About

SmallTalk Tutorial

A social approach to smalltalk learning

http://smalltalktutorial.herokuapp.com/

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What is it?

Smalltalk Tutorial is a web-page written with the support of the program Google Summer of Code 2012.

Why is it important?

Actually smalltalk community don't have a place in the social networks where to promote their language to new coders, that's what SmalltalkTutorial is trying to solve.

Who is intended for?

Smalltalk Tutorial is intended for young coders who have at least a little experience in Object Oriented programming languages.

What isn't SmalltalkTutorial

It is NOT an Object Oriented programming tutorial nor an OO design tutorial, it is a place where to learn Smalltalk syntax and features.

Features

- Integration, login and sharing with three social network APIs.

- Progress tracking of individuals.

- Twenty (For the moment) lessons explaining the basics of Smalltalk.

Social Networks

Smalltalk Tutorial provides login and sharing with this social networks:

- Facebook

- Twitter

- G+

Why those three?

Because those are the more used by the target of users our tool is intended for, also they provide a clear and easy to use API that gives us all the info we need about them with their permission.

You can leave Smalltalk Tutorial after doing some lessons and come back when you have time to do more.
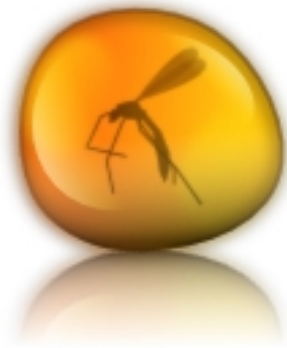
What DB?

SmalltalkTutorial makes use of a MySQL database, that stores just needed info and nothing more. Actually it is provided by ClearDB.

Lessons

The tutorial lesson widget is implemented in Amber, it provides us of a web embedded workspace and Class browser that's ideal for this!

Evaluating Expressions

The first three lessons of Smalltalk tutorial explain the user how to evaluate a smalltalk expression and the correct usage of the three ways of doing it.

- DoIt

- PrintIt

- InspectIt

Precedence Rules

The following four lessons are about precedence rules, we explain what type of messages you can find in smalltalk and it's precedence, also we teach usage of parentheses to change it.

- Unary Messages

- Binary Messages

- Keyword Messages

- Parentheses Usage

Block Closures

Three lessons about block closures and their uses.

- Block Closures

- Block with Parameters

- IfTrue: ifFalse:

Smalltalk Collections

Then we feature three lessons about Smalltalk Collections and its differences.

- Array (Dynamically and statically defined)

- Set

- Dictionary

Four lessons about collections messages teaching the more abstract ones.

- do:

- collect:

- select: and reject:

- inject: into:

Class Browser

The last three lessons are about class and method creating.

- Classes
- Instance Methods
- Class Methods
- Inheritance
- Class Browser usage

Why in this order?

The order of the lessons is mildly inspired by the "Universidad Nacional de Quilmes" program in "Objetos I" class which I am part of the staff.

Tools and Frameworks

Amber
Smalltalk brought to the web

node JS

cleardb

EJS

<% Embedded JavaScript %>

heroku

Screenshots

Welcome screen

Screenshots

Lesson widget

Screenshots

Class Browser

Furtherwork

- Achievement system

- Better Lesson creation API

- Full Amber Migration

- More Lessons!

Team

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