



	<b>Must know</b>	<p>Hiring at HabotConnect is a demanding process. Typically 1 out of 180+ candidates are accepted. You must show that you know your work.</p> <p>If you wish to be a HaboTech, you must know its:</p> <ol style="list-style-type: none"><li>1. Values</li><li>2. Leadership Principles</li></ol>
	<b>Project Context</b>	Build a basic REST API to manage employees in a company, focusing on CRUD operations, RESTful principles, and authentication.
	<b>You Will Be Assessed On</b>	<ol style="list-style-type: none"><li>1. Adherence to RESTful principles: Proper use of HTTP methods and status codes.</li><li>2. Code Quality and Organization: Clean, modular code with appropriate validation and error handling.</li><li>3. Testing: Simple unit tests for each endpoint.</li><li>4. Documentation: Clear API documentation with instructions for running the project locally.</li><li>5. Authentication and Security: Proper implementation of token-based authentication.</li></ol>
	<b>You are Expected To Do</b>	<p><b>Objective:</b> Build a basic REST API to manage employees in a company, focusing on CRUD operations, RESTful principles, and authentication.</p> <p><b>Requirements</b></p> <ol style="list-style-type: none"><li>1. <b>API Endpoints:</b><ul style="list-style-type: none"><li>○ <b>Create an Employee:</b> POST /api/employees/</li><li>○ <b>List all Employees:</b> GET /api/employees/</li><li>○ <b>Retrieve a Single Employee:</b> GET /api/employees/{id}/</li><li>○ <b>Update an Employee:</b> PUT /api/employees/{id}/</li><li>○ <b>Delete an Employee:</b> DELETE /api/employees/{id}/</li></ul></li><li>2. <b>Employee Model:</b><ul style="list-style-type: none"><li>○ <b>id:</b> Unique identifier (auto-generated)</li><li>○ <b>name:</b> String, required</li><li>○ <b>email:</b> Email field, required and unique</li><li>○ <b>department:</b> String, optional (e.g., "HR", "Engineering", "Sales")</li><li>○ <b>role:</b> String, optional (e.g., "Manager", "Developer", "Analyst")</li><li>○ <b>date_joined:</b> Date, auto-generated on creation</li></ul></li><li>3. <b>Additional Requirements:</b></li></ol>

		<ul style="list-style-type: none"><li>○ <b>Validation:</b> Ensure <code>email</code> is unique and valid. <code>name</code> should not be empty.</li><li>○ <b>Error Handling:</b> Return appropriate HTTP status codes for different responses:<ul style="list-style-type: none"><li>■ <code>201 Created</code> for successful creation.</li><li>■ <code>404 Not Found</code> for invalid employee IDs.</li><li>■ <code>400 Bad Request</code> for validation errors.</li><li>■ <code>204 No Content</code> for successful deletion.</li></ul></li><li>○ <b>Filtering:</b> Allow filtering of employees by <code>department</code> and <code>role</code> (e.g., <code>GET /api/employees/?department=HR</code>).</li><li>○ <b>Pagination:</b> Limit results per page to 10 employees with pagination support (e.g., <code>GET /api/employees/?page=2</code>).</li><li>○ <b>Authentication:</b> Use token-based authentication (JWT or simple token) to secure the endpoints. Only authenticated users should access these endpoints.</li></ul> <p>4. <b>Testing:</b></p> <ul style="list-style-type: none"><li>○ Write basic tests to cover each endpoint and edge cases, like attempting to create an employee with an existing email.</li></ul>
	<b>The Presentation Is To Be</b>	<p>Instructions to complete</p> <p><b>You are required to:</b></p> <p><b>Intro:</b> Brief overview of the API and its purpose (CRUD for employee management).</p> <p><b>Authentication:</b></p> <ul style="list-style-type: none"><li>● Show how to authenticate with a <code>POST</code> request for a token.</li><li>● Add the token to Postman's Authorization header for secure requests.</li></ul> <p><b>Endpoint Demos:</b></p> <ul style="list-style-type: none"><li>● Create Employee (<code>POST /api/employees/</code>): Demonstrate creating an employee with valid data and handling a duplicate email (400 error).</li><li>● List Employees (<code>GET /api/employees/</code>): Show all employees with pagination, plus filtering by department or role.</li><li>● Retrieve Employee (<code>GET /api/employees/{id}/</code>): Fetch a single employee by ID, showing a successful request and a 404 error for non-existent IDs.</li><li>● Update Employee (<code>PUT /api/employees/{id}/</code>): Modify an employee's details and verify the updated response.</li></ul>

		<ul style="list-style-type: none"> <li>Delete Employee (DELETE /api/employees/{id}/): Delete an employee and confirm with a 204 No Content status.</li> </ul> <p><b>Summary:</b></p> <ul style="list-style-type: none"> <li>Brief recap of the CRUD operations.</li> <li>Highlight RESTful practices, error handling, and Postman's ease for testing.</li> </ul>
	<b>Suggestions</b>	<ul style="list-style-type: none"> <li>The project should take you 4 to 8 hrs to complete.</li> <li>You are expected to use outside resources to help you understand what is required</li> <li>Use this opportunity to find out whether you want to work with HabotConnect</li> <li>Show us that you can do what is required by us without supervision</li> <li>No company resource person will be available</li> </ul>
	<b>When</b>	You will present your completed project during the Project interview
	<b>Where</b>	Video call presentation via Google Meet. You will receive a calendar invite with the date and time from our HR team members.
	<b>Who</b>	You will be presenting to the panel members which may include CEO, Team Lead and HR team members
	<b>How</b>	<ul style="list-style-type: none"> <li>It is assumed that you will let us know if you are unable to do the required presentation and that you no longer wish to continue with the interview process at HabotConnect.</li> </ul>
	<b>Additional HabotConnect Resource links</b>	<p><b>The Leadership Principles:</b></p> <p> Leadership Principles -HAW 3 2025-271124.pdf</p> <p><b>HabotConnect Values:</b></p> <p> Habot- Values-HAW3-291124.pdf</p>