Technical specifications for the development of a service algorithm and packager interface for Yandex Market

BUSINESS REQUIREMENTS

Information about the
1. **company Industry and areas of activity:** Marketplace, service for purchasing goods.

2. **General description of the task:** In order for the user to receive the order, it is necessary to pack the ordered goods in parcels to the end customer. The company noticed that the employee spends a lot of time choosing the packaging material in which to pack the goods. There is a large amount of packaging material (boxes, bags). It is necessary to come up with a way to prompt the user with information about the choice of packaging material. The packager interface should display the contents of the order to control completeness. The packer interface should,

based on the contents of the order, prompt the packer in which container (box, bag, taking into account the size) the order should be packed. When determining the packaging option for an order, you need to take into account the type of product, weight and size characteristics and the need for additional packaging for fragile goods.

Goals of the
service: 3. – Recommend with high accuracy the correct packaging for an order, which will allow the goods to be delivered without damage to the client and minimize the cost of packaging material, –

Display statistics about the operation of the model,
– Interface on how to advise information on choosing a box
to the user.

FUNCTIONAL REQUIREMENTS

1. Mandatory requirements for DS operation. There is
a set of data: a)
description of the
product, b) category of
the product, c) VGC (weight and dimensional
characteristics) of the product, d) history of previous
employee selections. It is necessary to develop a classification model that will allow suggest which orders should be packed in boxes and which ones in bags.

In this case, the order may be packaged in various parcels and our task is to minimize their number. Output an
assessment of the quality of the model.

2. Mandatory requirements for the work of designers. Screen:
List of items on order. The list must contain: a picture to facilitate and
‾ identify the product description of the product
‾

- product barcode
- information on the need for additional packaging of goods

Product control of order contents. Completeness control process looks like scanning the barcode of goods from the order one by one.

3. Mandatory requirements for the work of backend and frontend developers.

The backend developer must cooperate with the DS developer and supply data on the employee's choice of packaging material to the model to call it again before learning.

As a result, there should be an application that sends additional information into the model for further training. Give in separate handles statistics about classification and evaluation.

Frontend developer must write UI to display all information on the results of the algorithm.

4. Mandatory requirements for the work of managers.

Delivery of a project by a team within deadlines by transmitting links in one a message containing all the results of the team's work,

Building communication within the team for comfortable interactions between participants,

Decomposition of tasks within stages, adherence to deadlines between stages of work,

Preparing team members for a meeting with a consultant: participant meeting knows what stage his work is currently at, understands what he has a request for a consultant,

Packaging the final work of the project team and forming cover letter (optional).