# API Specifications

**Endpoints:**

1. *GET /employees*

* Retrieve a list of all employees
* Request:
  + Method: GET
  + URL: /employees
* Response:
  + Status Code: 200 (Success)
  + Body: List of employee objects

1. *POST /employees*

* Create a new employee
* Request:
  + Method: POST
  + URL: /employees
  + Headers: Content-Type: application/json
  + Body: Employee object in JSON format
* Response:
  + Status Code: 201 (Created)
  + Body: Newly created employee object

1. *GET /employees/{identity\_no}:*

* Retrieve details of a specific employee
* Request:
  + Method: GET
  + URL: /employees/{identity\_no}
* Response:
  + Status Code: 200 (Success)
  + Body: Employee object

1. *PUT /employees/{identity\_no}:*

* Update details of a specific employee
* Request:
  + Method: PUT
  + URL: /employees/{identity\_no}
  + Headers: Content-Type: application/json
  + Body: Updated employee object in JSON format
* Response:
  + Status Code: 200 (Success)
  + Body: Updated employee object

1. *DELETE /employees/{identity\_no}:*

* Delete a specific employee.
* Request:
  + Method: DELETE
  + URL: /employees/{identity\_no}
* Response:
  + Status Code: 204 (No Content)

Example Employee Object:

{

"name": "Kelvin Ho Juin Ket",

"dob": "2002-12-08",

"date\_joined": "2022-01-01",

“date\_left”: “2023-01-01”,

"identity\_no": "123456-78-9012",

"department": "engineering",

"salary": 5000,

"remark": "Experienced engineer"

}

# Database Schema

**Collections**:

1. *employees*

* Stores all employees’ data

|  |  |  |
| --- | --- | --- |
| **Field name** | **Data type** | **Explanation** |
| \_id | ObjectId | Unique id generated by MongoDB for each employee |
| name | string | Full Name of the employee |
| dob | date | Date of birth of the employee |
| date\_joined | date | Date when the employee joined |
| date\_left | date / null | Date when the employee left, or null if still employed |
| identity\_no | string | Unique identity number of the employee, NRIC or Passport |
| department | string - enumerated | Department where the employee works, enumerated for only 'admin', 'engineering', 'management', 'sales' and 'qc' |
| salary | double / int | Salary of the employee |
| remark | string | Additional remarks about the employee |

1. *logs*

* Stores all log data whenever a destructive method is called (Create, Update and Delete)

|  |  |  |
| --- | --- | --- |
| **Field name** | **Data type** | **Explanation** |
| \_id | ObjectId | Unique id generated by MongoDB for each log |
| timestamp | date | Date and time details for the log |
| action | string – enumerated | Action of the log |
| employee\_id | string | Modified employee identity\_no of the log |
| details | string | Detail of the log |