Lative

# React Technical Assessment

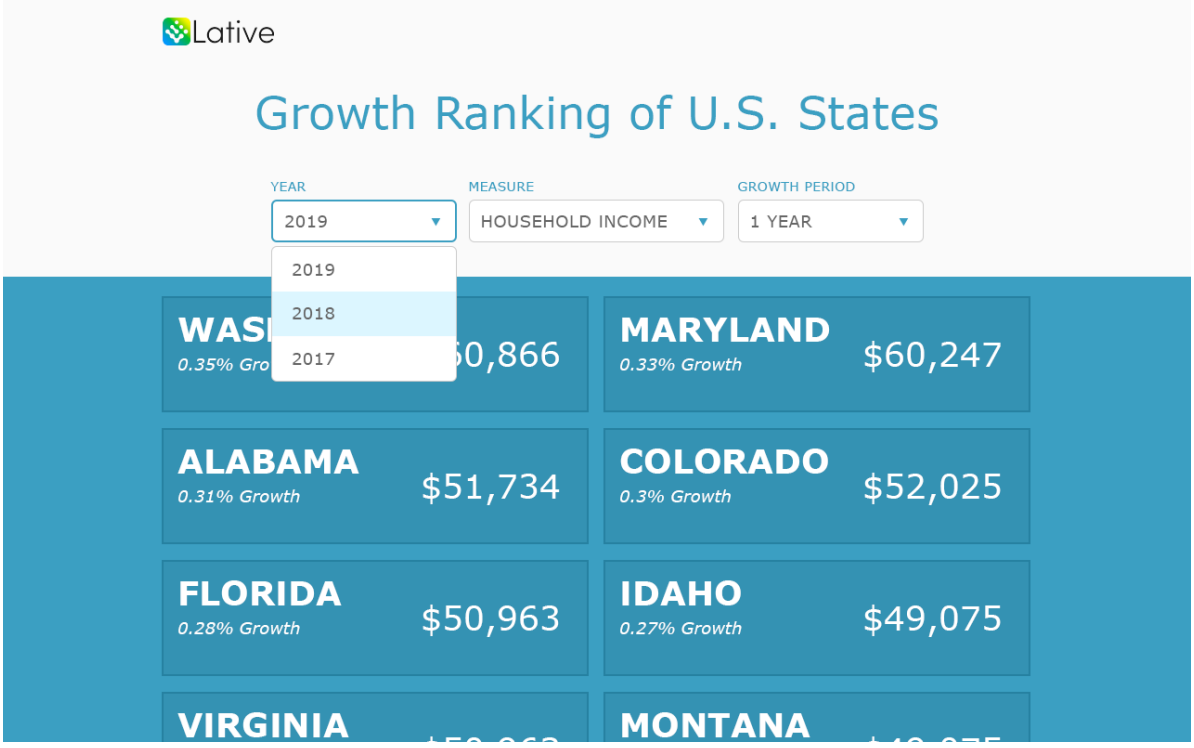
## Coding Challenge

We would like to see how you implement and test the following high-fidelity mock-up in HTML, CSS, TypeScript, and ReactJS.

You can download here a ZIP file which includes the site's design and a base React project you can use as a starting point.

Please feel free to change anything on the project code, folder structure, libraries or look and feel you think can be improved.

You have up to a week to send your source code, either by sharing a link to your GitHub repository or by sending a ZIP file to your contact at Lative.




## The Problem

The board should display a list of all U.S. States ordered by growth in descending order according to the selected period.

The options for the Dropdowns are static and set to the following:

- **Year:** 2019, 2018, 2017, 2016 and 2015.
- **Measures:** Population, Household Income and Property Value.

- **Growth Period:** 1 Year, 2 Year and 3 Year.

You can consume the following public API to obtain the list of U.S. States and its measures. For this exercise you will only need to use the **data** attribute in the response:

https://datausa.io/api/data?drilldowns=State&measures=Property+Value&year=2018,2019

## Growth Calculation

The 1-year growth for the Alabama State in 2018 is **4,67%** because Alabama's property value went from $141,300 in 2017 to $147,900 in 2018 so the YOY growth rate is:

($147,900 - $141,300) / $141,300 = 0.0467 * 100 = 4,67%

## Acceptance Criteria

*Functionality:*

When selecting any dropdown value:

1) A HTTP request must be performed to the API to retrieve all the States's data.

2) Each State box should contain the following information:

- **State Name:** attribute from the JSON response.
- **Growth percentage:** must be calculated.
- **Measure:** attribute from the JSON response.

3) The board needs to be rendered in descending order of Growth percentage.

*Tests:*

Please Unit Test all relevant behaviour/functionality and ensure all tests pass successfully.