



Chapter 3: Patterns (Part 1)

Extended Reference Pattern

< Back to the Question

Correct Option:

- An app needs to retrieve a product and information about its supplier.

This is a good scenario for the *Extended Reference Pattern*. It is likely that we want to carry some information about a supplier with the product, however not all of it. Having fields like the supplier's name, a reference number, and the supplier's phone number should provide all the information we need when looking at a product. Additional information like the complete address and billing contact should be left within the suppliers collection.

Incorrect Options:

- An app needs to retrieve a product and its ten most recent reviews.

This is a better scenario for the *Subset Pattern*. We want to bring in only the top ten reviews. However, a product may have a lot more reviews and these would be kept in a reviews collection.

- A product model needs to store a counter representing the number of times it was purchased.

This is a better scenario for the *Computed Pattern*. We would periodically calculate the number of times a product was purchased and store the information within the product itself.

- A product model needs to store references to images of the product that are kept in an external location outside the database.

This is one design solution to store large binaries. In this solution, the data is stored outside the database instead of inside it. However, this is not the definition of the *Extended Reference Pattern*.

- An order model needs to store the product ID, the price sold, and the quantity ordered for each product in an order.

The price sold and the quantity ordered are qualifying the relationship between the order and the products in it. The only other field, product ID, looks like a simple reference. If we want more information like the product name and a short description to also be part of the order document, then we should use the *Extended Reference Pattern*.

Proceed to next section