

Exercise 11 - Working with Query Values

Exercise 11.a - Create a Aggregate Reviews View in Couchbase

We need to be able to display the total number of reviews for a given rating of 1 - 5 on the product detail page.

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 `review_aggregates`
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 "review"
 2. Has a `product_id` property
 3. Has a `review_date` property
 4. Has a `rating` property

```
function (doc, meta) {  
  if(  
    doc.doc_type ==  
    doc.doc_type === "review" &&  
    doc.product_id &&  
    doc.review_date &&  
    doc.rating  
  ){  
    emit([doc.product_id, doc.rating], null);  
  }  
}
```

Notice that we are outputting the review rating as the value to the view

8. For the **Reduce** function enter the value of `_count` and click the "Save" button
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 11.b - Querying Aggregate Reviews View

1. Open `exercise10/com/example/documents/Product.cfc` in your IDE
2. Modify the `getReviewAggregates` method to query Couchbase View. This will call the `CFCouchbase.query()` method with the following arguments:

```
query = cb.query(  
    designDocumentName = "products",  
    viewName = "review_aggregates",  
    options = {  
        sortOrder = "DESC",  
        reduce = true,  
        group = true,  
        startKey = [getProduct_ID(), 5],  
        endKey = [getProduct_ID(), 1]  
    }  
);
```

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

- `exercise9/view/includes/product.tabs.reviews.cfm`