

PHP Developer Test

Introduction

The objective is to create a voucher pool microservice based in PHP.
You can use whichever components, libraries and frameworks you prefer.

What is a voucher pool?

A voucher pool is a collection of (voucher) codes that can be used by customers (recipients) to get discounts in a web shop.

Each code may only be used once and we would like to know when it was used by the recipient.

Since there can be many recipients in a voucher pool, we need a call that auto-generates voucher codes for each recipient.

Here's a screenshot from our software to give you an idea what it looks like:

The screenshot shows a web interface for managing a voucher pool. At the top, under the heading "Willkommensgutscheine", there are three summary statistics: "120.000 Gesamte Gutscheine", "90.193 Unbenutzte Gutscheine", and "29.807 Benutzte Gutscheine". Below this is a table of vouchers. The table has columns for "CODE", "BENUTZT" (Used), "EMPFÄNGER" (Recipient), and "VERWENDUNGSDATUM" (Usage Date). The first row shows a voucher with code "X3A9309B", which is used (checked), sent to "schebesta@newsletter2go.com", and used on "24.08.2017". The next two rows show unused vouchers with codes "A9309BX3" and "Y8390BES". Each row has a checkbox on the left and a settings gear icon on the right. At the bottom right, there is a pagination control showing "1", "2" (selected), "3", "4", "...", "10", and ">".

Willkommensgutscheine			
120.000	90.193	29.807	
Gesamte Gutscheine	Unbenutzte Gutscheine	Benutzte Gutscheine	
<div><button>+ Gutscheine hinzufügen</button> <input type="text"/> <input type="button" value="⚙"/></div>			
<input type="checkbox"/> CODE	BENUTZT	EMPFÄNGER	VERWENDUNGSDATUM
<input type="checkbox"/> X3A9309B <input type="button" value="⚙"/>	✓	schebesta@newsletter2go.com	24.08.2017
<input type="checkbox"/> A9309BX3 <input type="button" value="⚙"/>	✗		
<input type="checkbox"/> Y8390BES <input type="button" value="⚙"/>	✗		

« 1 2 3 4 ... 10 »

Entities

- Recipient
 - Name
 - Email (unique)
- Special Offer
 - Name
 - fixed percentage discount
- Voucher Code
 - unique randomly generated Code (at least 8 chars)
 - assigned to a Recipient and a special offer
 - Expiration Date
 - Can just be used once
 - Should track date of usage

Functionalities

- For a given Special Offer and an expiration date generate for each Recipient a Voucher Code
- Provide an endpoint, reachable via HTTP, which receives a Voucher Code and Email and validates the Voucher Code. In Case it is valid, return the Percentage Discount and set the date of usage
- Extra: For a given Email, return all his valid Voucher Codes with the Name of the Special Offer

Tasks

- ☐ Design a database schema
- ☐ Write an application
- ☐ Add an API endpoint for verifying and redeeming vouchers
- ☐ The code should be covered by tests
- ☐ Write a documentation with code examples for the implemented calls (Postman collection is a nice-to-have)

Hints

- A micro-framework may help you get started quickly
- Security is not a concern - look at this as an internal app, no need for access control
- A system that works is appreciated, but the larger focus is on code quality etc.
- Tests may reveal inconsistencies or unexpected scenarios in the original specification
- Any further questions? Feel free to ask us!