

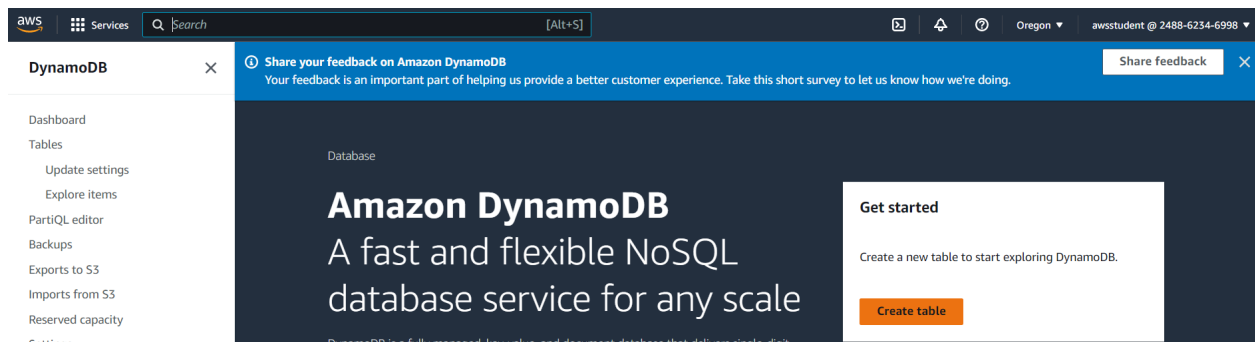
Introduction to Amazon DynamoDB

Objectives

After completing this lab, you will be able to:

- Create an Amazon DynamoDB table.
- Enter data into an Amazon DynamoDB table.
- Query an Amazon DynamoDB table.
- Delete an Amazon DynamoDB table.

Task 1: Create a new table



Create table

Table details [Info](#)

DynamoDB is a schemaless database that requires only a table name and a primary key when you create the table.

Table name

This will be used to identify your table.

Music

Between 3 and 255 characters, containing only letters, numbers, underscores (_), hyphens (-), and periods (.).

Partition key

The partition key is part of the table's primary key. It is a hash value that is used to retrieve items from your table and allocate data across hosts for scalability and availability.

Artist

String ▼

1 to 255 characters and case sensitive.

Sort key - *optional*

You can use a sort key as the second part of a table's primary key. The sort key allows you to sort or search among all items sharing the same partition key.

Song

String ▼

Here's our table:

Tables (1) Info										
<input type="text" value="Find tables by table name"/>					Any table tag ▼		< 1 > ⚙			
<input type="checkbox"/>	Na...	▲	Status	Partition key	Sort key	Indexes	Deletion protection	Read capacity mode	Write capacity mo...	Total s
<input type="checkbox"/>	Music		Active	Artist (S)	Song (S)	0	Off	Provisioned (5)	Provisioned (5)	0 bytes

Task 2: Add Data

Update settings

Explore items

PartiQL editor

Backups

Exports to S3

Imports from S3

Reserved capacity

Settings

Tables (1) ×

Any table tag ▼

< 1 > ⚙

Music

Music

Autopreview View table details

▶ Scan or query items

Expand to query or scan items.

Completed. Read capacity units consumed: 0.5

Items returned (0)

⌂ Actions ▼ Create item

< 1 > ⚙

We add the following attributes, with appropriate values to the table Music:

Attributes	
<div><div></div>Attribute name</div>	Value
Artist - <i>Partition key</i>	<input type="text" value="Pink Floyd"/>
Song - <i>Sort key</i>	<input type="text" value="Money"/>

We add 2 optional attributes:

<input type="text" value="Album"/>	<input type="text" value="The Dark Side of the Moon"/>	String
<input type="text" value="Year"/>	<input type="text" value="1973"/>	Number

Creating a second item with the following attributes:

Attribute Name	Attribute Type	Attribute Value
<i>Artist</i>	String	John Lennon
<i>Song</i>	String	Imagine
<i>Album</i>	String	Imagine
<i>Year</i>	Number	1971
<i>Genre</i>	String	Soft rock

Create item

[Form](#)[JSON view](#)

You can add, remove, or edit the attributes of an item. You can nest attributes inside other attributes up to 32 levels deep. [Learn more](#)

Attributes

[Add new attribute](#)

Attribute name	Value	Type	
Artist - Partition key	John Lennon	String	
Song - Sort key	Imagine	String	
Album	Imagine	String	Remove
Year	1971	Number	Remove
Genre	Soft rock	String	Remove

[Cancel](#)[Create item](#)

Creating a 3rd item with the following attributes and values:

Attribute Name	Attribute Type	Attribute Value
<i>Artist</i>	String	Psy
<i>Song</i>	String	Gangnam Style
<i>Album</i>	String	Psy 6 (Six Rules), Part 1
<i>Year</i>	Number	2011
<i>LengthSeconds</i>	Number	219

Create item

[Form](#)[JSON view](#)

You can add, remove, or edit the attributes of an item. You can nest attributes inside other attributes up to 32 levels deep. [Learn more](#)

Attributes

[Add new attribute](#)

Attribute name	Value	Type	
Artist - Partition key	Psy	String	
Song - Sort key	Gangnam Style	String	
Album	Psy 6 (Six Rules), Part 1	String	Remove
Year	2011	Number	Remove
LengthSeconds	219	Number	Remove

[Cancel](#)[Create item](#)

Task 3: Modify an existing item

Items returned (1/3)

	Artist	Song	Album
<input checked="" type="checkbox"/>	Psy	Gangnam Style	Psy 6 (Six R...
<input type="checkbox"/>	John Lennon	Imagine	Imagine Soft rock
<input type="checkbox"/>	Pink Floyd	Money	The Dark Si...

Actions menu:

- Edit item
- Duplicate item
- Delete items
- Download selected items to CSV
- Download results to CSV

Changing the year attribute to 2012

Year

2012

Task 4: Query the Table

- 2 ways to query a DynamoDB table - Query and Scan

Update settings
Explore items
 PartiQL editor
 Backups
 Exports to S3
 Imports from S3
 Reserved capacity
 Settings

DAX
 Clusters
 Subnet groups
 Parameter groups

Tables (1)

Any table tag

Find tables by table name

Music

Music

Autopreview View table details

Scan or query items

Scan Query

Select a table or index

Table - Music

Select attribute projection

All attributes

Filters

Run Reset

Configuring the query:

▼ Scan or query items

☐ Scan

☒ Query

Select a table or index

Table - Music ▼

Select attribute projection

All attributes ▼

Artist (Partition key)

Psy

Song (Sort key)

Equal to ▼

Gangnam Style

☐ Sort descending

► Filters

Run

Reset

Here's the result:

✓ Completed. Read capacity units consumed: 0.5

Items returned (1)

↺

Actions ▼

Create item

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<input type="checkbox"/>	Artist ▼	Song ▼	Album ▼	LengthSeconds ▼	Year
<input type="checkbox"/>	Psy	Gangnam Style	Psy 6 (Six R...	219	2012

Using the Scan method:

▼ Scan or query items

☒ Scan

☐ Query

Select a table or index

Table - Music ▼

Select attribute projection

All attributes ▼

▼ Filters

Attribute name	Type	Condition	Value	
Year	Number ▼	Equal to ▼	1971	<div>Remove</div>
<div>Add filter</div>				

Run

Reset

Result:

✔ Completed. Read capacity units consumed: 0.5 ✕

Items returned (1)

↺

Actions ▼

Create item

< 1 > ⚙️ 🗖️

<input type="checkbox"/>	Artist ▼	Song ▼	Album ▼	Genre ▼	Year ▼
<input type="checkbox"/>	John Lennon	Imagine	Imagine	Soft rock	1971

Task 5: Delete the table

Tables (1/1) info									
<input type="text" value="Find tables by table name"/>					Any table tag		< 1 >		
<input checked="" type="checkbox"/>	Na... ▲	Status	Partition key	Sort key	Indexes	Deletion protection	Read capacity mode	Write capacity mo...	Total :
<input checked="" type="checkbox"/>	Music	Active	Artist (S)	Song (S)	0	Off	Provisioned (5)	Provisioned (5)	0 byte