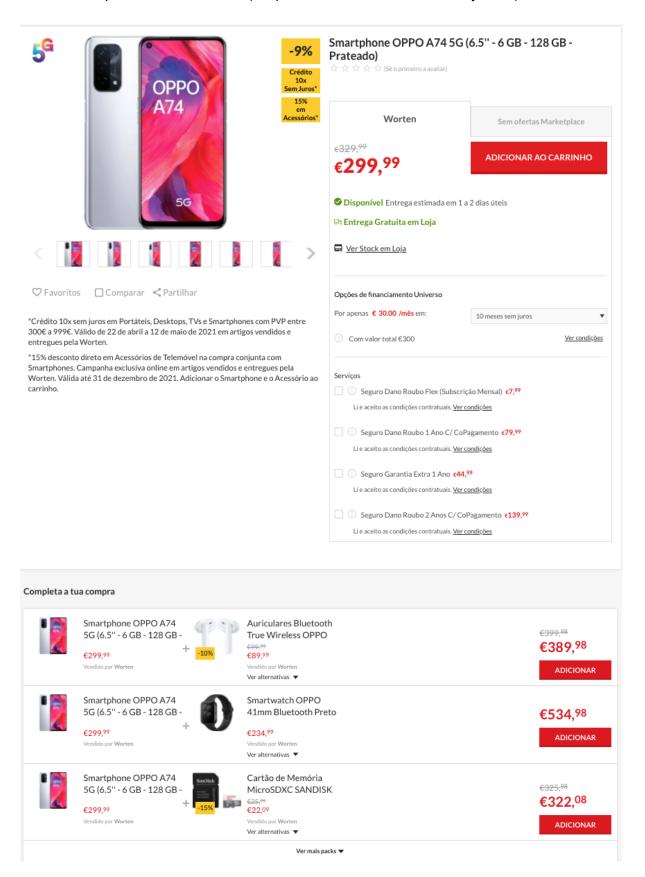
Swogo bundles

Swogo helps the world's most successful retailers in each industry to increase their online profit and sales using our automated cross-sell bundle technology.

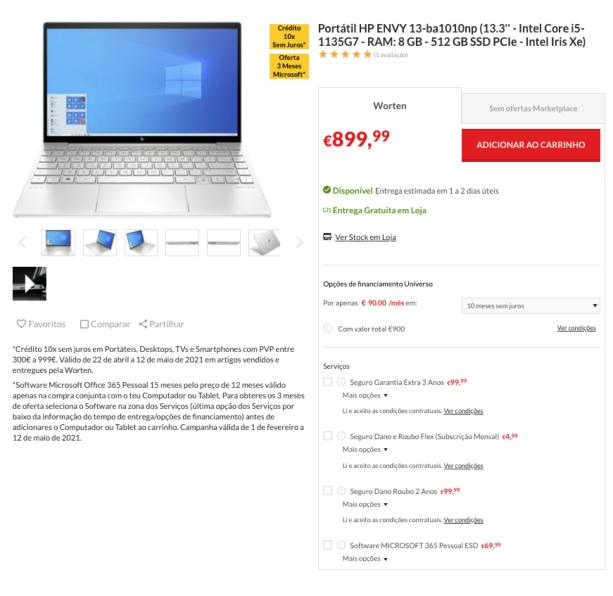
Swogo recommendation engine matches relevant accessories within the product detail page. This combination between the main product and its accessories it's called a bundle.

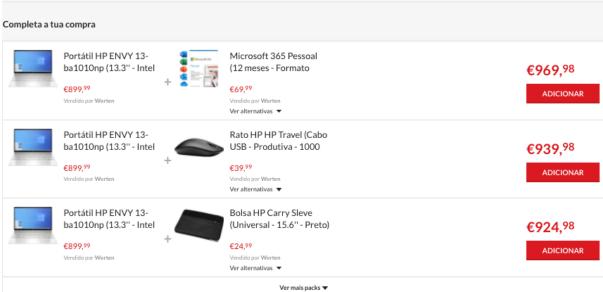
Here are a couple of examples from Worten PT:

- Smartphone with 3 bundles (Earpods, Smartwatch and Memory Card):



- Laptop with 3 bundles (Office, Mouse and Laptop Sleeve)





Exercise

The fundamental principle around Swogo's success is its ability to understand all different product ranges and match products with accessories using compatibility rules.

In the context of this exercise, we want you to put yourself in our shoes and imagine building a simplified version of Swogo:

- 1. Build a simple product detail page where you can navigate to (title, price and image). No home page is required. We can navigate through the products using the URL.
- 2. Implement a product database (MongoDB) and use it to feed both the pages and the recommendations
- Build a recommendation algorithm and API to feed the product detail page. For the sake of simplicity, you should only rely on product information to build the recommendations
- 4. Load relevant accessories in each product detail page. As an outcome you should showcase some products where your recommendations are being loaded and explain how the algorithm adapts to more complex scenarios.

Node.js usage is strongly recommended.

Bonus Questions

Once this system is in place, please describe how you should address more complex topics (no implementation is required for these topics):

- How will you ensure that the API is able to handle a large number of requests as your customer base grows?
- What strategies will you adopt to make sure your product database is constantly updated and has all the attributes needed to make the system work?
- How will you build the API using a multi tenant architecture? What security concerns will you have in mind to avoid leaking data to the wrong customers?
- What metrics (technical and business) will you measure to make sure the system is working properly?