

Backend Code Challenge (lite version)

Your task is to build a mini-aspire API:

It is an app that allows authenticated users to go through a loan application. It doesn't have to contain too many fields, but at least "amount required" and "loan term." All the loans will be assumed to have a "weekly" repayment frequency.

After the loan is approved, the user must be able to submit the weekly loan repayments. It can be a simplified repay functionality, which won't need to check if the dates are correct but will just set the weekly amount to be repaid.

Actions to implement:



Customer create a loan:

- Customer submit a loan request defining amount and term
 - example:
 - Request **amount** of **10.000 \$** with **term 3** on date **7th Feb 2022**
 - he will generate 3 scheduled repayments:
 - **14th Feb 2022** with amount **3.333,33 \$**
 - **21st Feb 2022** with amount **3.333,33 \$**
 - **28th Feb 2022** with amount **3.333,34 \$**
- the loan and scheduled repayments will have state `PENDING`

2) Admin approve the loan:

- Admin change the pending loans to state `APPROVED`

3) Customer can view loan belong to him:

- Add a policy check to make sure that the customers can view them own loan only.

4) Customer add a repayments:

- Customer add a repayment with amount greater or equal to the scheduled repayment
- The scheduled repayment change the status to `PAID`
- If all the scheduled repayments connected to a loan are `PAID` automatically also the loan become `PAID`

Technical Requirements

Must have

- ▮ Aspire is using **PHP** with **Laravel** framework. However, you can use other frameworks like Symphony, Go, Python, Java, Nodejs.
- ▮ Build fully functional REST API **without any UI**
- ▮ [README.md](#) should contain all the information that the reviewers need to **run and use** the app
- ▮ Write code with your teammates in mind: apply the standard code style, readable, easy to review & understand.
- ▮ **Unit and Features** tests are required

Nice-to-have:

- ▮ Include brief documentation for the project: the choices you made and why
- ▮ Script to install the app in one go (any tool)
- ▮ Postman collection/openAPI document for the API
- ▮ Clean application architecture / design patterns
- ▮ Laravel exposure

Notes:

- ▮ We're **not only** taking care a lot about quality **but also** encourage any of your creative ideas to make the project better, so don't hesitate to try anything. (In case, you still have more ideas and need more time, it's okay to ask for delaying sometime, **we'd like to see all your best**)

The complete project should be shared with us as a public **GitHub/Bitbucket/GitLab** repo.

Happy coding!