

Lab5: Key-Value Store [NOSQL]

Objectives: Learn the basic command to collect and retrieve data from key-value store

Estimated Time : 1 hours

Lab Instruction

This case study shows the scenario of registration system using Redis as a caching system to improve the efficiency to be able to work faster. Write Redis commands and capture screenshots for answer 3 questions using the given schema.

Table1. Course Information

CourseID	Course name	Credits	Semester	Year
DMM101	DMM	3	Aug	2020
ML101	ML	3	Aug	2020
IRDM101	IRDM	3	Aug	2020

Table2. Student Information

StudentID	Name	Gender	Field of study
st120100	Peter	Male	CS
st120101	Jane	Female	IM
st120103	Joe	Male	DSAI

1. Draw the data model of registration system using Redis as a caching system.

[Task 1.] Design the data model of registration system including Course, Student and Registration Information.

2. Admin insert the course information and student information in key-value store.

[Task 2.] Write insert commands to store course information and student information in key-value store.

3. Mr. Joe is a student. He would like to enroll in two courses for this semester. After he read course descriptions, he decides to enroll "DMM101" and "IRDM101" and he adds these courses in the registration table.

[Task 3.] Write insert commands to collect the selected courses of Mr. Joe.

[Task 4.] Write the command to retrieve the selected courses of Mr. Joe .

4. However, he does not click “Request for approval” immediately. He goes to ask his advisor about his decision. His advisor suggests Mr. Joe to enroll “ML101”, so he drops “IRDM101”.

[Task 5.] Write the command to drop course “IRDM101” and add course “ML101”.

5. All enrolled courses information is shown in the registration table.

[Task 6.] Write the command to retrieve the all selected courses of Mr. Joe.

Lab Submission

Submission System: Course LMS (primary),

Email: dmmlab2020@gmail.com (In case of you cannot submit in Course LMS)

For example; you want to submit LAB 4 and your id is st120200, your e-mail subject and your assignment filename must be LAB5_st120200

Total TASKS: 6