atomic Documentation

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An atomic class that guarantees atomic updates to its contained value.

You can report bugs and discuss features on the issues page.

CHAPTER 1

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Installation

1. Either check out Atomic from GitHub or to pull a release off PyPI

```
pip install atomic
```

Usage

class `atomic.`**`Atomic`**(*value=None*)

An atomic class that guarantees atomic updates to its contained value.

`compare_and_set`(*expect_value*, *new_value*)

Atomically sets the value to the given value if the current value is equal to the expected value.

Parameters

- **`expect_value`** – the expected value
- **`new_value`** – the new value

`get_and_set`(*new_value*)

Atomically sets to the given value and returns the old value

Parameters **`new_value`** – the new value

`try_update`(*update_func*)

Update value based on the given function.

If the value changes before the update can happen, it will raise a `ConcurrentUpdateException`.

Parameters **`update_func`** (*`func`*) – a function that given the current value return the new value

Raises ConcurrentUpdateException

update(*update_func*)

Update value based on the given function.

It may run the block repeatedly if there are other concurrent updates in progress.

Parameters **update_func** (*func*) – a function that given the current value return the new value

value

Get and set current value

CHAPTER 2

Indices and tables

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