

A DynamoDB Example

For example, consider the following example of People:

```
{
  "PersonID": 101,
  "LastName": "Smith",
  "FirstName": "Fred",
  "Phone": "555-4321"
}

{
  "PersonID": 102,
  "LastName": "Jones",
  "FirstName": "Mary",
  "Address": {
    "Street": "123 Main",
    "City": "Anytown",
    "State": "OH",
    "ZIPCode": 12345
  }
}

{
  "PersonID": 103,
  "LastName": "Stephens",
  "FirstName": "Howard",
  "Address": {
    "Street": "123 Main",
    "City": "London",
    "PostalCode": "ER3 5K8"
  },
  "FavoriteColor": "Blue"
}
```

Like our earlier database examples, this seems familiar in certain ways because each record has a unique PersonID field that appears to be a good way to distinguish between each person. Many of the data elements are scalar values which means there is just one value associated with that field. But if you look at Address, you'll notice a nested set of values there. DynamoDB supports up to 32 levels of nesting like this so you have a lot of flexibility in the way you can organize your information.

However, one very different feature being portrayed here is that the data elements do not have a regular structure. For example, the first person has a phone number, but the second person has an address and no phone number, while the third person has a favorite color. This lack of regular structure is what defines a noSQL database solution. It would have been very hard to efficiently store this kind of information inside MySQL and RDS.