Welcome to the CoGrammar

Task Walkthrough: Task 23 - Database Interaction with MongoDB and Mongoose

The session will start shortly...

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


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Presentation
June 2024

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. Moderators are going to be answering questions as the session progresses as well.
- 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**

Skills Bootcamp
8-Week Progression Overview

Fulfil 4 Criteria to Graduation

✅ Criterion 1: Initial Requirements

Timeframe: First 2 Weeks
Guided Learning Hours (GLH): Minimum of 15 hours
Task Completion: First four tasks

Due Date: 24 March 2024

✅ Criterion 2: Mid-Course Progress

60 Guided Learning Hours

Data Science - **13 tasks**
Software Engineering - **13 tasks**
Web Development - **13 tasks**

Due Date: 28 April 2024

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Skills Bootcamp Progression Overview

✅ Criterion 3: Course Progress

Completion: All mandatory tasks, including Build Your Brand and resubmissions by study period end
Interview Invitation: Within 4 weeks post-course
Guided Learning Hours: Minimum of 112 hours by support end date (10.5 hours average, each week)

✅ Criterion 4: Demonstrating Employability

Final Job or Apprenticeship Outcome: Document within 12 weeks post-graduation
Relevance: Progression to employment or related opportunity

Learning Objectives

- Understand database fundamentals
- Understand the principles of NoSQL databases
- Analyze and construct MongoDB queries
- Develop a schema in Mongoose
- Demonstrate the ability to set up a MongoDB database and perform operations using both the Mongo shell and Mongoose.

What is MongoDB?

- MongoDB is a powerful NoSQL database that is widely used for its flexibility, scalability, and performance.

Mongo Shell Basic Commands

- show dbs: Lists all databases.
- use db_name: Selects or creates a database.
- show collections: Displays all collections in the selected database.
- db.dropDatabase(): Deletes the selected database.

CRUD Operations

- Create: Use insertOne or insertMany to add documents.
- Read: Use find() to fetch documents, with pretty() for readable output.
- Update: Use updateOne() or updateMany() with $set to modify documents.
- Delete: Use deleteOne() or deleteMany() to remove documents.

MongoDB with Node.js and Mongoose

- Integration of Node.js with MongoDB enables web applications to perform database operations asynchronously and efficiently.

What is Mongoose?

- Mongoose is a Node.js library that provides MongoDB object modeling, designed to work in an asynchronous environment.

- Mongoose serves as an abstraction layer on top of the MongoDB Node.js driver, making it easier to create and manage data models. It abstracts boilerplate CRUD operations and adds an extra layer of logic.

Example Task

Questions and answers

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Thank you for attending

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