# **PerSpection App**

**EDITED** Design: Service Layers

## Owner

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## Overview

The PerSpection app will allow users to build test inspections before official inspection. The application frontend and backend will be hosted through <a href="Render.com">Render.com</a> and will be built using a Postgres Object-Relational Database. RESTful APIs Requests and responses will be sent as JSON documents.

## **Hosting Platform**

Render.com

#### Project URL

https://perspectiveapp.onrender.com

#### GitHub URL

https://github.com/SWDV-Capstone/PerSpectiveApp.git

## Database Type

Object-Relational Database

## **Database Connection**

HTTP protocol to all HTTP requests and responses.

## **Database Base URL**

postgres://admin:KqAiCAkiyXEs0ivOiaGbgzAWNBytlVNM@dpg-co07ge8cmk4c73b650tg-a.ohio-postgres.render.com/perspectiveapp

### Service Layers

- 1. Management Layer for CRUD operation endpoints.
- 2. Data Persistence Layer for data storage and retrieval.
- 3. Reporting Layer for reporting analytics.
- 4. Validation layer for input controls
- 5. Authentication layer for application access/navigation.
- 6. User policy layer for UI roles and rights.
- 7. Automation layer for event triggers.

## **Users**

```
Create User: Select "Create Account" for login and click "Save".
```

```
async function createUser( data ) {
    const res = await axios.post( baseURL, some_column: 'someValue' })
}
Edit User: Select user's "Edit" icon and click "Save".

async function editUser( data ) {
    const res = await axios.patch( baseURL + '/' + data.id, { some_column: 'someValue' })
}
```

## **Inspections**

**Create Inspection:** Select "Add New Inspection" and click "Add" icon.

```
async function createInspection( data ) {
    const res = await axios.post( baseURL, some_column: 'someValue' })
}
```

Edit Inspection: Select Inspection's "Edit" icon and click "Save".

```
async function editInspection( data ) {
    const res = await axios.patch( baseURL + '/' + data.id, { some_column: 'someValue' })
}
```

**Display Inspections:** Created Inspections will be displayed on the Inspections page.

```
async function fetchInspections) {
    const res = await axios.get( baseURL + '?_sort=inspection_name&_order=asc' )
    inspectionList.value = res.data
}
```

### **Points**

**Create Points:** Select "Add Inspection Point" and click "Add" icon.

```
async function createPoint( data ) {
    const res = await axios.post( baseURL, some_column: 'someValue' })
}
```

Edit Point: Click Point's "Edit" icon and click "Save".

```
async function editPoint( data ) {
    const res = await axios.patch( baseURL + '/' + data.id, { some_column: 'someValue' })
}
```

**Display Points:** Created point will be displayed as accordion of inspection parent.

```
async function fetchPoints() {
    const res = await axios.get( baseURL + '?_sort=point_name&_order=asc' )
    pointList.value = res.data
}
```

**Delete Point:** Click Point's "Delete" icon.

```
async function deletePoint( data ) {
   const res = await axios.delete( baseURL + '/' + data.id )
}
```

## **Example: JSON Object (Inspection)**

```
{
       "inspection_id": 1001,
       "inspection_name": "Kitchen: Temperature Control",
       "points count": 2,
       "inspection_group": "Kitchen Monthly",
       "inspection interval": 30,
       "inspection_due_date": 01-02-2024,
       "inspection start date": 01-01-2024,
       "inspection end date": null,
       "inspection status": incomplete,
       "user": [{
              "user id": 101,
              "user isAdmin": true
       "Points": [
              {
                     "point id": 1001,
                     "point name": "Thermometers working correctly",
                     "point status": "measured",
                     "Measurements": [{
                            "measurement_id": 1,
                            "measurement value": "Good",
                            "measurement date": 01-01-2024
              },
                     "point id": 1004,
                     "point name": " Cold food below 40°F ",
                     "point_status": "not-measured",
                     "Measurements": [{
                            "measurement_id": null,
                            "measurement value": null,
                            "measurement_date": null
              },
       1
}
```