LookUpDevice

A Device Comparison Application - Database schema

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Documents

1. User

The User collection will store all the users' data required for registration and login, as well as their wish lists and product view history.

```
{
  "_id": "1i696a2-d0f2-4g8g-h67d-pa1d4b6b6109",
  "username": "sagar776",
  "firstname": "Sagar",
  "lastname": "Mathada",
  "gender": "Male",
  "email": "sagara1997@gmail.com",
  "password": "$9b$08$XdSbNOFgK0M0iV5HOskfVvNkfdNIL8F8xsuIUen7.PWncShU.O",
  "usertype": "customer",
  "wishlists": [
    "7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310",
    "9q7997a2-c0d2-4f8c-b07a-1a1d4u7b6009"
  ],
  "history": [
    "7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310",
    "9q7997a2-c0d2-4f8c-b07a-1a1d4u7b6009"
  ]
}
```

Name	Type	Description
_id	String	A globally unique identifier for User document
usertype	String	Type of the user: customer, admin or expert

username	String	Username of the user
email	String	Email of the user used for login
password	String	Encrypted password
wishlists	Array/list	A wish list of products
history	Array/list	History of products the user has visited

2. **Product**

The Product collection will store product information
- Product Name, description and category
- Product specifications
- Reviews and rating
- Comments
- Questions and answers

```json
{
  "_id": "7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310",
  "name": "Iphone 14",
  "category": "Phone",
  "specifications": {
    "model-number": "MPUA3LL/A",
    "os": "Apple iOS 16",
    "carrier": "T-Mobile",
    "ram": "6GB",
    "storage": "128 GB, 256 GB, 512 GB NVMe",
    "processor": "A15 Bionic chip 5nm, 6-core CPU with 2 performance and 4 efficiency cores, 5-core GPU, 16-core Neural Engine",
    "rear-camera": "12 MP, f/1.5, 26mm (wide), 1/1.7, 1.9µm, dual pixel PDAF, sensor-shift OIS 12 MP, f/2.4, 13mm, 120˚ (ultrawide)",
    "front-camera": "12 MP, f/1.9, 23mm (wide), 1/3.6, PDAF SL 3D, (depth/biometrics sensor)",
    "colors": "Midnight, Purple, Starlight, Blue, Red",
    "sensors": "Face ID, accelerometer, gyro, proximity, compass, barometer",
    "display": "6.1 inches 2532 x 1170 Super Retina XDR display",
    "battery": "Lithium-ion ",
    "wireless": "5G, LTE",
    "weight": "172 g (6.07 oz)",
    "dimensions": "146.7 x 71.5 x 7.8 mm (5.78 x 2.81 x 0.31 in)",
    "build": "Glass front (Corning-made glass), glass back (Corning-made glass), aluminum frame",
    "connectivity": "Wi-Fi 802.11 a/b/g/n/ac/6, dual-band, hotspot; Bluetooth 5.3, A2DP, LE",
    "special-features": "Face ID, accelerometer, gyro, proximity, compass, barometer Ultra Wideband (UWB) support,Emergency SOS via satellite (SMS sending/receiving)"
  },
  "description": "Iphone 14 6GB 128GB Midnight black",
```

```json
    "reviews": [
      {
        "_id": "7b696a2-d0f2-4g8g-h67d-7a1d4b6b8897",
        "title": "Terrific device",
        "author": "Anonymous1",
        "body": "Its one of the best devices from Apple",
        "pictures": [],
        "rating": 5,
        "likes": 1,
        "dislikes": 0,
        "comments": [
          {
            "author": "Anonymous2",
            "body": "Did you get a chance to check out the new camera sensor?"
          }
        ],
        "date": "11/01/2022"
      },
      {
        "_id": "7b7997a2-c0d2-4f8c-b27a-6a1d4b5b1109",
        "title": "Its a good devide, but...",
        "author": "Anonymous3",
        "body": "Its a good devide, but just a minor upgrade on the privious gen. Apple should have done better....",
        "pictures": [],
        "rating": 3,
        "likes": 7,
        "dislikes": 1,
        "comments": [
          {
            "author": "Anonymous4",
            "body": "I agree with you, better we go with the Iphone 13 for a lesser price"
          }
        ],
        "date": "10/16/2022"
      }
    ],
    "rating": 4,
    "price": "799.99",
    "release-date": "09/16/2022",
    "qna": [
      {
        "_id": "7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310",
        "question": "Is it a good device for gaming?",
        "answers": [
```

```json
            {
                "_id": "",
                "author": "Anonymous5",
                "answer": "Yes, the chip is very powerful and can handle almost everything",
                "date": "09/10/2022"
            },
            {
                "_id": "",
                "author": "Anonymous6",
                "answer": "Yesss, just go for it",
                "date": "09/15/2022"
            }
        ]
    }
],
"comments": [
    {
        "_id": "7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310",
        "body": "Both the cameras are good, but not a major upgrade from 13",
        "author": "Anonymous6"
    }
],
"pictures": [],
"amazonurl": "NA",
"bestbuyurl":
"https://www.bestbuy.com/site/apple-iphone-14-128gb-midnight-t-mobile/6505471.p?skuId=6505471"
}
```

Name	Type	Description
_id	String	A global identifier for the product
Category	String	Type of device: Phone, Tablet or Laptop
Specifications	Sub-document	A sub-document consisting of all the important technical specifications of the product
Reviews	Sub-document	A sub-document consisting of all the customer reviews of the product
qna	Sub-document	A sub-document consisting of all the questions asked by the users and the relevant answers posted by users/experts
Comments	Sub-document	A sub-document consisting of all the comments made by the users

Pictures	Array	A set of pictures of the product
amazonurl	String	URL to product page on Amazon
bestbuyurl	String	URL to product page on Bestbuy

2a. Reviews

A sub-document consisting of all the customer reviews of the product

```
"reviews": [
    {
        "_id": "7b696a2-d0f2-4g8g-h67d-7a1d4b6b8897",
        "title": "Terrific device",
        "author": "Anonymous1",
        "body": "Its one of the best devices from Apple",
        "pictures": [],
        "rating": 5,
        "likes": 1,
        "dislikes": 0,
        "comments": [
            {
                "_id": "7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310",
                "author": "Anonymous2",
                "body": "Did you get a chance to check out the new camera sensor?"
            }
        ],
        "date": "11/01/2022"
    }]
```

Name	Type	Description
_id	String	A global identifier for the review
title	String	Title of the review
author	String	Author of the review
body	String	Review of the product
pictures	String	Pictures posted by the user
rating	Number	Rating of the product by the user
likes	Number	Number of users that like this review

Dislikes	Number	Number of users that dislike this review
date	String	Date of the review
Comments	Sub-document	Comments made under the review

2b. Qna

Sub-document to store questions asked by the users and their subsequent answers

```
"qna":
{
      "_id": "7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310",
      "question": "Is it a good device for gaming?",
      "answers": [
        {
           "_id": "",
           "author": "Anonymous5",
           "answer": "Yes, the chip is very powerful and can handle almost everything",
           "date": "09/10/2022"
        },
        {
           "_id": "",
           "author": "Anonymous6",
           "answer": "Yesss, just go for it",
           "date": "09/15/2022"
        }
      ]
    }
  ]
```

Name	Type	Description
_id	String	A global identifier for the question
question	String	Question asked by an anonymous user
answers	Sub-document	A sub-document consisting of all the answers for the above questions

2c. Answers

An array of sub-documents consisting of all the answers for the question

```
"answers": [
        {
          "_id": "",
          "author": "Anonymous5",
          "answer": "Yes, the chip is very powerful and can handle almost everything",
          "date": "09/10/2022"
        },
        {
          "_id": "",
          "author": "Anonymous6",
          "answer": "Yesss, just go for it",
          "date": "09/15/2022"
        }
    ]
```

Name	Type	Description
_id	String	A global identifier for the posted answer
author	String	Username of the author
answer	String	Answer to the question
date	String	Date of the post

2d. Comments

An array of sub-documents consisting of comments for the product or the review

```
"comments": [
        {
            "_id": "7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310",
            "author": "Anonymous2",
            "body": "Did you get a chance to check out the new camera sensor?"
        }
     ]
```

Name	Type	Description
_id	String	A global identifier for the posted answer
author	String	Username of the author
comment	String	The comment on the product/review