JedisAppliacation Documentation

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1.0 Introduction

1.1 Purpose of this document

The purpose of this document is to provide documentation for Restful JedisApplication

1.2 Intended Audience

Development and Testing Team

1.3 Hardware and Software Requirements

1. Hardware Requirements
   a. Desktop with 8 GB RAM

2. Software Requirements
   a. Java 8
   b. Maven
   c. Eclipse
   d. Postman
   e. Redis Server
   f. Chrome Browser

2.0 Background on Project

2.1 Language Selection

Java provide a great support to Redis using java Redis Client named Jedis and moreover Java SpringBoot frame work provides a brilliant support for restful web services.

2.2 Used Data Structure

Mainly Java Collections along with Plain Object Java Class and primitive java data types have been used to provide MVC like structure to the Project

2.3 Multithreaded Implementation

The software support multithread implementation by configuring JedisClientConfiguration class with a support of maximum 16 connection to the Redis database at a client. It works on Java Callable interface. It must be noted Redis itself is a single threaded program. It can achieve concurrency at the Input Output level by using IO demultiplexing mechanism and event lock which is basically what Jedis does.

2.4 Further Improvement

The software currently is more of a implementation and demonstration project it can be enhanced into complete CRUD project.

3.0 Structure of The Project

The Project can be divided mainly into actual software and Postman API mock collection each into Jedis and POSTMAN folder respectively.

4.0 Process to run the software

Step 1: Start Redis Server

Step 2: Open and import the Jedis Folder as a Maven Project in eclipse

Step 3: Migrate to src/main/resources/application.properties and redis server host password and port number

Step 4: Open `com.unacademy.redis.jedis.JedisApplication` and `run it as a standalone java application`

Step 5: Embedded tomcat server will start the service at default port 8080

5.0 Process to Import Postman API test collection

If not familiar with postman, the postman is just a tool to make rest calls. Using postman, one can share the API calls with others.

How to import these collections to your postman:

1- Download postman from the internet.

2- Click on the file menu, select Import.

3- From the pop up select Import From file and import POSTMAN/JedisSpringBoot.postman_collection.json

6.0 Available API test methods

- /programmer-string:POST – Post Progammer To SERVER As JSON
- /programmer-string/{id}:GET – GET Programmer From Server As JSON Based on {id}
- /programmer-list:POST – Post List Of Programmers To Server As JSON
- /programmer-list:GET – GET List Of Programmers To Server As JSON
- /programmer-list/count:GET – GET Total Programmers In The List key OF Redis
- /programmer-set:POST – Post List Of Programmers To Server As JSON, Unique Data is Mentioned at Database
- /programmer-set:GET – Get Unqiue List Of Programmers From The Server As JSON Response
- /isProgrammer – Returns Weather Programmer Is In The Unique List

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