

Calendar View Builder Machine Coding Round

What is it?

Birthday Cal is a 7-day calendar that tells you the day (Mon/Tue/Wed...Sun) a person's birthday falls on for a specific year.

How does it work?

Given a list of birthdays and the year as input, the Birthday Cal shows the person's name under the correct day in the calendar.

Say, you have a list of people:

A = 2/15/1978

B = 5/23/1983

and the user selects the year as "2015".

Since A's birthday in 2015 falls on Sunday (because 2/15/2015 is Sunday) and B's birthday falls on Saturday (because 5/23/2015 is Saturday).

On the calendar, you have to put A in Sunday's box. And B in Saturday's box.

Task Details

The birthday list will be entered in a JSON format within the text area. The year will be selected from a dropdown. You need to process the given JSON input and place people's initials on the card according to these rules:

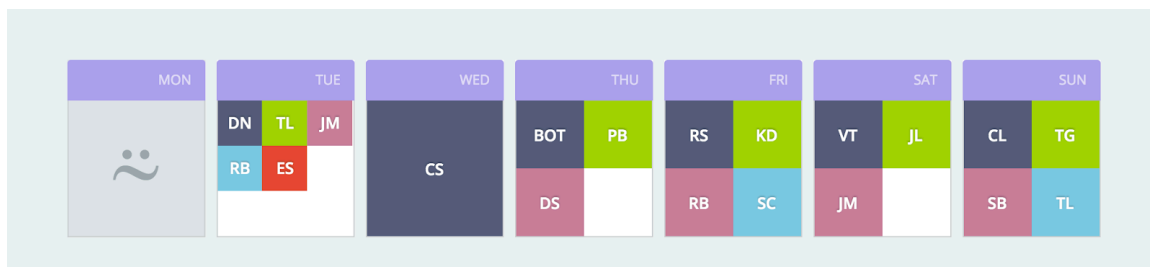
- If the box is empty, it should add the day-empty class.
- Add the name as the title attribute for each box of a card.
- Each person must always be rendered as square.
- Order people inside the card based on their age (youngest to oldest).
- Each square in a card must be of equal size and fit so that every person occupies the maximum area.

How it works?

On the initial load, the calendar should show the result for the selected year.

Year change should update the birthday calendar.

Here's an example of how the complete calendar would look like:

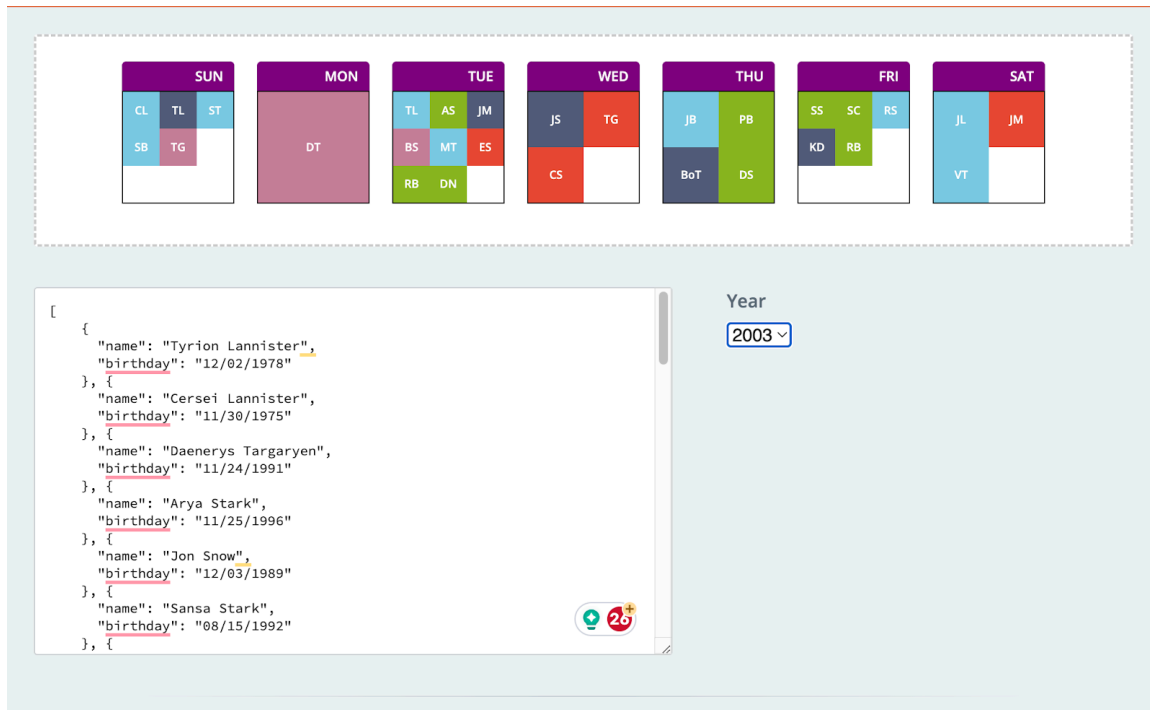


Tech Stack

- ReactJS
- Javascript/Typescript
- You are not allowed to use any external third-party CSS library

Reference Final Design

- Calendar Section
- TextArea for JSON input
- Dropdown for year-selector (you can start the year from 2000 - present)
- Colors: ['#545D79', '#8AB721', '#C77D99', '#78CAE3', '#E64A33']
- Reference Video: <https://drive.google.com/file/d/1Pk0sc3a1wkN61jGGbDrAsR2jQs9hrxZe/view?usp=sharing>



Sample JSON

```
[
  {
    "name": "Tyrion Lannister",
    "birthday": "12/02/1978"
  },
  {
    "name": "Cersei Lannister",
    "birthday": "11/30/1975"
  },
  {
    "name": "Daenerys Targaryen",
    "birthday": "11/24/1991"
  },
  {
    "name": "Arya Stark",
    "birthday": "11/25/1996"
  },
  {

```

```
},
{
  "name": "Jon Snow",
  "birthday": "12/03/1989"
},
{
  "name": "Sansa Stark",
  "birthday": "08/15/1992"
},
{
  "name": "Jorah Mormont",
  "birthday": "12/16/1968"
},
{
  "name": "Jaime Lannister",
  "birthday": "12/06/1975"
},
{
  "name": "Sandor Clegane",
  "birthday": "11/07/1969"
},
{
  "name": "Tywin Lannister",
  "birthday": "10/12/1951"
},
{
  "name": "Theon Greyjoy",
  "birthday": "12/31/1989"
},
{
  "name": "Samwell Tarly",
  "birthday": "12/07/1990"
},
{
  "name": "Joffrey Baratheon",
  "birthday": "06/12/1992"
},
{
  "name": "Catelyn Stark",
  "birthday": "12/03/1962"
},
{
  "name": "Bran Stark",
  "birthday": "12/02/1995"
},
{
  "name": "Petyr Baelish",
  "birthday": "11/20/1974"
},
{
  "name": "Robb Stark",
  "birthday": "11/28/1986"
```

```

},
{
    "name": "Brienne of Tarth",
    "birthday": "11/27/1985"
},
{
    "name": "Margaery Tyrell",
    "birthday": "12/02/1989"
},
{
    "name": "Stannis Baratheon",
    "birthday": "09/14/1971"
},
{
    "name": "Davos Seaworth",
    "birthday": "02/13/1973"
},
{
    "name": "Tormund Giantsbane",
    "birthday": "12/14/1974"
},
{
    "name": "Jeor Mormont",
    "birthday": "11/01/1955"
},
{
    "name": "Eddard Stark",
    "birthday": "12/02/1963"
},
{
    "name": "Khal Drogo",
    "birthday": "12/05/1980"
},
{
    "name": "Ramsay Bolton",
    "birthday": "12/05/1976"
},
{
    "name": "Robert Baratheon",
    "birthday": "12/02/1965"
},
{
    "name": "Daario Naharis",
    "birthday": "12/02/1985"
},
{
    "name": "Viserys Targaryen",
    "birthday": "12/06/1984"
}

```