Limit handling

On Bitrise.io we have limits on:

- how many builds can run concurrently
- for how long can a build run
- how many builds can be started in a month
- how many team members can be added to apps

We have different plans that a user can select from on registration:

Free plan	Developer plan	Organization plan
1 concurrent build	2 concurrent builds	4 concurrent builds
10 mins build time	45 mins build time	90 mins build time
200 builds per month	unlimited builds per month	unlimited builds per month
2 team members	unlimited team members	unlimited team members

First, limits were bound to users, so if a user adds multiple apps to Bitrise, the concurrent builds count, the builds count per month, etc. of their apps will add up. We wanted to support open source projects, so we introduced public apps. If a user adds a public app to Bitrise, it has its own quota, it won't count towards the user's limits (E.g. a user can run 2 builds on a public app and 1 on a private app concurrently even if they are on a free plan.)

Public app default limits

2 concurrent builds45 mins build timeunlimited builds per monthunlimited team members (for that app)

For large open source projects though we might want to add more concurrency or more build time on a per-app basis. So we want to be able to modify these limits manually. And we want to enable the owner of a public app to opt out from using the public app default limits, so the app will behave as it was one of their private apps. (Use case: a user bought an organization plan with higher concurrency count and wants to use that instead of the public app's default limit.)

Please create a software that supports these business needs. We would like to be able to perform these actions:

- create a user account on one of the plans
- create a public or private app for a user
- set up custom limits for a public app
- opt out from the default public app limits (use the owner's plan instead)
- get the limits of an app

Notes

- Keeping track of the used resources (e.g. builds started) and retrieving the actual available limits is out of scope. The software should only care about the general limits that would apply to apps each month.
- http or persistence layer is not needed, no need to think about packaging or deploying your code, focus on the quality of the code instead of what is actually needed to fulfil the requirements.
- Please don't use a web framework as it makes it harder for us to assess the code that was written by you.
- Please create a publicly available git repository and share it with us.