




Welcome to the **Co**Grammar

Building a simple RESTful API with Express

The session will start shortly...

Questions? Drop them in the chat. We'll have dedicated moderators answering questions.



Full Stack Web Development Session Housekeeping

- The use of disrespectful language is prohibited in the questions, this is a supportive, learning environment for all - please engage accordingly.
(Fundamental British Values: Mutual Respect and Tolerance)
- No question is daft or silly - **ask them!**
- There are **Q&A sessions** midway and at the end of the session, should you wish to ask any follow-up questions.
- If you have any questions outside of this lecture, or that are not answered during this lecture, please do submit these for upcoming Academic Sessions. You can submit these questions here: [Questions](#)

Full Stack Web Development Session Housekeeping cont.

- For all **non-academic questions**, please submit a query:
www.hyperiondev.com/support
- Report a **safeguarding** incident:
www.hyperiondev.com/safeguardreporting
- We would love your **feedback** on lectures: [Feedback on Lectures](#)
- You can turn on live captions in your browser's settings for clear translation on what's being lectured

Safeguarding & Welfare

We are committed to all our students and staff feeling safe and happy; we want to make sure there is always someone you can turn to if you are worried about anything.

If you are feeling upset or unsafe, are worried about a friend, student or family member, or you feel like something isn't right, speak to our safeguarding team:



Ian Wyles
Designated Safeguarding
Lead



Simone Botes



Nurhaan Snyman



Rafiq Manan



Ronald Munodawafa



Tevin Pitts

Scan to report a
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or email the Designated
Safeguarding Lead:
Ian Wyles

safeguarding@hyperiondev.com

Polls

Please have a look at the poll notification and select an option.

What status code should be returned when a resource is successfully created in a RESTful API?

- A) 200
- B) 201
- C) 400
- D) 404

Polls

Please have a look at the poll notification and select an option.

What is the purpose of route parameters in Express?

- A) To handle query strings
- B) To dynamically capture values from the URL
- C) To define static routes
- D) To validate request bodies

Lesson Objectives

❖ By the end of this topic, students will:

- Implement a simple RESTful API using Express to perform CRUD operations on a resource.
- Evaluate the structure and efficiency of a RESTful API built with Express.
- Explain how Express middleware and routing work to handle HTTP requests and responses.
- Recall the core concepts of RESTful APIs and the basic structure of an Express application.

**SKILLS
FOR LIFE**

SKILLS BOOTCAMPS



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RESTful APIs

January 2025

Task Management System: Project Description



Objective and Key Features

To demonstrate the creation of RESTful API using Express.js without a database, showcasing core backend development skills

- **CRUD Operations:**
 - Create, Read, Update, and Delete tasks.
- **In-Memory Storage:**
 - Tasks stored in an array for simplicity.
- **Validation:**
 - Middleware to validate request data.
- **Error Handling:**
 - Graceful handling of invalid requests and missing resources.

API Endpoints

1. POST /tasks: Create a new task.
2. GET /tasks: Retrieve all tasks.
3. GET /tasks/:id : Retrieve a single task by ID.
4. PUT /tasks/:id : Update a task by ID.
5. DELETE /tasks/:id : Delete a task by ID.

Task Structure

```
{  
  "id": 1,  
  "title": "Finish project",  
  "description": "Complete the task management API",  
  "status": "pending",  
  "createdAt": "2023-10-01T12:00:00Z",  
  "updatedAt": "2023-10-01T12:00:00Z"  
}
```

Questions and Answers



Thank you for attending



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