Takeaway.com

Transactional email microservice - code challenge

Description

To streamline all transactional emails within Takeaway we want a transactional email microservice. This service should make sure transactional emails are sent with a high degree of certainty.

This microservice will use external services to actually send the emails.
When such an external service is unavailable there should be a fallback to a secondary service.
In the future, there probably will be more fallbacks so this should be taken into account.

You're free to use any email delivery platforms but you should use at least two (one as a fallback). E.g. Mailjet and Sendgrid are both offering free accounts and have great API's.
Do not use the Laravel mailer but write your own implementation.

At first, this microservice should be able to send an email by an (JSON) API and through a CLI command. We also want to have a log entry for every email that is sent through this microservice.

To improve the speed of the API calls the sending should happen asynchronously (use the queuing technique of your own preference).

Make sure;

- The micro-service is horizontally scalable
- The code has tests
- You’re including a readme which describes the choices you made and why
- You’re using micro-commits

Important: we'll only have Docker running on our machines and should not have to install any additional software to get this micro-service running.

Bonus points

- Allow multiple mail formats
    - HTML
    - Markdown
    - Text
- Allow more recipients
- Create a simplified separate “consumer self-service” (micro)service with endpoints for registration and forgotten password
    - Sending the following emails
        - (New) customer registered
        - Password forgotten

  - Make it handle potential downtime of mailer-service gracefully

Out of scope

Don't worry about the authentication/authorization for this microservice for now.

Required techniques:

- Docker
- PHP
- MySQL (or any other data storage)

Preferred techniques:

- Laravel/Lumen/Symfony

Done?

Push all the micro-commits to a Github repository and share this with one of our recruiters and include the repository url.