plans for private repositories and free accounts, which are usually used to host open-source software projects. As of 2014, GitHub reports having over 3.4 million users and with 16.7 million repositories making it the largest code host in the world.

CoderDojo Girls



Here you can see some advice and tools specifically for encouraging young women to engage with computer programming!







You can see Italian tutorials and resources submitted by CoderDojo Italia
 Dojos on Kataltalia.

KataJapan



You can see Japanese tutorials and resources submitted by CoderDojo Japan
 Dojos on KataJapan.

KataDutch

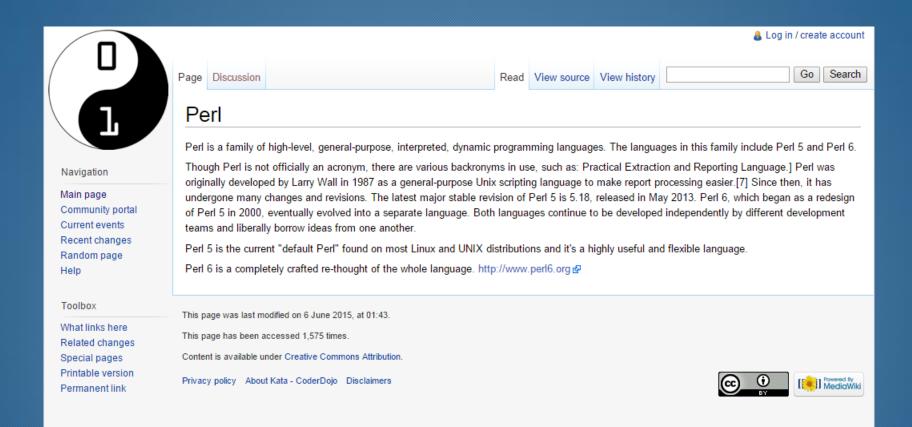


• You can see Dutch tutorials and resources submitted by Dutch & and Belgian Dojos on KataDutch.



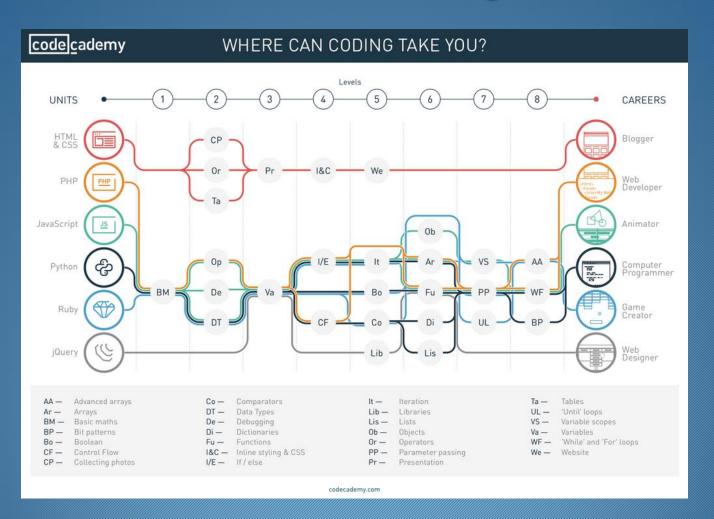


So what's missing?



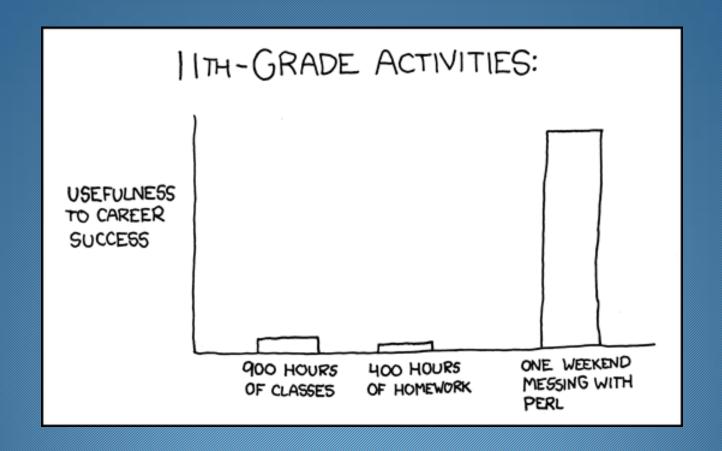


So what's missing?





Where to start?





Where to start?

- Teaching Perl to kids…
- Is Perl a bad idea to start with?
- Python always seems to be the default language of choice today for beginners.
- Can we identify a subset of Perl that is appropriate to teach beginning concepts?
- Perl 6?! ©





A contrast of Philosophies



"There should be one-- and preferably only one--obvious way to do it."

- the Zen of Python



A contrast of Philosophies

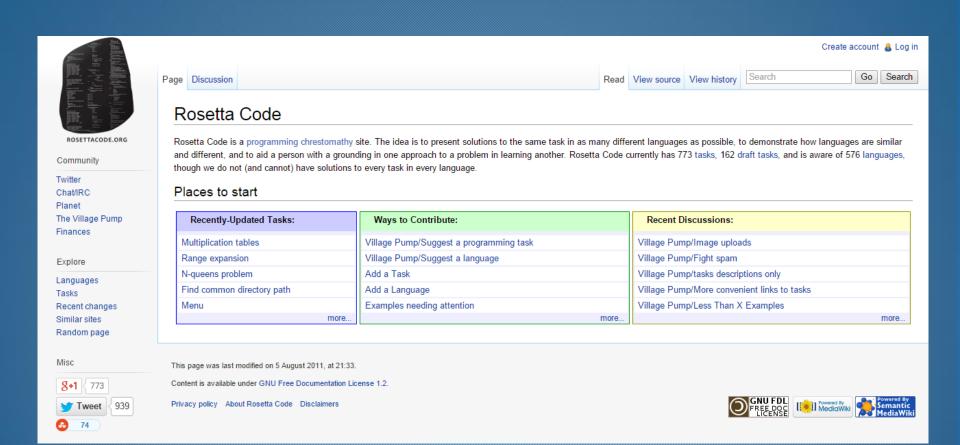


Although the Perl Slogan is There's More Than One Way to Do It, I hesitate to make 10 ways to do something. :-)

(Larry Wall)



rosettacode.org





rosettacode.org

- Lots of great examples...
- Easy to see how a sample problem can be solved using various languages side by side.
- Perl 6 is included!



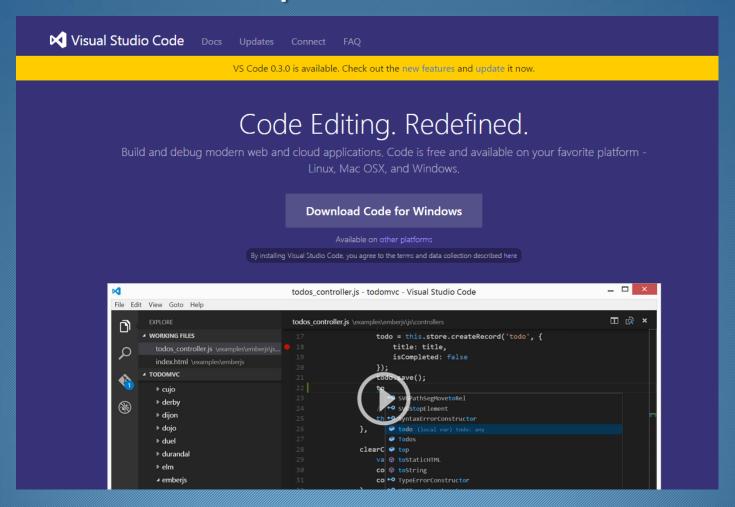


Best Development Environments





Best Development Environments





Best Development Environments



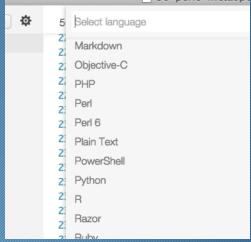
How to get Rakudo Perl 6

Definitions

Some grossly over-simplified definitions:

- Perl 6 is a language specification.
- Rakudo is a compiler for Perl 6.
- Rakudo Star (or Rakudo *) is a distribution that contains the Rakudo compiler, documentation and some useful modules.
- MoarVM and JVM are Process Virtual Machines. They provide an interface between
 the compiler and the underlying operating system or machine. If you don't know which
 to choose, try MoarVM first. You can always switch to the JVM if MoarVM doesn't suit
 your needs.

⋈ Visual Studio Code







Building the Perl Kata

- Searching for the best tutorials
- Finding the best examples from Rosetta Code
- Validating examples using Rakudo Perl with MoarVM
- Building web examples with frameworks:
 - Dancer
 - Mojolicious



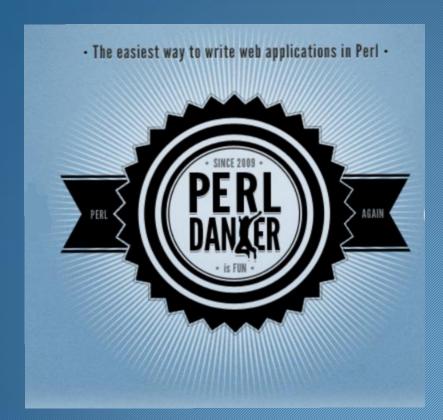
Building the Perl Kata







Building the Perl Kata





Where are my best examples?



- What is Dojo Sushi?
- Dojo Sushi is delivered on double-sided laminated cards known as *Sushi Cards*. One card = one concept. Dojo Sushi is a method of communicating programming concepts which is suited to the CoderDojo environment. Concepts are communicated in easy-to-digest, bite-sited chunks (hence *Sushi*).



HTML

My First Website : Card 2

Make a new web page

1 60 into the my-first-website folder and copy the about-me.html file.

To copy the file, select it, then hold down the $\stackrel{(m)}{=}$ and $\stackrel{(C)}{=}$ keys at the same time.

2 Paste the copy of the file into the same folder.

To paste the file, hold down the and keys at the same time.

After you have pasted the file you should see this -



Now you have a copy of the about-me.html file in the same folder. It is called about-me - Copy.html

You'll make this copied file into a new page which will list your favourite games. So you'll need to change its name to games.html

3 Click the file to select it and press

The about-me - Copy part of the filename is highlighted.

4 Change the name to games, html



HT/ML

My First Website : Cord 2

When you have renamed the file it should look like this -



You now have a new web page named games.html. But at the moment it's just the same as the about-me.html page.

5 You'll need to open it and edit the text so that the page is now about your favourite games.
Use the example below for ideas. Can you figure out how to download a picture (like the Minecraft logo) for your top game and display it in the page?

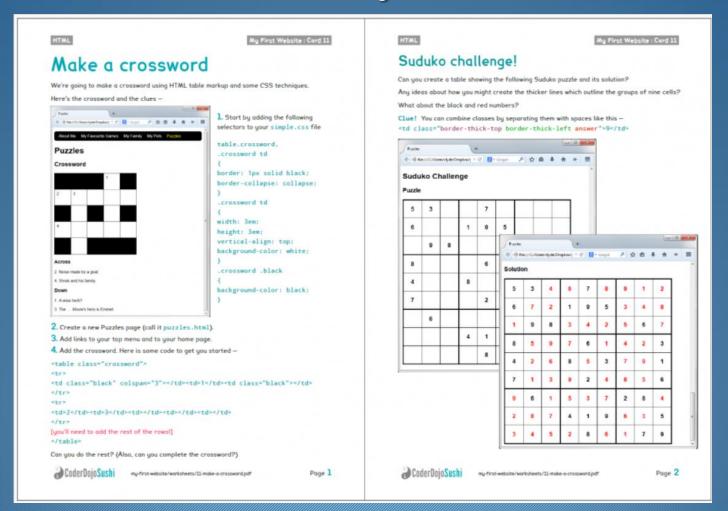


Save the file every so often as you're working on it. To save press the and keys at the same time. That way you won't loose your work if your laptop battery gives out suddenly! Every time you save the file, refresh the web page to see the effect of your most recent chances.

- * Can you see that we've added a list to the page? The list has several 11 elements inside a u1 element.
- * What happens if you put the li elements inside an ol instead of a ul element?









Ultimately, I want the kids I teach to understand why this might be funny... ©

```
perl grrl @perlgrrl · 27 Apr 2013
for ($i = 0; $i < ( $answer eq 'no' ? 2 : 3 );
$i++ ) { print "Knock on the ".( $answer eq 'no' ? 'pipe' : 'ceiling' )."\n"; }
#songsincode

* ** 1 ** 1 ***
```

(A sushi card is a "lightning talk" on paper)



prairienyx@gmail.com

Thank you!

