



Databases and the MongoDB Database

Model-Answer Approach

[](http://www.hyperiondev.com/portal/)

# Auto-graded task 1

The approach for this task involves setting up a MongoDB database, connecting to it using MongoDB's command-line interface (mongosh), and managing user access within a project. The process begins with creating a MongoDB Atlas cluster and configuring user access through the Atlas interface. Users are invited to the project, and their roles are managed to control their access levels. The mongosh command is then used to connect to the MongoDB cluster, verifying the connection and performing basic operations such as selecting a database. The task also involves understanding and documenting the steps using screenshots to demonstrate successful completion of the setup and connection processes.

This solution is fitting because it addresses the task's requirements by providing hands-on experience with MongoDB, a widely used NoSQL database. The task helps students understand how to set up a cloud-based database environment, manage user access, and connect to the database using a command-line tool. By performing these steps, students gain practical skills that are directly applicable to real-world scenarios, particularly in backend development where database management is a crucial component. The inclusion of screenshots serves as a visual confirmation of the process, ensuring that students can troubleshoot and verify each step.

One potential pitfall in this task is incorrectly configuring the MongoDB Atlas cluster, such as setting inappropriate access permissions or using incorrect connection strings, which could prevent a successful connection to the database. Another common issue is failing to correctly use the mongosh command, which might lead to connection errors or an inability to execute commands within the MongoDB environment. Additionally, users might overlook security best practices, such as managing credentials securely or setting up proper user roles, which could lead to unauthorised access or data breaches.

This structured approach ensures that students not only complete the MongoDB setup correctly but also understand the importance of secure and efficient database management practices​.