

ABSTRACT

The present disclosure provides systems and methods for automated bag packaging, comprising at least one processor; and memory storing comprising: receiving an order comprising at least one item; searching at least one data store to determine one or more properties associated with each item; for each group: performing an optimization process for packaging the at least one item into one or more bags, by: selecting a data structure representing a first bag, the data structure comprising a size of the first bag; iteratively simulating packaging of a largest item of the group into the first bag until all items are packaged in the selected bag; generating at least one set of instructions for packaging the items into the selected bag; and sending the generated instructions to a computer system for display, the instructions including at least one item identifier and one bag identifier.