

Plone Conference 2009

Budapest

Lightning Talk

cornerstone.soup
isolated container
for queryable records

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Use-Cases

Need Container for many entities (mass-data) of non-CMSish content, like:

- Votes,
- Data from a Poll,
- Orders in a Webshop,
- measuring data,
- (fill in your use-case here)

tested with Plone 3.3

Soup Characteristics

- isolated: all in one persistent local utility;
- stores generic „Records“:
 - persistent items
 - with attributes passed in at construction time as keyword arguments.
- has its own local index (ZopeToolKit);
- fetches items by query.

Recipe

Cook your own Soup

1

Heat editor in a large saucepan, subclass the soup object and give it an appropriate id:

```
>>> from cornerstone.soup import Soup
>>> class MySoup(Soup):
...     id = u'mysoup'
```

Recipe

Cook your own Soup

2

Provide a Catalog Factory and cook for 2-3 minutes, until softened but not colored.

```
>>> from zope.interface import implements
>>> from zope.catalog.catalog import Catalog
>>> from zope.catalog.field import FieldIndex
>>> from cornerstone.soup.interfaces import ICatalogFactory
>>> class MyCatalogFactory(object):
...     implements(ICatalogFactory)
...
...     def __call__(self):
...         catalog = Catalog()
...         catalog[u'name'] = FieldIndex(field_name='name',
...                                       field_callable=False)
...         return catalog
```

Recipe

Cook your own Soup

3

Add one utility registered under the same name as the soup-id, stirring, for 20 seconds:

```
<utility  
  name="mysoup"  
  factory=".mymodule.MyCatalogFactory"  
  provides="cornerstone.soup.interfaces.ICatalogFactory"  
>
```

Recipe

Cook your own Soup

4

Add two local utilities to componentregistry.xml registered under the same name as the soup-id, and bring to boil.

```
<utilities>
  <utility
    name="mysoup"
    factory="mymodule.MySoup"
    interface="cornerstone.soup.interfaces.ISoup"
  />
  <utility
    name="mysoup"
    factory="five.intid.intid.OFSIntIds"
    interface="zope.app.intid.interfaces.IIntIds"
  />
</utilities>
```

Recipe

Cook your own Soup

5

Start your Plone, turn heat to low, cover and simmer for some minutes.

Go to portal_setup and import your packages GenericSetup profile.

Season and add a little more data if desired.

```
>>> from zope.component import getUtility
>>> from cornerstone.soup.interfaces import ISoup
>>> soup = getUtility(ISoup, name=u'mysoup')

>>> from cornerstone.soup import Record
>>> rec = Record(name=u'rec1')
>>> soup.add(rec)
>>> rec = Record(name=u'rec2')
>>> soup.add(rec)
```


Enjoy your soup bon appetit!

Query data:

```
>>> soup.query(name=u'rec1')  
[<Record at ../record-0>]
```

```
>>> soup.query(name=u'rec2')  
[<Record at ../record-1>]
```

Modify data:

```
>>> rec.data['name'] = u'rec1'  
>>> soup.reindex([rec])  
>>> soup.query(name=u'rec1')  
[<Record at ../record-0>, <Record at ../record-1>]
```

Ingredients and complete recipe

<http://pypi.python.org/pypi/cornerstone.soup>