# **Parythony**

Parythony is an open source language used to develop server-side apps, as well as desktop apps (Windows, Linux, and Android). Server-side Parythony (pronounced puh-RITH-uh-nee) is implemented in Python, and shares its functionality with Python, but has a Lisp-like syntax. Parythony for desktop/mobile apps is implemented in Java. Users of Parythony pay subscription fees to access advanced functionality, including the ability to write server-side Parythony code, as well as the ability to use more than 16 gigabytes of storage.

### **Language Features**

Parythony is a Python-like programming language in which all operators precede their operands, and parentheses are used for all grouping (except string literals, which as in Python are delimited with single or double quotes). Parythony code can be embedded in a PRYML text file (PaRYthony Markup Language). PRYML is similar to HTML, except open tags begin with a brace bracket and a keyword, and the closing tag is simply a close brace bracket. Any text enclosed in a tag is preceded by a vertical slash (|). PRYML also shares features of the Wikipedia markup language, so it's simpler than HTML, and is used to define the screen layout of a Parythony program.

Parythony is both a subset and superset of Python, except a given class can only inherit from a single base class (no multiple inheritance). Parythony borrows the interface feature from Java, in which the interface keyword is renamed to "scool". Two other new keywords include "scoolref" (built-in function returns a scool reference) and "abclass" (abstract class).

## **Feature Summary**

- Functionality of Python, but with syntax of Lisp
- Develop server-side, desktop and mobile apps
- Freemium business model gives users who use less than 16 GB freedom from subscription fees
- Users who write server-side Parythony code must be subscribers

#### About Me

I am Mike Hahn, the founder of Parythony. I have schizophrenia and depression, but my schizophrenia is well controlled by medication nowadays, and I've had very little depression since August 9, 2014. At that time I began working on a different project, and then I started Parythony on March 3, 2015. I avoid depression these days by keeping busy with software development.

I was previously employed at Brooklyn Computer Systems as a Delphi Programmer and a Technical Writer (I worked there between 1996 and 2013). In December 2014 I quit my job as a volunteer tutor at Fred Victor on Tuesday afternoons, where for 5 years I taught math, computers, and literacy. I'm now a volunteer computer tutor at West Neighbourhood House. My hobbies are reading the news at cbc.ca and going for walks in my neighbourhood. About twice a year I get together with my sister who lives in Victoria. She comes here or I go out there usually in the summer. At those times I'm much more active, but most of the year I tend to lie on the couch a lot, and not be very active. I do, however, visit my brother once a month or so and listen to my disabled friend (she also has schizophrenia and talks to me on the phone).

### **Contact Info**

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### **PRYML Format**

Heading	==, ===,
Bold/Italics/both	11, 111, 1111
Numbered List	#, ##,
Bulleted List	*, **,
Container Tag	{   }
Table/Grid/Tag	{ }
Open Row	{row
	<pre>{row fld=val</pre>
Close Row	}
Open Column	
	fld=val
	x1=y1;x2=y2;
Vert. Grid Line	\
Horiz. Grid Line	underscore (_)
Grid Intersection	plus (+)
Escape Char.	backslash (\)
Tags:	

- table, row, grid, point, polygon, label, meta
- super, sub, text, pre, br, hr, img, a, ch
- input, radio, checkbox, pry

#### Fields:

- width=50/0.5 (pixels/ratio)
- pad=50/0.5
- x, y = 50/0.5
- height = n (pixels)
- topb=1 (pixels)
- bottomb, leftb, rightb, midb = 1
- color=FF00FF (rgb)
- fcolor=00FF00 (text)
- bcolor=000000 (borders)
- colspan, rowspan = n
- just="L/C/R"
- b, i, u (bold, italics, underline)
- same (same as previous)
- vis (visible)
- coldefs
- name="xyz"
- rows, cols = n (grid size)

# Implementation Steps

- Parythony:
  - 1. Written in Java using Linux
  - 2. Token Parser
  - 3. Compiler: PRY >> PRYC
  - 4. ParYthony Runtime Environment (PYRE): run PRYC code
  - 5. Support if, for, try stmts.
  - 6. Port to Windows
  - 7. Port to Android
  - 8. Develop Python/Django version
- PRYDE:
  - 1. PaRYthony Development Environment
  - 2. Written in Java using Linux/Windows
  - 3. PRYML Rendering >> display UI
  - 4. PRYML/PRY Editor
  - GUI Editor: display UI >> PRYML
  - 6. Syntax Highlighting
  - 7. Unlimited Undo/Redo
  - 8. Debugger
  - 9. Monetization

## My Diagnosis

I am choosing to reveal my diagnosis (schizophrenia and depression), because I want to show that people whose brains are not wired together correctly (if that is a valid description of the effects of schizophrenia) are still capable of performing impressive feats of creativity. David Helfgott and John Nash were both successful creatively, despite their schizophrenia, and movies were made about those 2 guys. My sister, Catherine Hahn, might make a film about me, but it won't be a bio pic, the film will be about my positive symptom. She is a theatre designer and silversmith (she makes jewellery). My symptom involves intrusive, repetitive thoughts (they don't bother me when I'm working), including words/phrases such as "Reginald" and "tortured to death". A long time ago I used to say those thoughts out loud.