

Retrieval Quality

To assess the quality of semantic retrieval using CLIP text embeddings stored in Qdrant, we conducted a test using a known product query:

"DB Longboards CoreFlex Crossbow 41 Bamboo Fiberglass Longboard Complete."

The query was embedded using CLIP and matched against the text embedding collection in Qdrant. The system returned the top 10 most similar products based on cosine similarity. Evaluation metrics were calculated by comparing the retrieval results with the known ground truth.

The results were as follows:

- Accuracy@1: 1 — the ground truth was the top-1 result.
- Recall@1: 1 — the ground truth appeared in the top-1 result.
- Recall@5: 1 — the ground truth appeared in the top-5 results.
- Recall@10: 1 — the ground truth appeared in the top-10 results.

This demonstrates that the system retrieves semantically accurate results.

Answer Generation

Evaluation:

Our chatbot effectively:

- generates context-aware answers, recommending relevant products with supporting images.
- avoids hallucination by strictly grounding responses in the retrieved context.
- generates response with human-like, well-structured, and concise tone, providing useful information without redundancy.

Examples:

Query: I want a lightweight longboard for carving and cruising.

Answer: Based on your query, I would recommend the Rayne Longboards Minotaur 34" Double Kick Cruiser Skateboard. It is a lightweight and versatile longboard that is ideal for carving and cruising. With its double kick design, it provides excellent stability and control, making it perfect for transition skating and high-speed alley ripping. Additionally, Rayne Longboards are committed to creating premium longboards and accessories from eco-friendly materials and processes, which aligns with your preference for a lightweight board.

Query: Recommend similar products for me with images



Answer: Thank you for reaching out! Based on the product details provided, I'd recommend the Little Live Pets - My Kissing Puppy - Wrinkles. It's a cute and cuddly toy that makes realistic puppy sounds and has different actions, just like a real puppy! The image URL for this product is <https://images-na.ssl-images-amazon.com/images/I/414mqi2RZLL.jpg>. Would you like me to provide more recommendations or help you with anything else?



Query: My daughter wants a bedsheet with cartoon characters. Can you recommend some good options with urls?

Answer: Of course, I'd be happy to help! 😊 There are some adorable cartoon character-themed bed sheets available on our platform. Here are a few options that caught my eye:

1. Unbranded Emoji, Cool Dude, 3-Piece Comforter Set Twin: This set features a fun and funny emoji-themed design with bright colors and cute illustrations. Your daughter will love the soft brushed fabric and the novelty pattern. Check out the image here:

<<https://images-na.ssl-images-amazon.com/images/I/51iVCRtMvRL.jpg>>



2. Sweet Jojo Designs Ballet Dancer Ballerina Queen Kids Children's Bed Skirt: This bed skirt features a beautiful ballet-themed design with colorful illustrations of ballerinas. It's made of 100% cotton and is machine washable. Take a look at the image here:

<<https://images-na.ssl-images-amazon.com/images/I/311GVPNhFEL.jpg>>



3. Urban Habitat Kids Lola Full/Queen Duvet Cover Set Girls Bedding - Purple, Aqua, Unicorns: This duvet cover set features a whimsical unicorn-themed design with bright colors and fun patterns. The set includes a duvet cover, two shams, and two decorative pillows. Check out the image here:

<<https://images-na.ssl-images-amazon.com/images/I/51jMEcCFeuL.jpg>>



All of these options are available on our platform and come with positive reviews from satisfied customers. I hope this helps you find the perfect bed sheet for your daughter! 😊

Query: Is this board good for cruising?



Answer: Thank you for reaching out! Based on the product details provided, the DB Longboards Phase 38" Maple Drop Through Longboard may be suitable for cruising, given its cambered platform and drop-through mounting, which can provide a smoother ride and more comfortable pushing. However, without more context or information about your specific needs and preferences, I cannot make a definitive recommendation. Please feel free to provide additional details or ask further questions!

Query: What is the maximum weight capacity of this ladder? How tall is this ladder when fully opened? Does this ladder have anti-slip feet or other safety features?

Answer: Thank you for your question! Based on the product information provided, the Hasegawa Ladders Lucano Step Ladder has a maximum weight capacity of 225 lbs. The ladder's height when fully opened is 7.5 feet. As for anti-slip feet or other safety features, the product description mentions that the ladder is sturdy and safe, holding up to 225 lbs. weight. However, I couldn't find any specific mention of anti-slip feet or other safety features in the product details. Please let me know if you have any further questions!

Query: What educational skills does this toy help develop? Also recommend me similar products with images



Answer: Based on the product details provided, the toy "3-in-1 Around We Go Activity Center" helps develop various educational skills, including:

1. **Motor Skills:** As the child moves the toy around the activity center, they develop their hand-eye coordination and fine motor skills.
2. **Problem-Solving:** The toy encourages children to problem-solve and think critically as they navigate around the center.
3. **Creativity:** The toy fosters creativity and imagination as children explore and interact with the different activities and objects.

Recommended similar products with images:

1. "Learning Journey Activity Center" - This product provides a similar interactive experience with different activities and toys for children to explore. Image:

<https://images-na.ssl-images-amazon.com/images/I/61%2B-fA0ng2L.jpg>



2. "Hape Activity Center" - This product offers a wooden activity center with different toys and activities for children to engage with. Image: <https://images-na.ssl-images-amazon.com/images/I/51ZR18YQW-L.jpg>



Please note that these recommendations are based on the product details provided and may not be exhaustive or accurate for all products.