

ABSTRACT

The present disclosure provides systems and methods for automatic packaging determination comprising a memory storing instructions and at least one processor performing steps comprising: receiving an order comprising at least one item; searching a data store to determine a tag, volume, and weight associated with each item; sorting the items into groups based on the tags of the items; performing an optimization process for each group of items having the same tag by: creating a data structure representing a first package of the group; iteratively simulating packing a largest remaining item of the group into the first package, wherein if the simulating determines that a threshold is exceeded: creating an additional data structure representing an additional package, and iteratively simulating packing a largest remaining item until all items of the group are packed into a package; and generating at least one list of items for the data structures representing packages.