Pune Institute of Computer Technology
Dhankawadi, Pune-43
Department of Information Technology

Class: TE (IT)   Subject: LP-II (WADL)

Assignment No.: 3b   A.Y.: 2023-24   Date:

Title: API for CRUD operations

Problem Statement:

Create four APIs using Node.JS, Express JS and MongoDB for CRUD operations for Register User, Login User, Show User Data.

Objective:

Use NodeJS, Express, MongoDB and Mongoose libraries to create CRUD operations.

Theory:

API (Application Programming Interface) is a collection of communication protocols and subroutines used by various programs to communicate between them. A programmer can make use of various API tools to make their program easier and simpler.

A developer extensively uses APIs in their software to implement various features by using an API call without writing complex codes for the same.

CRUD is an acronym for Create, Read, Update and Delete. It is a set of operations we get servers to execute (POST, GET, PUT and DELETE requests respectively). This is what each operation does —

· Create (POST) — Make something
· Read (GET) — Get something
· Update (PUT) — Change something

· Delete (DELETE) - Remove something

Step 1 - Creating the Application
Create a new folder for the application. Initialize the application with a package.json file. Go to the root folder of your application and type npm init to initialize your app with a package.json file

Step 2 - Install dependencies. Install express, mongoose, and body-parser modules. Setup the Web Server by creating a new file named server.js in the root folder of the application. ~~with the following~~

Step 3 - Configuring and connecting to the database. Create a new folder config in the root folder of our application for keeping all the configurations. Create a new file database.config.js inside config folder.

Step 4 - Create Mongoose Model. Create a folder called model inside the app folder. Create a user.js file.

Step 5 - ~~Thus~~ Create the Controller. Inside app/controllers folder, create User.js with the CRUD functions.

Conclusion:
Thus, we have used node JS, express, mongo DB and mongoose libraries to create CRUD operations.