

**Challenge :**

Suppose we want to show a map to visualize the annual net generation of power plants of the US.

The challenge consists of the following requirements:

- We want to display the top N plants.
- On the map we want to show absolute value and percentage of the plant's federal state.
- We want to be able to filter by state so we can zoom in.
- The data usually comes as excel file - <https://www.epa.gov/egrid/download-data> (eGRID2020 Data File)
- Feel free to save the data in any adequate format to feed the needs of your project.

**Deliverables:**

- A REST API that feeds the data to a frontend
- A Frontend to display the US map (as simple as possible with just the administrative separations between states)
- The Plants must be displayed on the map (with correct location) and the information (net generation and percentage) should be displayed in a way that you judge suitable.

**Bonus (Optional):** Deployment of the solution in a cloud service.

**Guidelines:**

- The solution should be implemented in Angular 6+ and NodeJs, preferably in TypeScript. ExpressJs is preferred but you might pick any other framework that feel more suitable for the task.
- Solutions using code generation are not accepted.
- **Reasonable assumptions are very welcome**, though it must remain within the required scope.
- Readiness of the code is very important.
- Demonstration of great understanding of the requirements is extremely important.
- We appreciate candidates that do just the extra mile to **anticipate future changes** in their solution.

The challenge must be completed within 1 Week from the time you receive this document.

Please submit your code through <http://gitlab.com> by sharing it with the user <https://gitlab.com/elamin.ouzzane> (as maintainer of the repository)