Exercise 8 - Inflating Documents to Objects

Exercise 8.a - Create a Slug View in Couchbase

We need to be able to retrieve products from the database with a friendly url string, commonly called a "Slug" instead of a product_id. We will create an index that will emit the `slug` property for all product documents.

1. Open up the Couchbase Admin Console by going to http://127.0.0.1:8091/ in a web browser

2. Choose Data Buckets

3. Click the "Views" button next to the **default** bucket

4. Click the "Development Views" tab, since we already have a Design Document, click the "Add View" button next to `design/dev_products`

5. For the **View Name** use `on_sale`

6. Click "Save"

7. Use the following JavaScript as the **Map** function for the view. This will create a view whose value is a compound key / array of date parts. The value in the index is *null*. This will only emit documents to the index that match the following.

```
1. Has a `doc_type` property with a value of "product"
2. Has a `slug` property
```

```
function (doc, meta) {
  if(doc.doc_type && doc.doc_type === "product" && doc.slug){
    emit(doc.slug, null);
  }
}
```

8. For the **Reduce** function enter the value of `_count` and click the "Save" button. You can click on the "Show Results" button to see partial data from index.

9. We now need to publish our Development View to Production. To do this scroll up to the top of the page, and click on Views.

10. Make sure you are on the **Development Views** tab and next to `_design/dev_products` click on the "Publish" button. You will get a notification that the Design Document already exists and it will ask you to confirm that you want to overwrite it, click "Confirm". This will move your `product` Design Document to production and create the index against all of the documents in the entire bucket for all of the views in the view.On Sale

Exercise 8.b - Querying the Slug View

We can easily represent a JSON Document with a CFC. This will centralize any logic around a given document. To do this within a `get()` or `query()` we will use the `inflateTo="path.to.Class"` argument.

1. Open `exercise8/com/example/ProductService.cfc` in your IDE

2. Modify the `getProductBySlug` method to query Couchbase View. This will call the CFCouchbase `query()` method with the following arguments:

```
query = cb.query(
    designDocumentName = "products",
    viewName = "by_slug",
    inflateTo="root.exercise8.com.example.documents.Product",
    options = {
        reduce = false,
        key = arguments.slug,
        limit = 1,
        includeDocs = true
    }
);
```

For your reference the data from the `getProductBySlug` method is used in the following views:

- exercise/8/com/example/documents/Product.cfc
- exercise8/view/product.cfm
- exercise8/view/includes/product.info.cfm
- exercise8/view/includes/product.images.cfm
- exercise8/view/includes/product.tabs.cfm