ZACK TOLLMAN - @TOLLMANZ

PHP OBJECT CACHING

HAVE YOU DONE OBJECT CACHING?

WOULD YOU RATHER?

```php
if ( get_kewl_points() > 0 ) {
    echo 'Your Kewl points: ' . (int) get_kewl_points();
}
```

OR

```php
$kewl_points = (int) get_kewl_points();

if ( $kewl_points > 0 ) {
    echo 'Your Kewl points: ' . $kewl_points;
}
```

WHAT IS OBJECT CACHING

THE
CACHING
OF AN
OBJECT

WHAT IS OBJECT CACHING

WHAT IS OBJECT CACHING

- Cache

  - A place for storing things

  - Key/value store

  - Faster access that initial data source

- Object

  - Data: String, Int, Float, Array, Object, Boolean, NULL, etc

WHY OBJECT CACHE?

- Improve application performance

  - Reduce database load (e.g., MySQL)

  - Reduce slow lookups (e.g., remote requests)

  - Reduce redundant lookups (e.g., computationally expensive PHP routines)

WHERE TO CACHE OBJECTS

- PHP variable

- MySQL

- Alternate PHP Cache (APC)

- Memcached (multiple PHP interfaces)

- Redis, Couchbase, Riak

HOW TO CACHE OBJECTS

```php
<?php
// Connect to the Memcached server
$mc = new Memcached();
$mc->addServer( 'localhost', 11211 );

// Get the cached refund amount
$key    = 'refund-2014';
$refund = $mc->get( $key );

// Regenerate the refund amount if not found
if ( $mc->getResultCode() === Memcached::RES_NOTFOUND ) {
    $refund = calculate_refund();
    $mc->set( $key, $refund );
}

// Do something with the value
echo 'Refund amount: &#36;' . (float) $refund;
```

HOW TO CACHE OBJECTS

```php
1  <?php
2  // Connect to the Memcached server
3  $mc = new Memcached();
4  $mc->addServer( 'localhost', 11211 );
```

1 Connect to the cache

HOW TO CACHE OBJECTS

```php
1  <?php
2  // Connect to the Memcached server
3  $mc = new Memcached();
4  $mc->addServer( 'localhost', 11211 );
5
6  // Get the cached refund amount
7  $key    = 'refund-2014';
8  $refund = $mc->get( $key );
```

2 Lookup cached item

HOW TO CACHE OBJECTS

```php
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2  // Connect to the Memcached server
3  $mc = new Memcached();
4  $mc->addServer( 'localhost', 11211 );
5
6  // Get the cached refund amount
7  $key    = 'refund-2014';
8  $refund = $mc->get( $key );
9
10 // Regenerate the refund amount if not found
11 if ( $mc->getResultCode() === Memcached::RES_NOTFOUND ) {
12     $refund = calculate_refund();
13     $mc->set( $key, $refund );
14 }
```

3 Regenerate if not found

HOW TO CACHE OBJECTS

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13      $mc->set( $key, $refund );
14  }
15
16  // Do something with the value
17  echo 'Refund amount: &#36;' . (float) $refund;
```

WHEN TO OBJECT CACHE

1. When the data changes

2. On an interval

3. On front-end requests

TIPS

- Always set a TTL on cached objects

  - …but be sure the objects regenerate themselves

- Start by thinking about invalidation

- App should run without a cache

- Abstract caching into a class for easy caching engine replacement