

Cobra (programming language)

Cobra is a discontinued general-purpose, object-oriented programming language.^[1] Cobra is designed by Charles Esterbrook, and runs on the Microsoft .NET and Mono platforms.^[2] It is strongly influenced by Python, C#, Eiffel, Objective-C, and other programming languages.^[3] It supports both static and dynamic typing.^{[4][5]} It has support for unit tests and contracts.^[4] It has lambda expressions, closures, list comprehensions, and generators.^[6]

Cobra is an open-source project; it was released under the MIT License on February 29, 2008.^{[7][8]}

Cobra

<u>Paradigm</u>	<u>Multi-paradigm: object-oriented</u>
<u>Designed by</u>	Charles Esterbrook
<u>Developer</u>	Cobra Language LLC
<u>First appeared</u>	2006
<u>Final release</u>	0.9.6 / December 23, 2013
<u>Typing discipline</u>	<u>strong</u> , <u>static</u> , <u>dynamic</u> , <u>inferred</u>
<u>OS</u>	<u>Microsoft .NET</u> , <u>Mono</u>
<u>License</u>	<u>MIT</u>
<u>Filename extensions</u>	<u>.cobra</u>
<u>Website</u>	<u>cobra-language.com</u> (<u>http://cobra-language.com/</u>)
<u>Influenced by</u>	
<u>Python</u> , <u>Eiffel</u> , <u>C#</u> , <u>Objective-C</u>	

Contents

Features

Examples

Hello World

A simple class

References

External links

Features

Object-oriented

- Namespaces
- Classes, interfaces, structs, extensions, enumerations
- Methods, properties, indexers
- Mixins, extension methods
- Generics, attributes

Quality control

- Contracts, assertions
- Unit tests, docstrings
- Compile-time nil-tracking

Expressiveness

- Static and dynamic binding
- List, dictionary, and set literals
- in and implies operator

- for expressions
- Slicing
- Interpolated strings
- Compile-time type inference
- Lambdas and closures

General productivity

- Exception handling
- Postmortem exception report
- Garbage collection

Scripting conveniences

- Clean syntax
- Dynamic binding
- One-step run
- Shebang line (#!)

Miscellaneous

- Documentation tool (cobra -doc)
- Syntax highlighting tool (cobra -highlight)

Examples

The following examples can be run from a file using cobra <filename>.

Hello World

```
class Hello
  def main
    print 'HELLO WORLD'
```

A simple class

```
class Person

  var _name as String
  var _age as int

  cue init(name as String, age as int)
    _name, _age = name, age

  def toString as String is override
    return 'My name is [_name] and I am [_age] years old'
```

References

1. "The Cobra Programming Language" (<http://cobra-language.com>). Cobra Language LLC. Retrieved 2012-09-26.

2. Charles Esterbrook (Jan 28, 2008). *Lang.NET Symposium 2008 – The Cobra Programming Language* (<https://web.archive.org/web/20090326203941/http://www.facultyresourcecenter.com/curriculum/pfv.aspx?ID=7259>). Microsoft. Archived from the original (<https://www.facultyresourcecenter.com/curriculum/pfv.aspx?ID=7259>) (wmv) on March 26, 2009. Retrieved 2010-08-31.
3. Bridgwater, Adrian (5 March 2008). "Cobra takes a bite at open source" (<http://www.zdnet.co.uk/news/application-development/2008/03/05/cobra-takes-a-bite-at-open-source-39362140/>). *ZDNet UK*. Retrieved 2010-08-31.
4. Neward, Ted (June 2009). "Reaping the Benefits of Cobra" (<http://msdn.microsoft.com/en-us/magazine/dd882513.aspx>). *MSDN Magazine*.
5. Erickson, Jonathan (April 2008). "Was George Costanza a Computer Programmer?" (<http://www.ddj.com/architect/207400254>). *Dr. Dobb's Journal*.
6. Morris, Richard (April 2010). "Chuck Esterbrook: Geek of the Week" (<http://www.simple-talk.com/opinion/geek-of-the-week/chuck-esterbrook-geek-of-the-week/>). *simple-talk*.
7. Krill, Paul (Feb 7, 2008). "Cobra language slithering to open source" (<http://www.infoworld.com/d/developer-world/cobra-language-slithering-open-source-202>). *InfoWorld*. Retrieved 2010-08-31.
8. "The Cobra Programming Language" (<http://cobra-language.com/downloads/source/>). Cobra Language LLC. Retrieved 2008-02-29.

External links

- [Official website \(http://cobra-language.com\)](http://cobra-language.com)
 - [The Cobra blog \(http://cobralang.blogspot.com/\)](http://cobralang.blogspot.com/) by Charles Esterbrook
 - [Cobra News Index \(http://cobra-language.com/forums/viewforum.php?f=3\)](http://cobra-language.com/forums/viewforum.php?f=3)
-

Retrieved from "[https://en.wikipedia.org/w/index.php?title=Cobra_\(programming_language\)&oldid=1040103861](https://en.wikipedia.org/w/index.php?title=Cobra_(programming_language)&oldid=1040103861)"

This page was last edited on 22 August 2021, at 17:21 (UTC).

Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.