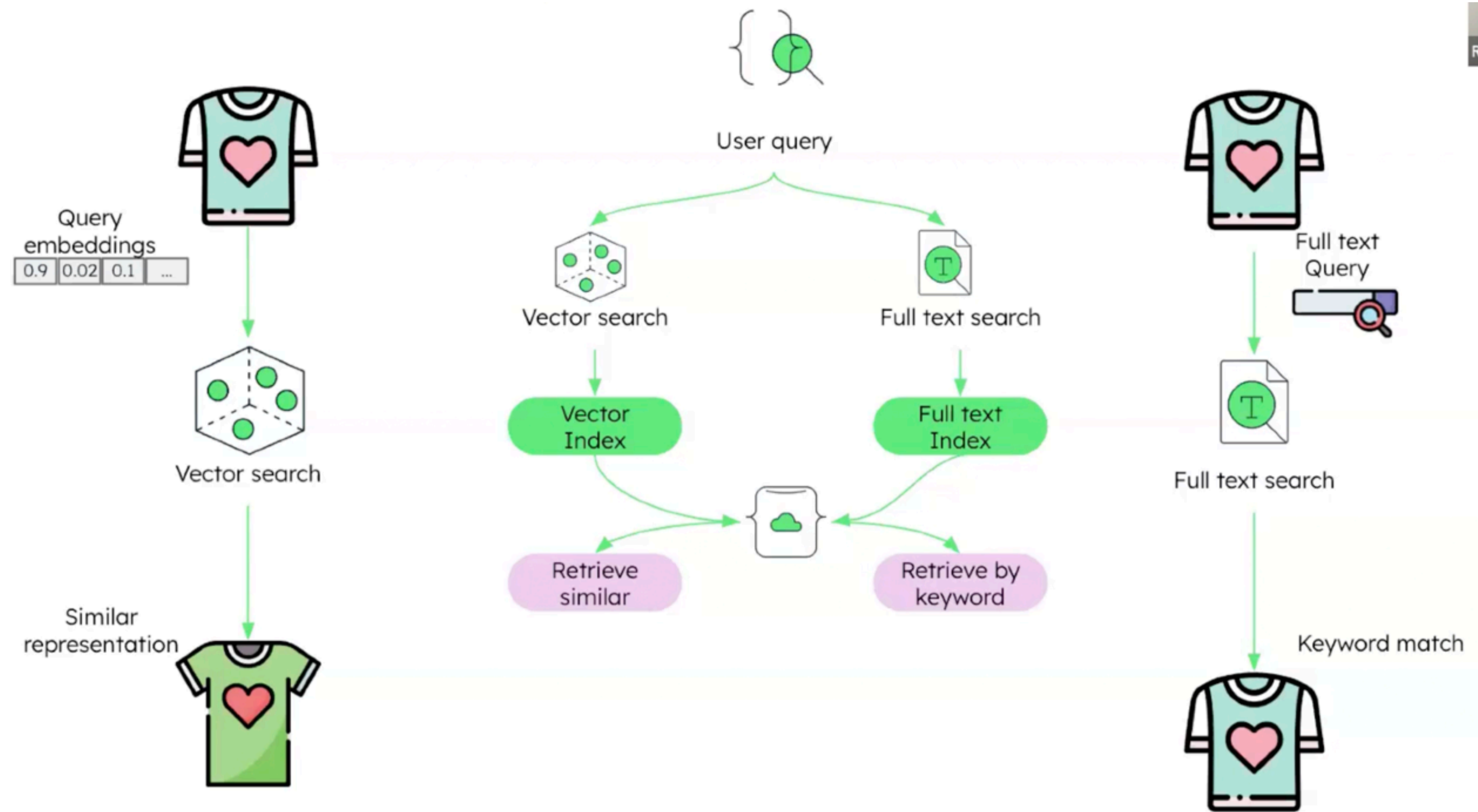


Hybridsearch



```
graph TD; A[ ] --> B[Hybrid Results]; B --> C[Reranked Results]; C --> A;
```

Hybrid
Results

Reranked
Results



Combining search and vector search

```
{  
  "_id": 1,  
  "title": "Autonomous AI Agents",  
  "content": "Artificial intelligence enables systems to act autonomously.",  
  "embedding": [0.12, 0.45, -0.33, ...]  
}
```

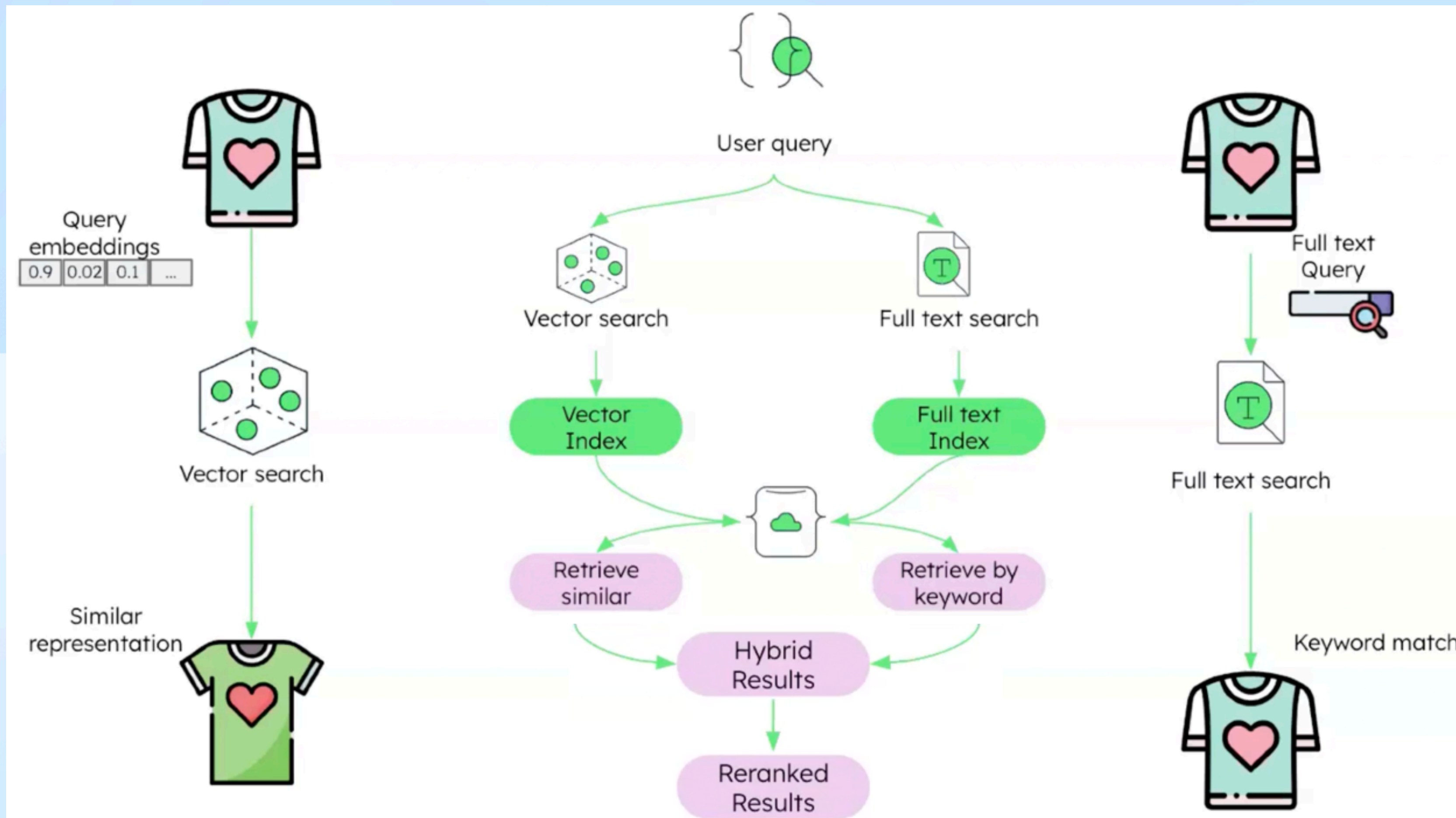
```
db.documents.aggregate([
  {
    $search: {
      index: "hybrid_index",
      compound: {
        should: [
          {
            text: {
              query: "autonomous",
              path: ["title", "content"],
              score: { boost: { value: 1.0 } }
            }
          },
          {
            knnBeta: {
              vector: [0.12, 0.44, -0.29, ...],
              path: "embedding",
              k: 10,
              score: { boost: { value: 1.0 } }
            }
          }
        ]
      }
    }
  },
  {
    $project: {
      title: 1,
      content: 1,
      score: { $meta: "searchScore" }
    }
  }
])
```


'compact hybrid search' is the most efficient way—it merges keyword and vector search in a single stage

Hybrid search

Combining search and vector search

```
{
  "_id": 1,
  "title": "Autonomous AI Agents",
  "content": "Artificial intelligence enables systems to act autonomously.",
  "embedding": [0.12, 0.45, -0.33, ...]
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```



```
db.documents.aggregate([
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    $search: {
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          {
            knnBeta: {
              vector: [0.12, 0.44, -0.29, ...],
              path: "embedding",
              k: 10,
              score: { boost: { value: 1.0 } }
            }
          }
        ]
      }
    }
  },
  {
    $project: {
      title: 1,
      content: 1,
      score: { $meta: "searchScore" }
    }
  }
])
```

RAG pipeline (1/2)

Introducing

