**Geeks For Geeks AI Hackathon**

**HASH IT OUT**

**Direct Relationships:**

* Subcategory (Product Data) & Purchase History (Customer Data)
* Category (Product Data) & Purchase History (Customer Data)
* Product Id (Product Data) & Purchase History (Customer Data) **(Derived)**
* Holiday (Product Data & Customer Data)
* Season (Product Data & Customer Data)
* Geographical Location (Product Data) & Location (Customer Data)
* product\_recommendation\_data.csv (Product Data) & customer\_data\_collection.csv (Customer Data) - **Connected via Browsing History:**

1. Subcategory (Product Data) & Browsing History (Customer Data):

**Customers browse product subcategories.**

1. Category (Product Data) & Browsing History (Customer Data):

**Customers browse within product categories.**

1. Product ID (Product Data) & Browsing History (Customer Data) (Derived):

**As above, once we have matched subcategories, we can derive product ID's**.

**Indirect Relationships:**

* Price (Product Data) & Avg\_Order\_Value (Customer Data)
* Category/Subcategory (Product Data) & Customer Segment (Customer Data)
* Product Rating/Average\_Rating\_of\_Similar\_Products (Product Data) & Customer Purchase Behavior

Here We can infuse the relation if product ratings influence customer purchase decisions.

* Customer\_Review\_Sentiment\_Score (Product Data) & Customer Purchase Behavior

We can check if customer review sentiment influences purchase decisions.

* Age/Gender (Customer Data) & Category/Subcategory (Product Data)

Here, we can check if customer demographics influence product preferences.