**Shopping Cart**

**Cart Overview**

A simple structure that can be serialized to JSON for storing cart items in a session.

**Required Data** – needs to be stored for each item contained in it

* The ID of a Product instance
* The quantity selected for the product
* Unit price for the product

**Functionality**

* When a cart is needed, check if a custom session key is set. If no cart is set in the session, create a new cart and save it in the cart session key.
* For successive requests, perform the same check, and get the cart items from the cart session key. Retrieve the cart items from the session and their related Product objects from the database.

**Functions to manage the shopping cart**

* Add product
* Save
* Remove product
* Iterate over products in the cart get the given product object from the database
* Total number of items in the cart (len)
* Total price
* Clear cart from session