

PointSync

Clinton Roberts

Overview

The backend for my web application, PointSync, will be using a Spring Boot framework with a PostgreSQL database. It will interact with a database to keep and retrieve data, making it scalable, efficient, and maintainable for the application.

Routes

Doctor Routes

POST Doctor

Method/Endpoint: POST /api/doctors

URL: <https://capstone802.herokuapp.com/api/doctors>

Purpose: In order to access the application, the doctor will need to make an account.

Example Request:

```
curl -request POST -url  
https://capstone802.herokuapp.com/api/doctors
```

```
{  
  "username": "doctor123",  
  "email": "doctor@example.com",  
  "password": "securepassword",  
  "unique_id": "44465484"  
}
```

Success response: Response (201 Created):

```
{
  "doctor_id": 1,
  "username": "doctor123",
  "email": "doctor@example.com",
  "unique_id": "44465484"
}
```

Error response: Error Response (400 Bad Request)

```
{
  "error": "Invalid request. Please provide a valid email address."
}
```

Get Doctor by Name

Method: GET /api/doctors

URL: <https://capstone802.herokuapp.com/api/doctors>

Purpose: When a patient or another doctor clicks a doctor, their page will show up.

Example Request:

curl -request GET -url

<https://capstone802.herokuapp.com/api/doctors>

Success response: Response: 200 OK

```
[
  {
    "doctor_id": 1,
    "username": "doctor123",
    "email": "doctor@example.com",
  },
]
```

Error response: ERROR 404 Not Found

```
{  
  "error": "Doctor not found with ID: 2"  
}
```

Update Doctor

Method: PUT /api/doctors/{doctorId}

URL: <https://capstone802.herokuapp.com/api/doctors>

Purpose: This will allow the doctor to update their information

```
{  
  "username": "updatedDoctor",  
  "id": "4434542"  
}
```

Example Request:

curl -request PUT -url <https://capstone802.herokuapp.com/api/doctors/{doctorId}>
<https://capstone802.herokuapp.com/api/doctors/1>

Success response:

```
{  
  "doctor_id": 1,  
  "username": "updatedDoctor",  
  "email": "doctor@example.com",  
  "password": "updatedPassword"  
}
```

Error response:

```
{
  "error": "Invalid request. Please provide a valid parameter."
}
```

Patient Routes

Method: Post /api/patients

URL: <https://capstone802.herokuapp.com/api/patients>

Purpose: This will allow a patient to create an account to use the application.

Example Request:

curl -request post -url

```
{
  "username": "patient123",
  "email": "patient@example.com",
  "password": "securepassword",
  "name": "name"
}
```

Success response: Response 201 Created

```
{
  "patient_id": 1,
  "username": "patient123",
  "email": "patient@example.com",
  "name": "John Doe"
}
```

Error response: Error Response 400: Bad Request

```
{  
  "error": "Invalid request. Please provide a valid email."  
}
```

Get Patient

Method: GET /api/patients/{patientId}

URL: <https://capstone802.herokuapp.com/api/patients>

Purpose: If a patient has requested a doctor, they can click on the patient to pull them up.

```
{  
  "patient_id": 1,  
  "username": "patient123",  
  "email": "patient@example.com",  
  "name": "John Doe"  
  // Other patient-specific fields  
}
```

Example Request:

curl -request Get -url

<https://capstone802.herokuapp.com/api/patients/1>

Error response: Not Found 404

```
{  
  "error": "Patient not found with ID: 2"  
}
```

Appointment Routes

Make Appoint:

Method: Post

URL: <https://capstone802.herokuapp.com/api/appointments>

Purpose: If a patient needs to make an appointment, they'll fill out a form

Example Request:

```
curl -request Post -url
```

```
https://capstone802.herokuapp.com/api/appointments
```

Success response: 201 Created

```
{  
  "title": "Checkup",  
  "date": "2023-11-01",  
  "time": "10:00 AM",  
  "userId": 1,  
  "DoctorId": 1  
}
```

Error response: 400 Bad Request

```
{  
  "error": "Invalid request. Please provide a valid date and time."  
}
```

Get All Appointments

Method: GET [api/appointments](https://capstone802.herokuapp.com/api/appointments)

URL: <https://capstone802.herokuapp.com/api/appointments>

Purpose: This will allow doctors to view all of the appointments

Example Request:

curl -request METHOD -url

Success response: 200 OK

```
[
  {
    "appointment_id": 1,
    "title": "Checkup",
    "date": "2023-11-01",
    "time": "10:00 AM",
    "user_id": 1
    // Other appointment-specific fields
  },
  // Other appointments
]
```

Error response: Not Found 404

Update Appointment

Method: Put

URL: <https://capstone802.herokuapp.com/api/appointments>

Purpose:

Example Request:

curl -request Post -url

<https://capstone802.herokuapp.com/api/appointments/1>

Success response: 200 OK

```
{
  "appointment_id": 1,
  "title": "Updated Checkup",
  "date": "2023-11-02",
  "time": "11:00 AM"
  // Other appointment-specific fields
}
```

Error response: 400 Bad Request

```
{
  "error": "Invalid request. Please provide a valid date and time."
}
```

Delete Appointment

Method: DELETE

URL: <https://capstone802.herokuapp.com/api/appointments/1>

Purpose: Delete appointments that can't be made

Example Request:

curl -request Post -url

<https://capstone802.herokuapp.com/api/appointments/1>

Success response: 204 No Content

Error response: 404 Not Found

```
"error": "Appointment not found with ID: 2"
```


Post Data Charts

Method:

URL: <https://capstone802.herokuapp.com/api/appointments>

Purpose: Take the data from appointments in database and make them a chart

Example Request:

`curl -request Post -url`

`https://capstone802.herokuapp.com/api/charts`

Success response: 200 OK

```
{
  "totalAppointments": 100,
  "appointmentsByMonth": {
    "January": 15,
    "February": 12,
    // ... other months
  },
  "appointmentsByDoctor": {
    "Dr. Smith": 40,
    "Dr. Johnson": 30,
    // ... other doctors
  }
  // Other statistical information
}
```

Error response: 500 Internal Server Error

```
{
  "error": "An unexpected server error occurred while fetching appointment statistics."
}
```