# API Documentation – Job Portal

This RESTful API enables interaction with job listings and applications. It supports standard CRUD operations using 8 core endpoints — 5 for Jobs and 3 for Applications.

## API Design Principles

- Follows REST conventions with clear resource-based routes (`/jobs`, `/applications`).

- Uses appropriate HTTP methods (GET, POST, PUT, DELETE).

- JSON used for request/response bodies.

- Implements validation, error handling, and proper HTTP status codes.

## Job API Endpoints (5 Total)

### 1. GET /api/jobs

Purpose: Fetch all job listings

Returns: Array of job objects (200 OK)

Error Handling: 500 Internal Server Error

Command-line Example (curl):

curl -X GET http://localhost:3000/api/jobs

### 2. GET /api/jobs/:id

Purpose: Fetch a specific job by ID

Returns: Job object (200 OK), or 404 if not found

Error Handling: 400 Bad Request, 500 Internal Server Error

Command-line Example (curl):

curl -X GET http://localhost:3000/api/jobs/1

### 3. POST /api/jobs

Purpose: Create a new job listing

Returns: Success message + new job ID (201 Created)

Error Handling: 400 Validation Error, 500 Internal Server Error

Command-line Example (curl):

curl -X POST http://localhost:3000/api/jobs \  
 -H "Content-Type: application/json" \  
 -d '{  
 "job\_title": "Software Engineer",  
 "company\_name": "Tech Corp",  
 "location": "New York",  
 "job\_type": "Full-time",  
 "salary\_range": "$80,000-$100,000",  
 "job\_description": "Developing web applications using modern technologies",  
 "application\_deadline": "2025-05-30"  
 }'

### 4. PUT /api/jobs/:id

Purpose: Update an existing job listing

Returns: Success message (200 OK)

Error Handling: 400 Bad Request, 404 Not Found, 500 Internal Server Error

Command-line Example (curl):

curl -X PUT http://localhost:3000/api/jobs/1 \  
 -H "Content-Type: application/json" \  
 -d '{  
 "job\_title": "Senior Software Engineer",  
 "company\_name": "Tech Corp",  
 "location": "New York",  
 "job\_type": "Full-time",  
 "salary\_range": "$100,000-$120,000",  
 "job\_description": "Leading development of web applications",  
 "application\_deadline": "2025-06-15"  
 }'

### 5. DELETE /api/jobs/:id

Purpose: Delete a job listing

Returns: Success message (200 OK)

Error Handling: 400 Bad Request, 404 Not Found, 500 Internal Server Error

Command-line Example (curl):

curl -X DELETE http://localhost:3000/api/jobs/1

## Application API Endpoints (3 Total)

### 6. GET /api/applications

Purpose: Fetch all job applications

Returns: Array of application objects (200 OK)

Error Handling: 500 Internal Server Error

Command-line Example (curl):

curl -X GET http://localhost:3000/api/applications

### 7. GET /api/applications/:id

Purpose: Fetch specific application by ID

Returns: Application object (200 OK), or 404 if not found

Error Handling: 400 Bad Request, 500 Internal Server Error

Command-line Example (curl):

curl -X GET http://localhost:3000/api/applications/1

### 8. POST /api/jobs/:id/apply

Purpose: Submit a job application

Returns: Confirmation + application ID (201 Created)

Error Handling: 400 Validation Error, 404 Not Found, 500 Internal Server Error

Command-line Example (curl):

curl -X POST http://localhost:3000/api/jobs/1/apply \  
 -H "Content-Type: application/json" \  
 -d '{  
 "applicant\_name": "John Doe",  
 "email": "john.doe@example.com"  
 }'