REST API MODULE

CONTENTS

This module has the following files:

1. MODULE_REST_API.doc
2. MODULE_REST_API_MEDIA.zip

INTRODUCTION

We know that the pandemic is not over yet and vaccination is something that must be done to be able to reduce the death rate against the COVID-19 attack. So the government appoints you as a competent person to create a vaccination registration platform.

The goal of this platform is so that societies can register vaccinations on the platform without having to come to the vaccine spot directly and can also see when and where society can come to the vaccine spot.

DESCRIPTION OF PROJECTS AND TASKS

Vaccination registration involves the society platform (request consultation and register first/second vaccination), doctor platform (see and accept/reject consultation from society), and officer platform (update vaccination data from society such as giving vaccines and determining who the vaccinator is).

But your scope of work on this module is only to **create a society platform**. Your job is creating a Society Vaccination REST API using provided PHP frameworks (Laravel).

REST API

Authentication

Before a society performs any activity on the society platform, they must be logged in using their **ID card number and password**. After successfully logging in, the token will be automatically generated from the **md5 of society ID card number**.

Specifications :

```
Feature: A1 - Login and Logout as society: as a visitor, i want to
login so that i can enter the system and register a vaccination.

    Scenario: Society Login

        Request:

            URL: [domain]/api/v1/auth/login

            Method: POST

            Header:

            Body: { id_card_number: "SomeText", password: "SomeText" }

        Response:

        A1a - If login success

            Header: Response code: 200

            Body: {

                    "name": "Siti Puspita",

                    "born_date": "1974-10-22",

                    "gender": "male"|"female",

                    "address": "Ki. Raya Setiabudhi No. 790",

                    "token": "e96aaafb6f2f76460b8cc93723bd030e",

                    "regional": {

                        "id": 1,

                        "province": "DKI Jakarta",

                        "district": "Central Jakarta"
```

```
                    }

                }

        A1b - If ID Card Number or Password incorrect

            Header: Response code: 401

            Body: { "message": "ID Card Number or Password incorrect" }

Scenario: Society Logout

    Request:

        URL: [domain]/api/v1/auth/logout

        Params: { token }

        Method: POST

        Header:

        Body:

    Response:

        A1c - If logout success

            Header: Response code: 200

            Body: { "message": "Logout success" }

        A1d - If logout invalid token

            Header: Response code: 401

            Body: { "message": "Invalid token" }
```

Request Consultation

To be able to register a vaccine, the society must consult with a doctor on the platform first. The society can view consultation status and make consultation requests. The society can only make one vaccination request.

Specifications:

```
Feature: A2 - Request Consultation: As a society, I want to request
consultation so that I can register for vaccination when my
consultation is accepted.

    Scenario: Request consultation

        Request:

            URL: [domain]/api/v1/consultations
```

```
    Params: { token }

    Method: POST

    Header:

    Body: { disease_history: "SomeText", current_symptoms:

        "SomeText" }

Response:

    A2a - If request consultation success

        Header: Response code: 200

        Body: { "message": "Request consultation sent successful" }

    A2b - If invalid token

        Header: Response code: 401

        Body: { "message": "Unauthorized user" }


Scenario: Get society consultation

    Request:

        URL: [domain]/api/v1/consultations

        Params: { token }

        Method: GET

        Header:

        Body:

    Response:

        A2c - If success

            Header: Response code: 200

            Body: {
```

```
        "consultation": {

                "id": 1,

                "status": "pending"|"accepted"|"rejected",

                "disease_history": "SomeText"|null,

                "current_symptoms": "SomeText"|null,

                "doctor_notes": "SomeText"|null,

                "doctor": { DOCTOR }|null

            }

        }



        A2d - If invalid token

            Header: Response code: 401

            Body: {"message": "Unauthorized user"}
```

Vaccination Spot

When the consultation has been accepted by the doctor and society will register the vaccination, the society can choose the vaccination spot based on the society region. List of available vaccines at each vaccine spot should also be displayed.

In the spot detail, calculate the number of vaccination registrations at that spot and on the requested date in the date param (optional and default today).

Specifications:

```
Feature: A3 - Vaccination Spot: As a society, I want to see
vaccination spots in my region.


    Scenario: Get all vaccine spots by society region

        Request:

            URL: [domain]/api/v1/spots
```

```
Params: { token }

Method: GET

Header:

Body:

Response:

    A3a - If success

        Header: Response code: 200

        Body: {

            "spots": [

                {

                    "id": 1,

                    "name": "Purnawati Hospital",

                    "address": "Jr. Gotong Royong",

                    "serve": 1|2|3,

                    "capacity": 15,

                    "available_vaccines": {

                        "Sinovac": true,

                        "AstraZeneca": false,

                        "Moderna": true,

                        "Pfizer": true,

                        "Sinnopharm": false

                    }

                },

                ...,
```

```
            ]

        }

    A3b - If invalid token

        Header: Response code: 401

        Body: { "message": "Unauthorized user" }


Scenario: Get spot detail by spot ID and date

    Request:

        URL: /api/v1/spots/<spot_id>

        Params: { token, date (optional and default today) }

        Method: GET

        Header:

        Body:

    Response:

        A3c - If success

            Header: Response code: 200

            Body: {

                    "date": "October 21, 2021",

                    "spot": {

                        "id": 1,

                        "name": "Purnawati Hospital",

                        "address": "Jr. Gotong Royong No. 264",

                        "serve": 2,

                        "capacity": 15
```

```
                },

                "vaccinations_count": 12

          }
```

A3d – If invalid token

   Header: Response code: 401

   Body: { "message": "Unauthorized user" }

Vaccination Registration

The society can register for vaccination if the society consultation has been accepted by the doctor. At the vaccination register, if the society has finished the first vaccination, it will automatically register the second vaccination.

Society can register for a second vaccination on condition that they have to wait 30 days after the first vaccination day and each society can only register for vaccination 2 times. Society can be said to be vaccinated if it has received a dose of the vaccine.

Spot ID and date must be filled where the date format is *YYYY-MM-DD*.

Specifications:

```
Feature: A4 - Vaccination: as a society, i want to register
vaccination and get all vaccination data.



    Scenario: Register Vaccination

        Request:

            URL: /api/v1/vaccinations

            Params: { token }

            Method: POST

            Header:

            Body: { spot_id: 1, date: "2021-10-26" }

        Response:

        A4a - If success

            Header: Response code: 200

            Body: { "message": "First|Second vaccination registered

                    successful" }

        A4b - If invalid token

            Header: Response code: 401

            Body: { "message": "Unauthorized user" }

        A4c - If the society consultation hasn't accepted by doctor
```

```
        Header: Response code: 401

        Body: { "message": "Your consultation must be accepted by
        doctor before" }

    A4d - If invalid fields

        Header: Response code: 401

        Body: {

                "message": "Invalid field",
                "errors": {
                    "date": [
                        "The date does not match the format Y-m-d."
                    ],
                    "spot_id": [
                        "The spot id field is required."
                    ]
                }
            }
    A4e - If 2nd vaccination < 30 days from 1st vaccination

        Header: Response code: 401

        Body: { "message": "Wait at least +30 days from 1st

                Vaccination" }

    A4f - If have been 2x vaccinated

        Header: Response code: 401

        Body: { "message": "Society has been 2x vaccinated" }


Scenario: Get all of society vaccinations

    Request:

        URL: [domain]/api/v1/vaccinations

        Params: { token }
```

Method: GET

Header:

Body: Response:

A4g - If success

  Header: Response code: 200

  Body: {

```
        "vaccinations": {

                "first": {

                    "queue": 1,

                    "dose": 1,

                    "vaccination_date": "2021-10-21",

                    "spot": {

                        "id": 1,

                        "name": "Purnawati Hospital",

                        "address": "Jr. Gotong Royong",

                        "serve": 2,

                        "capacity": 15,

                        "regional": {

                            "id": 1,

                            "province": "DKI Jakarta",

                            "district": "Central Jakarta"

                        }

                    },

                    "status": "done",
```

```
                        "vaccine": {

                            "id": 1,

                            "name": "Sinovac"

                        },

                        "vaccinator": {

                            "id": 1,

                            "role": "doctor",

                            "name": "Dr. Halima Yuniar"

                        }

                    },

                    "second": <VACCINATION>|null

                }

            }


        A4h - If invalid token

            Header: Response code: 401

Body: { "message": "Unauthorized user" }
```
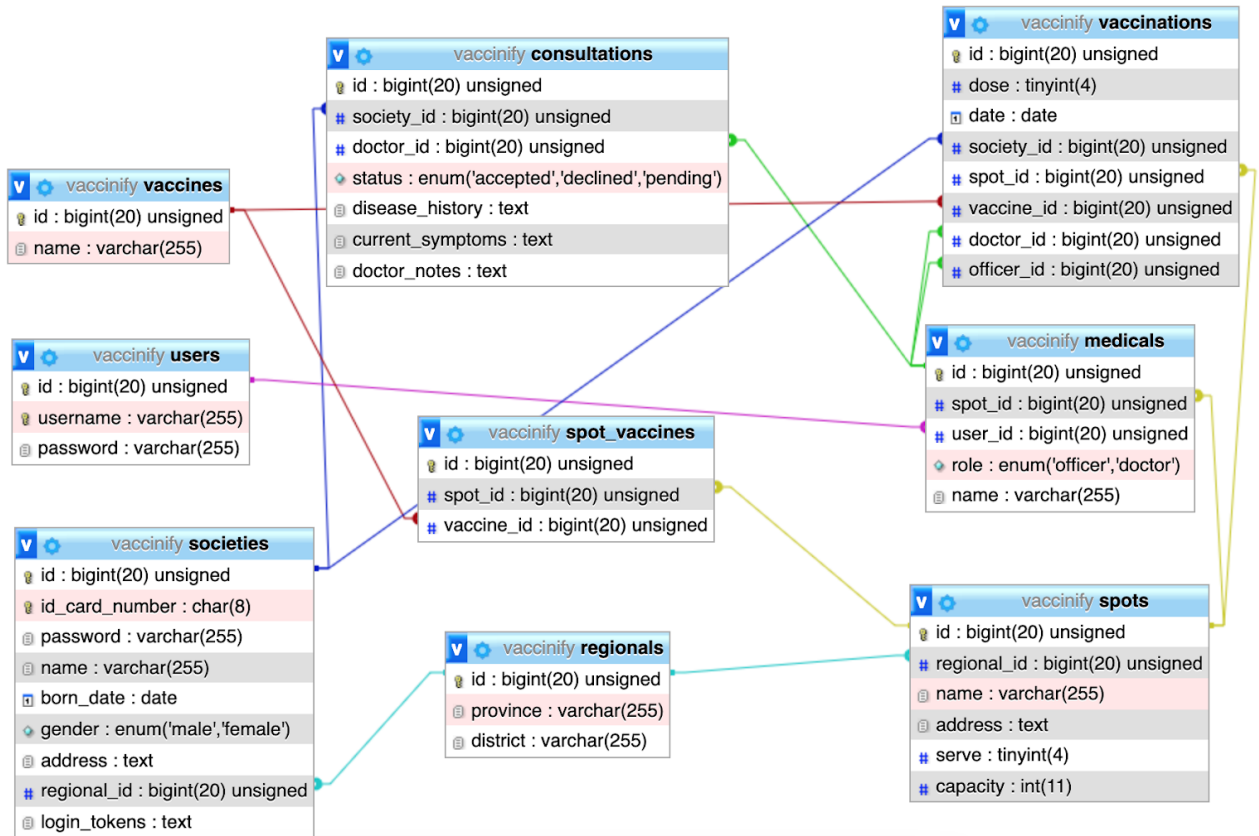
ERD

You can use and improve ERD below:

INSTRUCTION FOR COMPETITORS

- Import the database that has been provided in db-dump in the media files folder.

- Save your work in the "rest_api" folder **XX_module_rest_api**

- Postman environment and collection provided in REST_API_MEDIA/postman/

- You can check community accounts based on vaccination stages by looking at the accounts that have been provided in the folder REST_API_MEDIA/account/

- Use the gui templates provided in the media files.

- Create/generate a DB-diagram named "db-diagram.xxx" (xxx is the extension/type of the file eg. pdf or jpg) and put it into the directory mentioned above. Example:
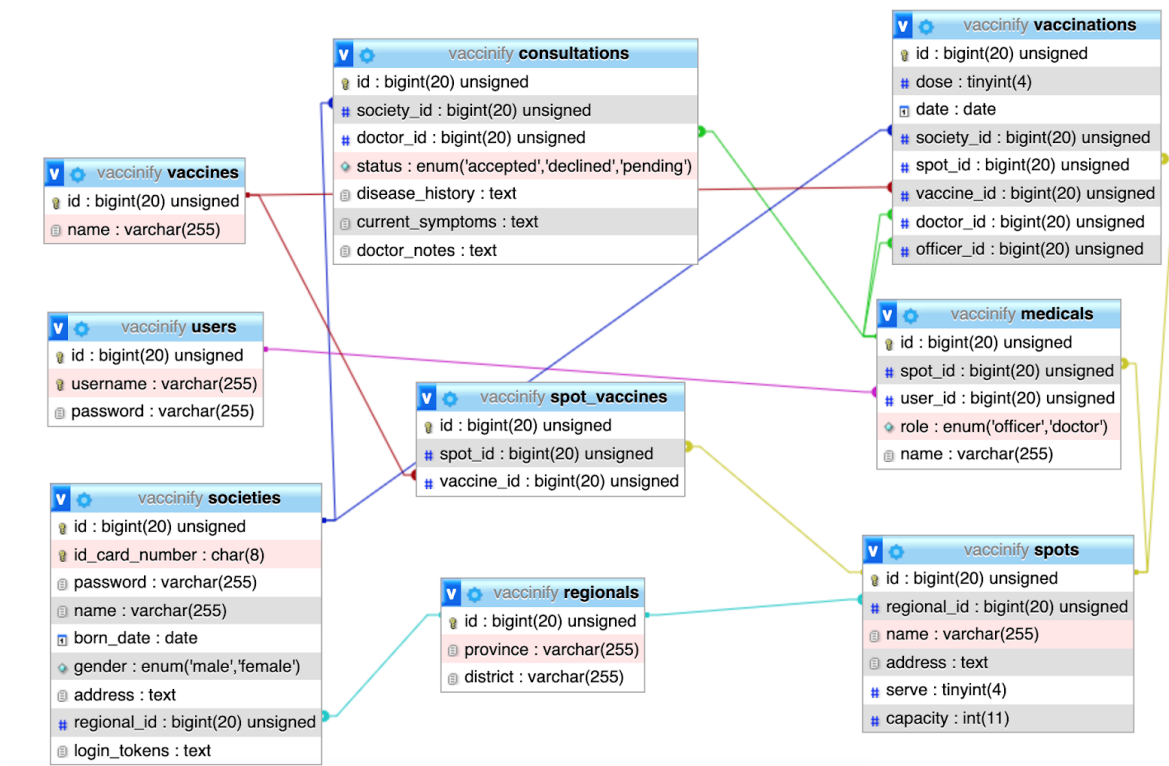
- For this module, you must use one of the available frameworks provided. Applications developed without use of any of these frameworks will not be considered. You should take advantage of the framework as much as possible.