

Building Your First JCache Application



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Overview



DEMO: “Hello JCache”

Basic Building Blocks

- CachingProvider
- CacheManager
- MutableConfiguration
- Cache

Demo



“Hello JCache”



Building Blocks



```
CachingProvider provider = Caching.getCachingProvider();
```

Getting the Default CachingProvider



CachingProvider

“A CachingProvider defines the mechanism to establish, configure, acquire, manage and control zero or more CacheManagers. An application may access and use zero or more CachingProviders at runtime.”



```
CachingProvider provider = Caching.getCachingProvider();  
CacheManager manager = provider.getCacheManager();
```

Getting the Default CacheManager



CacheManager

“A CacheManager defines the mechanism to establish, configure, acquire, manage and control zero or more uniquely named Caches all within the context of the CacheManager. A CacheManager is owned by a single CachingProvider.”

Configuration



Declarative Configuration
(Not defined in the specification)



Programmatic Configuration
(Defined in the specification)

```
CachingProvider provider = Caching.getCachingProvider();  
CacheManager manager = cachingProvider.getCacheManager();  
MutableConfiguration<Integer, String> config  
    = new MutableConfiguration<>();
```

Creating the MutableConfiguration



Other APIs & Languages

F#

Scala

Java

Coherence

F#

Python

Kotlin

PHP

Hazelcast

memcache



```
CachingProvider provider = Caching.getCachingProvider();  
CacheManager manager = cachingProvider.getCacheManager();  
MutableConfiguration<Integer, String> config  
    = new MutableConfiguration<>();  
Cache cache = manager.createCache("names", config);
```

Creating the Cache



Cache vs Map

Property	Map	Cache
Null keys and values	Allowed	Not Allowed
Expiration	Not defined	Supported
Eviction	Not defined	Supported
Store by value	Not defined	Supported



Review



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