MODULE WEB APPLICATION

INTRODUCTION

Your task is to implement the backend with PHP and the frontend using HTML, CSS, and JS.

DESCRIPTION OF PROJECT AND TASKS

1) Create a **'users'** table according to the following data dictionary:

column	data type
id	bigint (20) : unsigned
firstname	varchar(255)
lastname	varchar(255)
username	varchar(255)
password	varchar(255)
created_at	timestamp

2) Create dummy users on users table (password is hashed using **bcrypt**):

username	password	First name	Last name
due.date	54321	John	Doe
date.due	123789	Richard	Roe
due.due	90854	Jane	Poe

3) These are web service endpoint that you need to create:

a. Register

URL: [domain]/register.php

Description: For client to register new user

Method: POST

Request Parameter:

- Body:
    - First Name
    - Last Name
    - Username
    - Password

Validation:

- First Name must be alphabet only, length between 2 – 20
- Last name must be alphabet only, length between 2 – 20
- Username only consist of alphanumeric, underscore '_', or dot '.', and the length must be between 5 – 12
- Username must be unique
- Password length between 5 - 12

Response:

- If register success, registered user automatically logged in:

    Header: response status: 201

Body:

- o Token (authorization token generated by the system from logged in user id with **bcrypt** hashing method)

- If input validation failed:

Header: response status: 422

Body: JSON with informative error message

b. Login

URL: [domain]/login.php

Description: For client to generate and get login token using username and password. Username and password must be valid.

Method: POST

Request Parameter:

- Body:
  - o Username
  - o Password

Response:

- If login success:

Header: response status: 200

Body:

- o Token (authorization token generated by the system from logged in user id with bcrypt hashing method)

- If login failed (username or password do not match or empty):

Header: response status: 401

Body: JSON message: "invalid login"

c. Logout

URL: [domain]/logout.php?token={*AUTHORIZATION_TOKEN*}

Description: For server to make token invalid

Method: GET

Response:

- If logout success:

Header: response status: 200

Body:

- o message: logout success

- If logout failed (token invalid):

Header: response status: 401

Body: JSON message: "unauthorized user"

4) Provide a simple user interface (HTML, CSS, and JS) for:
- a. Login Page :
  - Display login form
  - Display button to register
  - On success redirect to home page
- b. Register Page :
  - Display register form
  - Display button to login page
  - On success redirect to home page
- c. Home Page :
  - Display logout button

5) This module will be marked using Postman.