

LAB101Assignment

Type:	LongAssignment
Code:	C.L.P0010
LOC:	150
Slot(s):	3

Title

Memcached.

Background Context

Memcached is a high-performance, distributed memory object caching system, generic in nature, but originally intended for use in speeding up dynamic web applications by alleviating database load.

Read more at <http://memcached.org/>

Program Specifications

There are some main functions that we use with Memcache and they are as follows:

- 1) Store data: sets a given key with a given value
- 2) Retrieve item: gets the value for a specified key
- 3) Delete item: remove a key and cache data
- 4) Flush all existing items: removes all keys and cached data
- 5) Exit the program.

Function details:

- 1) Function 1: When we store data using Memcache there are 3 parts to storing the data, those three parts are the key, the value, and the expiry time of the cached item. The key is used to reference the stored data.
 - The key that will be associated with the item.
 - The variable to store. Strings and integers are stored as is, other types are stored serialized.
 - Expiration time of the item. If it's equal to zero, the item will never expire. You can also use Unix timestamp or a number of seconds starting from current time, but in the latter case the number of seconds may not exceed 2592000 (30 days).
- 2) Function 2: Retrieve item, returns previously stored data if an item with such key exists.
- 3) Function 3: Deletes an item with the key.
- 4) Flush all existing items: The flush will expire all items up to the ones set within the same second.

Expectation of User interface:

```
===== Memcache =====

1) Store data
2) Retrieve item
3) Delete item
4) Flush all existing items
5) Exit the program.

Enter your choice: 1

Enter your key: _title_for_key
Enter your variable: This is my data
Enter expire time: 50

Store data success with key '_title_for_key', using on-the-fly compression expire time is 50 seconds.

Enter your choice: 2

Enter your key: _title_for_key

Your data is: This is my data

Enter your choice: 3

Enter your key: _title_for_key

Delete success.

Enter your choice: 4

Success
```

Guidelines