

FRONT-END TEST

A: Algorithm:

Make 3 groups from 8 characters below.

(maximum 3 characters per group)

["A", "B", "C", "D", "E", "F", "G", "H"]

Please answer in JavaScript or PHP, Ruby.

Items in each group should be chosen randomly.

The number of list characters can be 8 or more.

Number of items in each group should be as similar as possible.

ex)

[3] [3] [2]= OK: divided equally

[1] [3] [4]= NG: divided unequally

Please write the code here and give us the URL for each test:

<https://paiza.io/en>

B: Application:

Use any framework and library that you understand to create an application with the below requirements:

*****Notes:** If you can also complete the below tasks, it will be considered as a BIG PLUS:

1. Improve UI/UX: spinner-loader, responsive design, etc.
2. Create UI manually (should not use any library).
3. Write unit tests for the application.
4. Deploy to any platform that you know.

REQUIREMENTS:

1. From Covid API: <https://api.covid19api.com>. API document:

<https://documenter.getpostman.com/view/10808728/SzS8rjbc#b07f97ba-24f4>

[-4ebe-ad71-97fa35f3b683](#)

Use the following **summary API** (<https://api.covid19api.com/summary>) as the data source to create an application with the following features (*feel free to apply any UX/UI*):

- a. Make the list of countries which are most affected by Covid-19, and sort by the below rules:
 - The most total confirmed cases
 - The highest number of deaths
 - The least number of recovered cases
- b. Be able to click to show popup the detailed covid situation of the country. The popup should have 2 parts:
 - The first part to display the selected country's information such as name, flag image, population, capital, region, subregion.

Refer the API: <https://restcountries.com> (you can get country detail data by CountryCode (alpha2code) from **summary API**)
 - The 2nd part to visualize covid data of the selected country by period time. (can use chart).

Refer API: <https://api.covid19api.com/country/south-africa> (south-africa is slug field from **summary API**).
- c. Can bookmark/remove the country (save to localstorage or redux eg...)

2. Initialize version control with git & upload source code to Github.

