

Lesson 06 Demo 01

Implementing Database Operations in DynamoDB

Objective: To create a database table using DynamoDB to store and read items in a database

Tools require: AWS Management Console

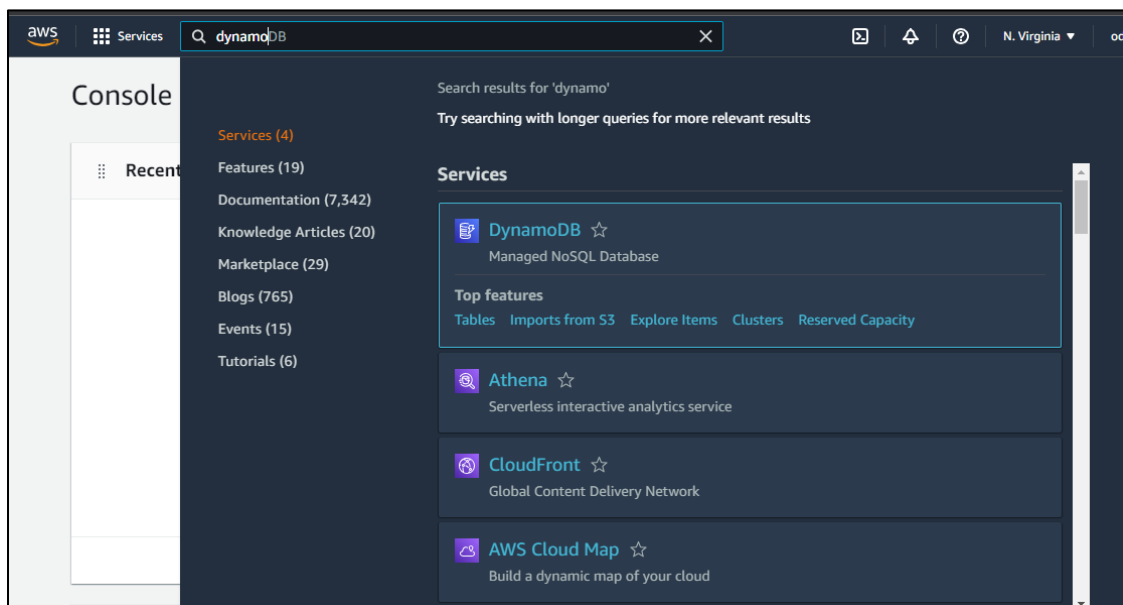
Prerequisites: AWS account

Steps to be followed:

1. Create a table
2. Store and read the items

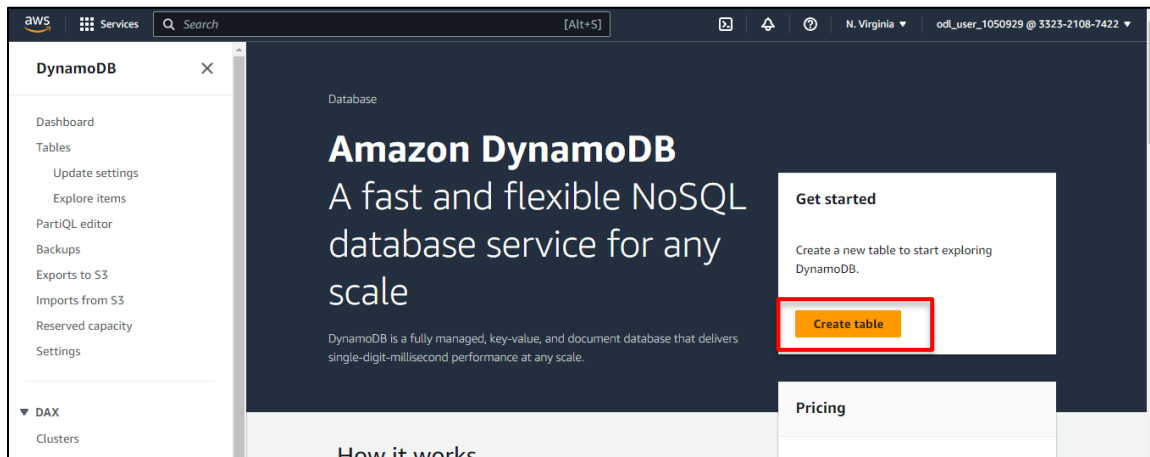
Step 1: Create a table

1.1 Navigate to the AWS portal and select the **DynamoDB** service

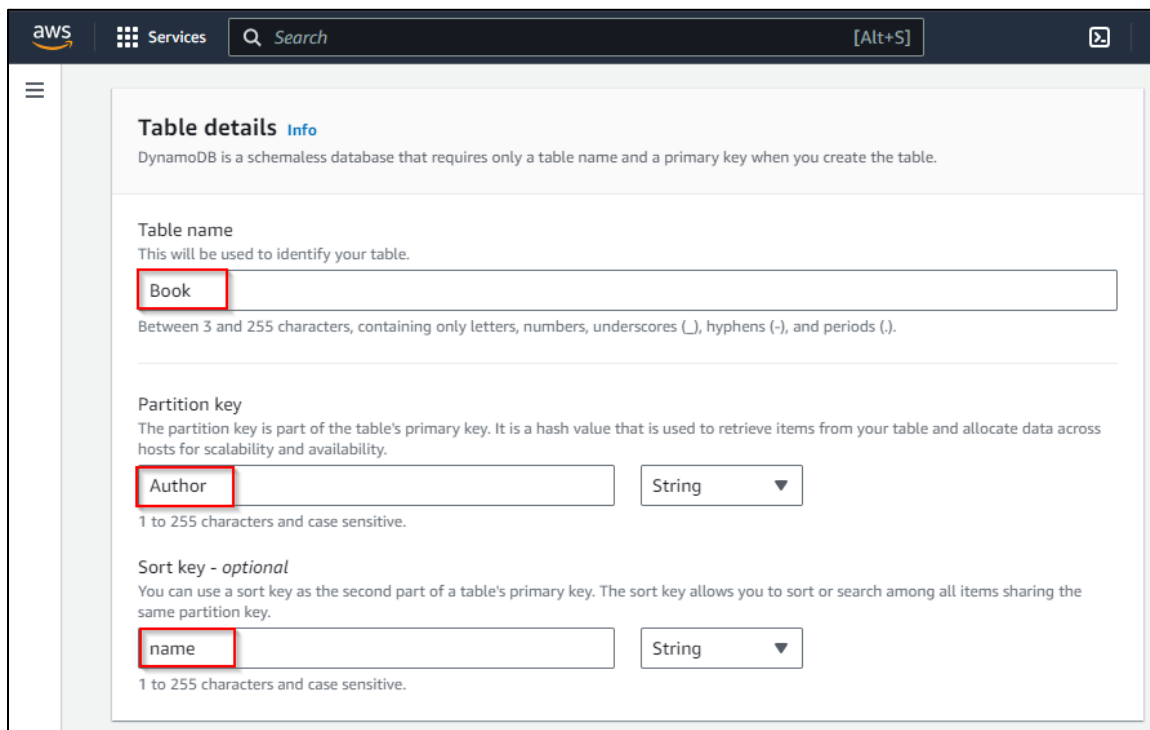


Note: Ensure that the region is **US East (N. Virginia) us-east-1**

1.2 Click on the **Create table** button



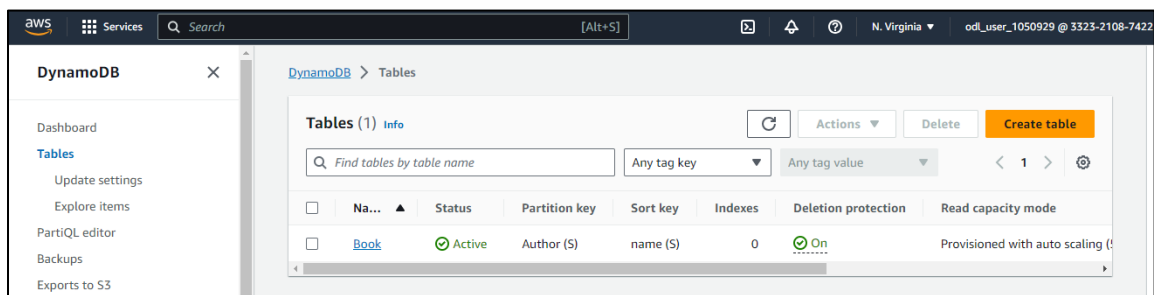
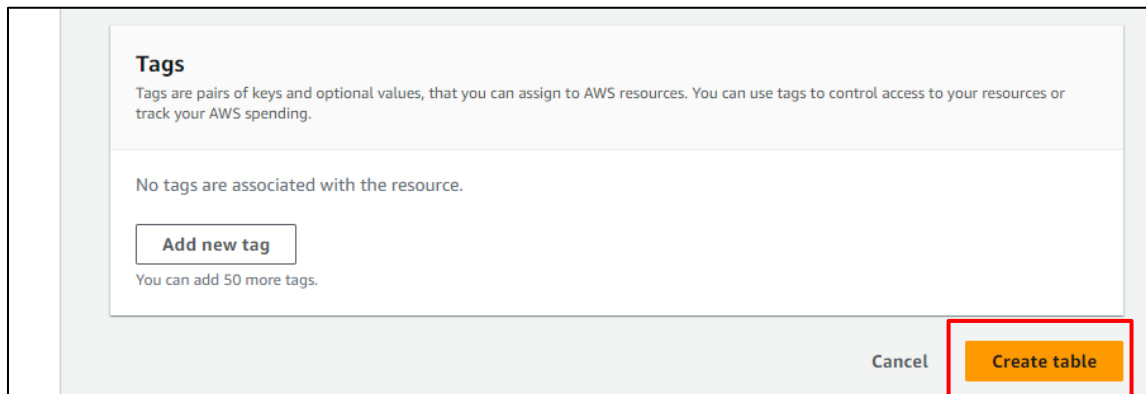
1.3 Enter the desired **Table name**, **Partition key**, and **Sort key**



The screenshot shows the 'Table details' form in the Amazon DynamoDB console. The form includes the following fields and options:

- Table name:** A text input field containing 'Book'. Below the field, it states: 'Between 3 and 255 characters, containing only letters, numbers, underscores (_), hyphens (-), and periods (.).'.
- Partition key:** A text input field containing 'Author' and a dropdown menu set to 'String'. Below the field, it states: '1 to 255 characters and case sensitive.'
- Sort key - optional:** A text input field containing 'name' and a dropdown menu set to 'String'. Below the field, it states: '1 to 255 characters and case sensitive.'

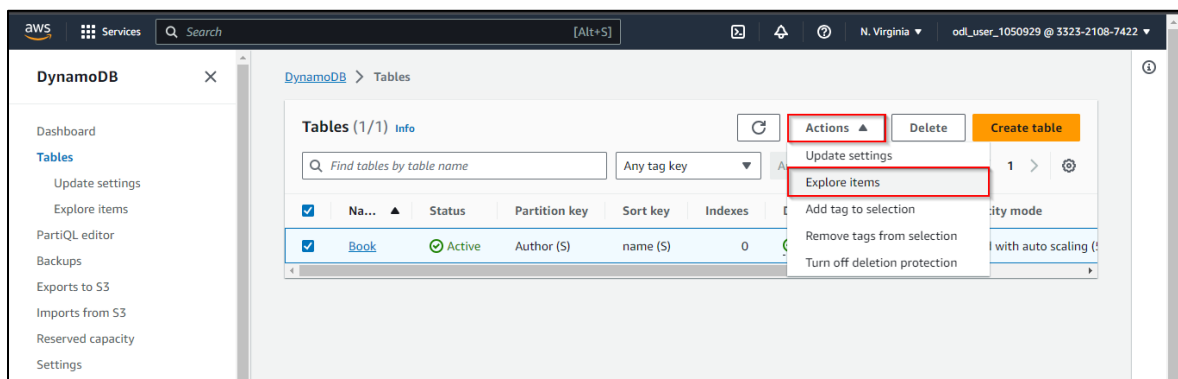
1.4 Click on the **Create table** button



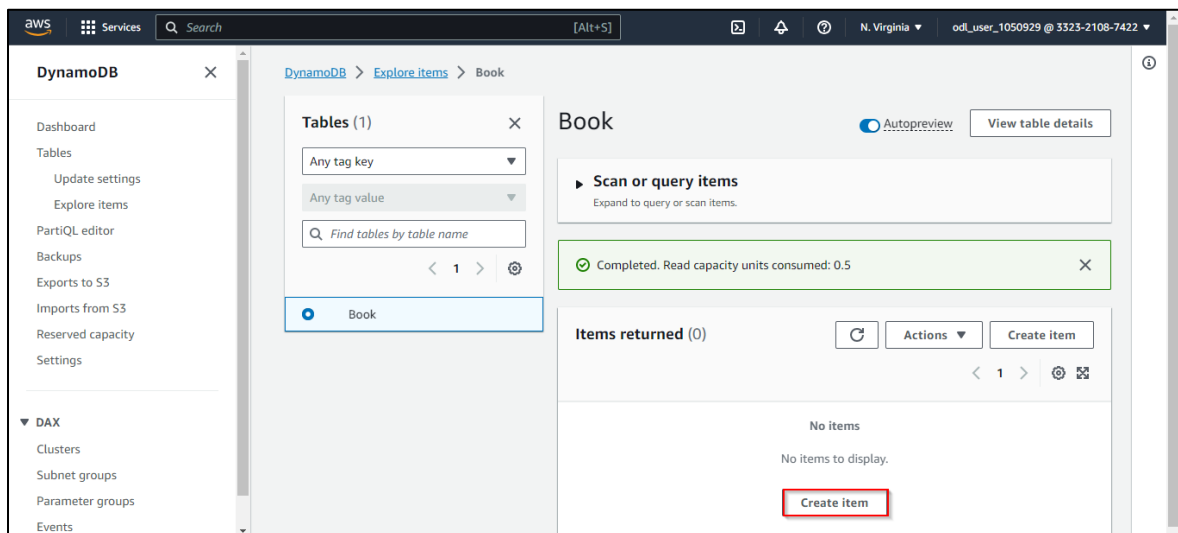
A database table using DynamoDB has been created.

Step 2: Store and read the items

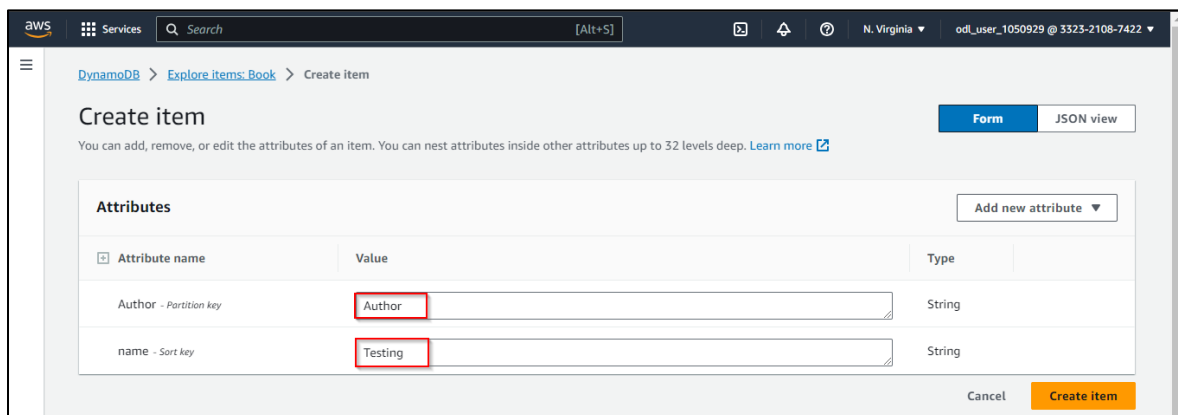
2.1 Select the created table and choose the **Explore items** option under **Actions**



2.2 Click on the **Create item** button



2.3 Enter values for the **Author** and **name** attributes



2.4 Click on **Add new attribute** to add attributes with the table and then select **String** as the value type

The screenshot shows the AWS Management Console 'Create item' page for a DynamoDB table. The 'Attributes' section contains a table with the following data:

Attribute name	Value	Type
Author - Partition key	Author	String
name - Sort key	Testin	String

A dropdown menu is open next to the 'Add new attribute' button, showing the following options: String, Number, Boolean, Binary, Null, String set, Number set, Binary set, List, and Map. The 'String' option is highlighted.

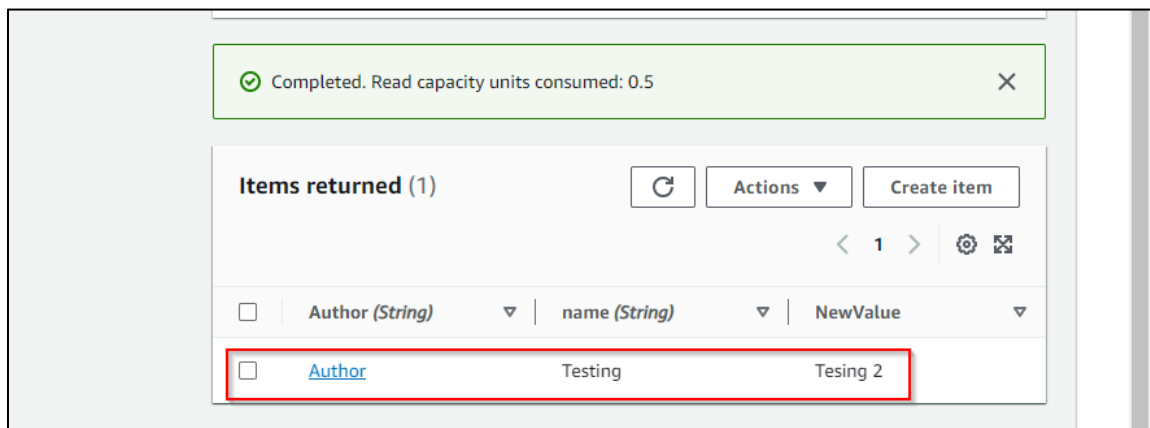
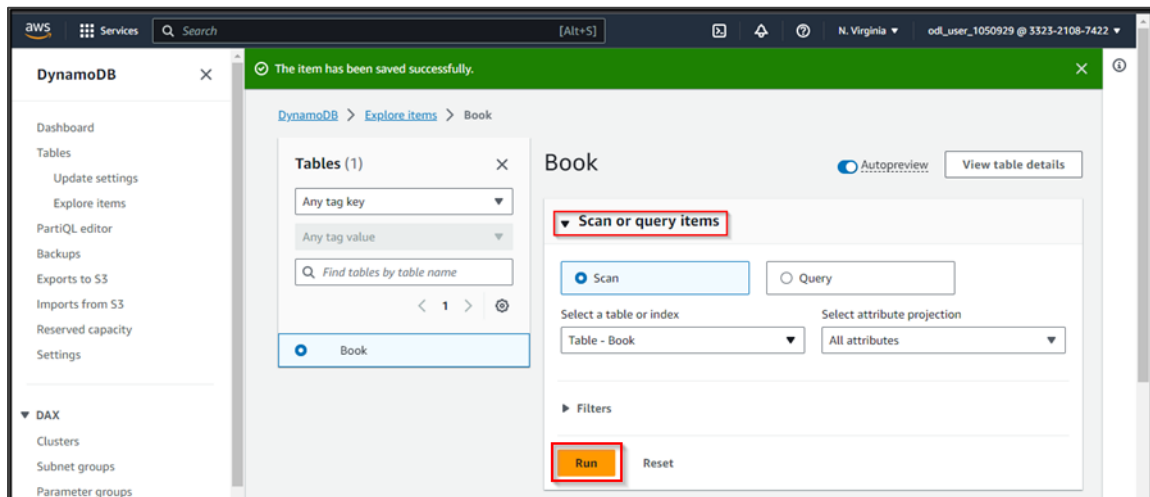
2.5 Enter the new attribute name and value and click the **Create item** button

The screenshot shows the AWS Management Console 'Create item' page for a DynamoDB table. The 'Attributes' section contains a table with the following data:

Attribute name	Value	Type
Author - Partition key	Author	String
name - Sort key	Testing	String
NewValue	Testing 2	String

The 'Create item' button is highlighted in orange.

2.6 Click on **Scan or Query items** and select **Run** to retrieve the stored items



By following these steps, you have successfully created a database table using DynamoDB to store and read items in a database. This experience equips you to confidently manage data using DynamoDB for diverse applications.