funky Documentation

Release 0.1

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CONTENTS

Contents: Tiny functional programming oriented Python library inspired by underscore.js and Haskell prelude.

funky.**compose**(*f1*, *f2*, **fs*)

Takes a two or more functions and returns a composition of them:

```
>>> fn = compose(lambda x: x/2, lambda x: x+5)
>>> fn(5)
```

5.0

funky.**curry**(*fn*)

Returns a function that can be partially applied:

```
>>> fn = curry(lambda x,y: x**y)
>>> fn(2,8)
```

256 >>> fn(2)(8) 256

funky.**template**(*f*, **args*, ***kwargs*)

Returns a function with some of its arguments bound:

```
>>> fn = template(lambda a,b,c: (a*b)/c, ___, 2, ___)
>>> fn(5, 2)
```

5.0

class funky.**chain**

A subclass of list that changes the behaviour of *append*, *extend*, *insert*, *remove*, *reverse* and *sort* so that they allow chaining of method calls:

```
>>> chain([1,2,3]).append(4).reverse().extend([5, 6]).sort()
[1,2,3,4,5,6]
```

funky.**caller**(*method*, **args*, ***kwargs*)

Returns a function that takes an object and calls its *method* optionally passing it **args* and ***kwargs*

funky.**invoke**(*iterable*, *method*, **args*, ***kwargs*)

Invokes *method* on every member of the *iterable* passing it **args* and ***kwargs*

funky.**iterate**(*fn*, *x*)

An iterator that repeatedly applies *fn* to *x*

funky.**pre**(**checks*)

A decorator that checks that all of the provided preconditions are met when the function is called:

```
>>> @pre(lambda x: x > 0)
>>> def fn(x):
>>>     return x*x
>>> fn(-1)
```

funky.**post**(**checks*)

A decorator that checks that all of the provided postconditions are met when the function returns

funky.**identity**(*arg*)

A function that takes one argument and returns it.

funky.**flip**(*fn*)

A function that takes a function with arity of two and returns a function with the arguments flipped

funky.**first**(*xs*)

Takes an iterable and returns its first item

funky.**second**(*xs*)
Takes and iterable and returns its second item

exception funky.**ConditionError**
Raised when pre- or postcondition fails

CHAPTER

ONE

INDICES AND TABLES

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PYTHON MODULE INDEX

f

funky, **??**