

Programming task

You have been given a task to write a new REST API for a webshop. The API must implement a handler for saving and fetching shopping cart data to and from a database.

The application must be able to do the following:

- Accept a REST request which contains fields described below, validates them (type, content, etc.), and then saves the data to database. Application must return an identifier for the newly created cart as a response.
- Accept a REST request which contains the identifier field, fetches the cart content from database with it, and returns the cart content as a response.

Required REST API fields:

- List of items in the cart:
 - Item ID
 - Item name
 - Item price
- Country name or ID for VAT purposes

You may design the API and database models freely. The following technologies must be used:

- Python 3
- Django, Flask or some other similar web framework
- Any SQL database for the shopping cart data (Sqlite, MariaDB, MySQL, PostgreSQL ...)
- REST compatible API

We appreciate good programming practices, eg., readable code and unit tests. Also note that we do not expect everything to be fully implemented, as long as you explain your choices in the comments or when asked.

Optional additional tasks

We don't necessarily expect these to be done, but if you have the time, you can use these to show your skills:

- Implement a web page where you can generate and load shopping carts using JavaScript frontend framework (Vuejs, Angular, React ...).
- Implement an administration web page where one can monitor the saved shopping cart contents
- Implement response cache using eg. Redis (choose technology freely)
- Implement authentication and session handling for the above mentioned admin panel
- Implement authentication and session handling for the Rest API, and save User ID to database
- Anything else related with which you want to show off your skills :)