

Take-Home Challenge – Backend Developer

Here's a short technical challenge to help us get a sense of your coding style and approach. The goal isn't to test your knowledge of a specific framework — we're more interested in how you think, structure code, and handle a bit of ambiguity.

The Task

We're building a small system to manage subscriptions to digital products (like software tools or content bundles). Here's what we need:

- A user can subscribe to one or more products.
- Each product can have one or more pricing options (e.g., monthly, yearly).
- A subscription is active for a given period and can be cancelled.
- When a subscription is cancelled, it should remain valid until the end of the paid period.
- The system should be able to:
 - Add users and products
 - Subscribe a user to a product
 - Cancel a subscription
 - List all active subscriptions for a given user

You're free to design the system the way you think makes sense.

Tech Notes

- Write it in PHP.
- If you're familiar with Symfony, feel free to use its components (e.g., HttpFoundation, Serializer, Console, etc.).
- If you're not, that's totally fine — clean, modular PHP is more important.
- Please include test coverage for core logic.
- Add at least one “fuzzy” end-to-end test (could be CLI-based, or simulating a flow).
- You can persist data in memory (e.g., arrays) or fake it. No need for a real DB.

What to Deliver

- A link to a public GitHub (or similar) repo.
- Include a short README.md explaining how to run your code and tests.
- If you use AI (e.g., ChatGPT, Copilot), that's OK — but please include the relevant transcripts or links.

What We're Looking At

- Code structure and clarity
- How you model the domain
- How you handle ambiguity
- Quality of test coverage
- Thoughtfulness in your approach
- Use of Symfony/PHP patterns (if you claim experience)

Let us know when it's ready or if you have any questions. Looking forward to seeing what you come up with!