

Thanks for taking some time to do our backend challenge

To do so, I am proposing you to implement a small system as described below.

Please respond to this message sharing your repo

### **Design Friends Lessons System**

We want to build a solution that allows a user to know for what courses their friends have taken any lesson. For example:

Joe has the following friends in the system: Mark, Jody, and Rachel.

Joe can see through the system that Rachel has taken 3 math lessons and 2 spanish lessons. A user can take more than one lesson on the same topic.

We would like to build an API that exposes endpoints for:

List all users in the system

List all friendships registered in the system.

List of all friends for a specific user.

List of lessons that a specific user has taken.

Extras for more points:

- Use postgres as your default database
- Traceback all the queries being executed
- Add a Header to each request received. The header must be MyHeader: Hello. You don't have to send it, you have to add it to the request that is coming
- Can you audit every request in a log? Or even better, in a mongoDB
- Add an async notification to an email(Tip: use celery). Please create a test email for ths and provide the credentials. And how to test it

NOTES:

- You have to do it django >= 3.2 y rest frameworrk >= 3
- Please upload everything to github
- Don't forget to add unit test to Your code
- For extra points please add an UML design of the solution
- Please add a detail readme on how to run your project. And feel free clarify anything You seem fit in the readme
- Integrate any free API of Your choosing and expose at least one endpoint.  
<https://github.com/public-apis/public-apis>

Thanks & good luck!