

Visualizing data with a website

The screenshot shows a web browser window with the address bar displaying '127.0.0.1:5000'. The page title is 'Product Recommendations'. The navigation bar includes 'Home' and 'About' links. The main content area is titled 'Product Recommendations' and features a search bar with the text 'Customer-Specific Recommendations'. Below the search bar, there is a user icon and the ID '14402', followed by a pink button labeled 'Show Recommendations'. The results section is titled 'Recommendations for Customer ID: 14402' with a date of '25.05.2025'. It contains a table with the following data:

Product ID	Product Name	Price	Country	Rating
22197	POPCORN HOLDER	0.85	United Kingdom	2.0
21137	BLACK RECORD COVER FRAME	3.39	United Kingdom	1.77
84360	TABLE LAMP WHITE SHADE WOOD BASE	5.95	United Kingdom	1.55
47566	PARTY BUNTING	4.65	United Kingdom	1.52
46775B	BERRIES CHUNKY KNITTED THROW	16.95	United Kingdom	1.51
84879	ASSORTED COLOUR BIRD ORNAMENT	1.69	United Kingdom	1.45
35611B	BLACK ASSORTED DROPLET DECORATION	0.38	Spain	1.4

Saving data to MongoDB

The screenshot shows the MongoDB Compass interface. The top bar displays the database name 'retail_db'. The left sidebar shows the database structure with 'recommendations' and 'retail_data' collections. The main area shows the details for the 'recommendations' collection, including storage size, document count, average document size, index count, and total index size. Below this, the 'retail_data' collection details are also shown.

Collection	Storage size	Documents	Avg. document size	Indexes	Total index size
recommendations	1.60 MB	58 K	106.00 B	1	589.82 kB
retail_data	78.72 MB	1.2 M	264.00 B	1	13.46 MB

Compass

{ } My Queries

CONNECTIONS (1)

Search connections

localhost:27017

- admin
- config
- local
- retail_db
 - recommendations
 - retail_data

localhost:27017 > retail_db > retail_data

Documents 1.2M Aggregations Schema Indexes 1 Validation

Type a query: { field: 'value' } or [Generate query](#)

EXPLAIN Reset Find Options

ADD DATA EXPORT DATA UPDATE DELETE

100 1 - 100 of 1203433

```
{
  "_id": ObjectId("683327770a7e4c17a9afaba6"),
  "Country": "Switzerland",
  "CustomerID": "113501",
  "Description": "CERAMIC CAKE DESIGN SPOTTED PLATE",
  "InvoiceDate": "2010-05-18T13:24:00.000+03:00",
  "InvoiceNo": "5088822",
  "Quantity": 12,
  "StockCode": "37447",
  "TotalAmount": 17.88,
  "UnitPrice": 1.49
}
```

```
{
  "_id": ObjectId("683327770a7e4c17a9afaba7"),
  "Country": "United Kingdom",
  "CustomerID": "113881",
  "Description": "PACK OF 6 SKULL PAPER PLATES",
  "InvoiceDate": "2011-02-24T16:30:00.000+02:00",
  "InvoiceNo": "544918",
  "Quantity": 24,
  "StockCode": "21988",
  "TotalAmount": 20.4,
  "UnitPrice": 0.85
}
```

```
{
  "_id": ObjectId("683327770a7e4c17a9afaba8"),
  "Country": "United Kingdom",
  "CustomerID": "114057",
  "Description": "JUNBO BAG ALPHABET",
  "InvoiceDate": "2011-05-24T15:56:00.000+03:00",
  "InvoiceNo": "554513",
  "Quantity": 20
}
```

Compass

{ } My Queries

CONNECTIONS (1)

Search connections

localhost:27017

- admin
- config
- local
- retail_db
 - recommendations
 - retail_data

localhost:27017 > retail_db > recommendations

Documents 58.5K Aggregations Schema Indexes 1 Validation

Type a query: { field: 'value' } or [Generate query](#)

EXPLAIN Reset Find Options

ADD DATA EXPORT DATA UPDATE DELETE

100 1 - 100 of 58460

```
{
  "_id": ObjectId("68332767b8f8fad9329c2c26"),
  "customer_id": 12534,
  "stock_code": "POST",
  "predicted_rating": 2.229563262365723,
  "timestamp": 2025-05-25T17:21:27.650+00:00
}
```

```
{
  "_id": ObjectId("68332767b8f8fad9329c2c27"),
  "customer_id": 12534,
  "stock_code": "Z1137",
  "predicted_rating": 1.9422333240509033,
  "timestamp": 2025-05-25T17:21:27.650+00:00
}
```

```
{
  "_id": ObjectId("68332767b8f8fad9329c2c28"),
  "customer_id": 12534,
  "stock_code": "47422",
  "predicted_rating": 1.7949192523956299,
  "timestamp": 2025-05-25T17:21:27.650+00:00
}
```

```
{
  "_id": ObjectId("68332767b8f8fad9329c2c29"),
  "customer_id": 12534,
  "stock_code": "TEST001",
  "predicted_rating": 1.6954934461212158,
  "timestamp": 2025-05-25T17:21:27.650+00:00
}
```

```
{
  "_id": ObjectId("68332767b8f8fad9329c2c2a"),
  "customer_id": 12534
}
```