Introduction to Python Data Structures

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Data Structures

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( )

set( )

Getting Started

Data Structures Concepts

Basic Demos

Stock Analysis Applications

List [ ]

Core Ideas

- Collection of items
- Membership (in, not in)
- Methods (append)
- Sort

Find Stocks with 2% Change

Dictionary { }

Core Ideas

- Key value pairs

- Methods

- Constant time look up

Join Data

Tuple ()

Core Ideas

- Immutable

- Methods

- Model records

Records

set()

Core Methods & Ideas
- Methods
- Unique membership

Unique Stock Symbols

List [ ]

Core Ideas

- Collection of items
- Membership (in, not in)
- length
- append
- insert
- pop
- sort

List

Basic Met   in   ec

Dictionary { }

Core Ideas
- Key value pairs
- Assignment or updating
- Membership (in, not in)
- Delete items
- Iterating (key, values)
- Length
- Constant time look up

Dictionary

Basic Met

Tuple ()

Core Ideas

- Immutable
- Common use – fields in database
- Access by position (zero)
- Functions (len, max, min, splice)
- Membership (in, not in)

Tuple

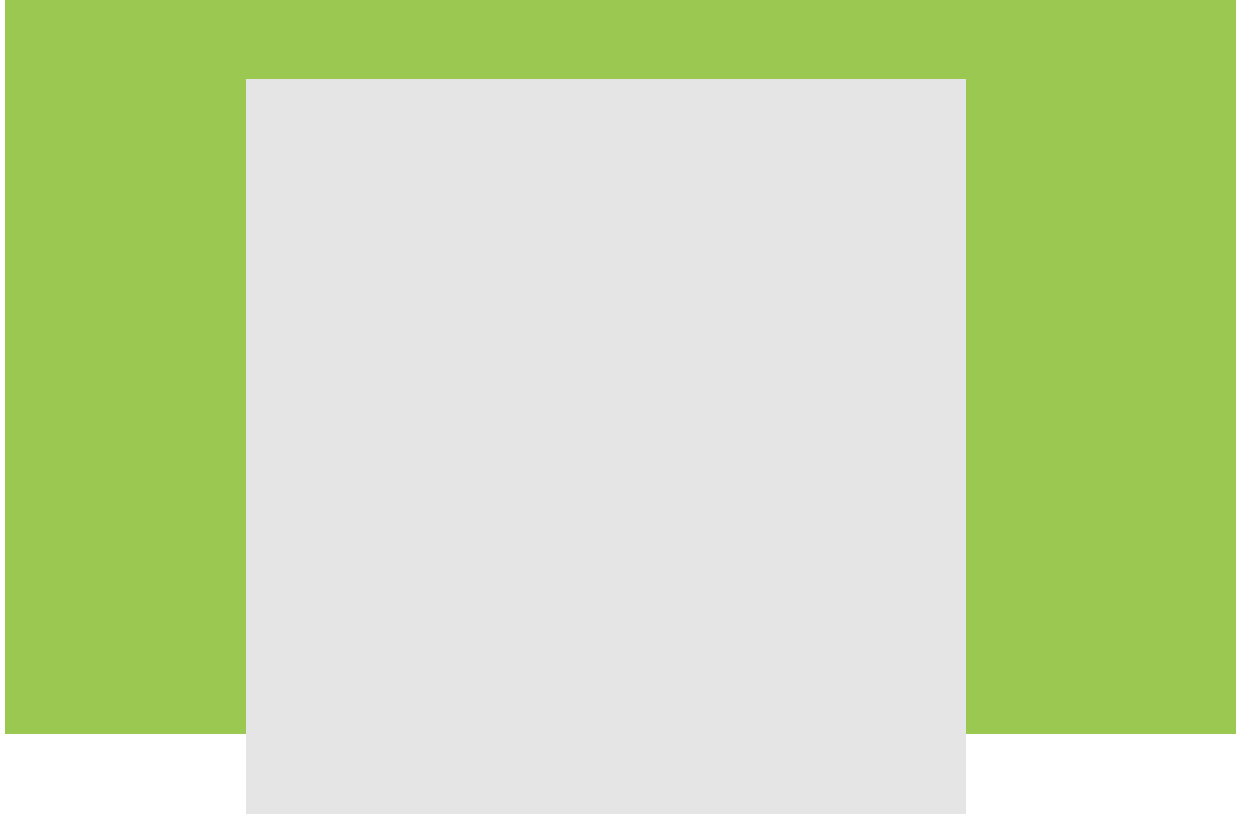Basic Met   uta

set()

Core Methods & Ideas
- set()
- add / discard
- update
- union / intersection
- in / not in

- Unique membership

set()

Basics

Demo

Nested Structures

List of Tu **ry**