API endpoint for order picking

Overview:

This document explains the functionality of an API endpoint for order picking. It retrieves positions of products and returns the list of product positions based on the request parameters.

Introduction:

The API endpoint is developed using the Express framework for Node.js and Axios for HTTP requests. The endpoint listens to the '/order-picking' path on port 3000. The endpoint accepts a GET request with a list of products to pick and returns the list of positions for those products.

Request parameters:

The endpoint accepts the following query parameters in the GET request:

products: A list of products to pick, where each product has a productId and a quantity. The products are passed as an array of objects.

Response:

The endpoint returns a JSON response with a list of product positions that contains the following fields:

productId: The ID of the product

positionId: The ID of the position where the product is located

quantity: The quantity of the product at the position

Functionality:

The endpoint checks for the presence of the 'products' parameter and validates it. If the parameter is missing or invalid, the endpoint returns a 400 (Bad Request) status code with an appropriate error message.

The endpoint retrieves the positions of each product using an external API endpoint. It filters the positions to only include those with enough remaining quantity for the product.

The endpoint sorts the product positions by quantity in ascending order.

The endpoint groups the product positions by productId and positionId.

The endpoint converts the grouped product positions to the output format and returns the list of product positions in the response.

Error handling:

If the 'products' parameter is missing or invalid, the endpoint returns a 400 (Bad Request) status code with an appropriate error message.

If the API endpoint for retrieving positions returns an error, the endpoint returns a 500 (Internal Server Error) status code with an appropriate error message.

Conclusion:

This document provides an overview of the functionality of an API endpoint for order picking. The endpoint retrieves positions of products and returns the list of product positions based on the request parameters. The endpoint is developed using the Express framework for Node.js and Axios for HTTP requests.