## Metadata schema of items in an e-commerce site

Metadata is data that provides information about other data, allowing systems to better understand, organize, and retrieve the content itself.

${f item}$	
$region\_code$	unique_code
id	primary key
category	enum(elec, cloth
	etc)
keywords	for SEO
title	searching
logistics	warehouse
	availability
availability	quantity of
	product

- 1. **Region code:** is vital to localize product information and handle logistics at a regional level. It is used to select which warehouses stock the products and prevent the showing of the wrong availability to users depending on their locations.
- 2. **ID:** is the primary key and is used to uniquely identify every product within the system. It facilitates quick lookups, updates, and consistency in data across services.
- 3. Category: enables rational classification of products such as electronics or apparel. This aids in product filtering, search ranking, and categorization in the user interface and backend analytics.
- 4. **Keywords:** are specifically built by the system for search engine optimization (SEO). They facilitate it to be easily found by the user on Amazon as well as through external search engines like Google.
- 5. **Title:** is a human-readable, searchable label on the item. It appears in listings, recommendations, and search results to give users an idea of what the item is.
- 6. **Logistics:** is metadata describing warehouse and fulfillment-related data. It assists backend systems in monitoring item availability at different distribution points and maximally optimizing delivery speed.
- 7. Availability: captures the quantity or stock status of a product. It's employed for real-time purchase availability, restock notification, and informing users about correct delivery time estimates.

In summary, this metadata schema was selected because it captures the essential descriptors used to enable search, logistics, classification, and traceability of data for a commerce system at scale. It's abstract enough to qualify as metadata, but significant enough to be applicable across several functional domains.