

Stackless Python 101 - Handout

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Abstract

An introduction to Stackless Python, showing what it is useful for and how to use it.

1. Introduction

Stackless Python is an extended version of the Python programming language. This presentation is intended to provide a general overview of it. From what makes it different and better than similar solutions, to a high level introduction to the small amount you need to know to use it.

2. Code Snippets

Creating a tasklet.

```
stackless.tasklet(callable)(*args, **kwargs)
```

Running the scheduler cooperatively.

```
stackless.run()
```

Running the scheduler preemptively.

```
stackless.run(numberOfInstructions)
```

Yielding the current tasklet to allow the others to run.

```
stackless.schedule()
```

Creating a channel.

```
channel = stackless.channel()
```

Receiving a value through a channel on the current tasklet.

```
value = channel.receive()
```

Sending a current value through a channel on the current tasklet.

```
channel.send(value)
```

Checking whether there are sending tasklets blocked on a channel.

```
channelHasBlockedSenders = channel.balance > 0
```

Checking whether there are receiving tasklets blocked on a channel.

```
channelHasBlockedReceivers = channel.balance < 0
```

3. Links

Stackless Python web site.

<http://www.stackless.com>

Stackless Python examples web site.

<http://code.google.com/p/stacklessexamples/>