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Week 5 Discussion Board

WEB 335

In MongoDB, aggregation operations are used to process multiple documents and return results. The $project aggregation stages operator is used to collect only certain fields from the database and pass those along to the next step in the process. This could be useful when dealing with an object that may have many fields such as “customer”, but only needing to gather the customer’s name and id to display on a profile page.

$match is another aggregate operator in MongoDB. Similar to $project, it collects certain documents and passes them along to the next stage. However, instead of filtering to only certain fields, $match is used to find all documents that match specific conditions and passes them along to the next step. Using a “customer” field as an example again, the $match operator could be used to filter to only customers over the age of 40 for the purposes of promoting a specific product to only those customers.

Finally, $sort is another aggregate operator in MongoDB that is used to return documents sorted as requested by certain fields. Sorting can be done ascending or descending, or by textScore (metadata score). Multiple fields (up to 32) can be specified for sorting. The documents will be sorted by the first field, and then any documents with matching first fields will be sorted by the second field, and so on. A good example of when the $sort operator may be useful is on an ecommerce site that displays products and would like to display the newest products first. The $sort operator could easily be used to get products sorted by the date added provided that field exists.

References

*$sort (aggregation) — MongoDB Manual*. (n.d.). Retrieved September 9, 2022, from https://www.mongodb.com/docs/v4.2/reference/operator/aggregation/sort/#sort-pipeline-metadata

*MongoDB Aggregation Stages Operator - $match*. (2022, August 19). W3resource. Retrieved September 9, 2022, from https://www.w3resource.com/mongodb/aggregation/mongodb-aggregatrion-match-operator.php

*MongoDB Aggregation Stages Operator - $project*. (2022, August 19). W3resource. Retrieved September 9, 2022, from https://www.w3resource.com/mongodb/aggregation/mongodb-aggregatrion-project-operator.php