

# Sensibull Frontend Developer Programming Challenge

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## Problem Statement

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- We have provided 2 APIs that give a list of stocks and their prices (See 'Input API Details' section below.)
- Create web application with the following 2 pages
  - Stocks page
    - Display a table listing the symbol, name and category for each instrument
    - Provide a search box that fuzzy searches the symbol and name and filters the list of stocks shown in the table
    - On clicking any symbol, user must be redirected to quotes page for that symbol (see below)
    - For this page, load data from `/instruments` API (see 'Input API Details' section below)
  - Quotes page
    - For the selected instrument, show the list of quotes
    - The quotes must be sort-able by timestamp ascending or descending
    - Please refresh the quotes when the `valid_till` timestamp for the data expires
    - For this page, load data from `/quotes` API (see 'Input API Details' section below)
- Please make the pages look nice

## Technical Requirements

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- The submission must use React.
- You may use any third party npm libraries.
- You can use any third party CSS frameworks as you want (eg. material-ui, bootstrap etc.) or write vanilla CSS.

## Submission

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- Please create a `tar.gz` file containing a git repo of the solution and upload it to a shared Google Drive/DropBox folder, and share that link with us.
  - **NOTE:** Please remove `node_modules` directory before creating the `tar.gz` file.
- Use Git for version control.
  - We would like to see the Git metadata (the `.git` folder) in the tarball so we can look at your commit logs and understand how your solution evolved.
  - Frequent commits are a big plus.
- Please make sure that the code has the necessary instructions to build the frontend and run the dev server.
  - Please make sure that the build instructions are simple, for eg. something like

```
npm install && npm run build && npm run start
```
- Please include a file detailing any design / architecture and any potential improvement if needed.

- Do not make either your solution or this problem statement publicly available by, for example, using GitHub, Gitlab or Bitbucket or by posting this problem to a blog or forum.

## Input API Details

### Instruments API

(NOTE: This API is provided by Sensibull)

**Endpoint:** `https://prototype.sbulltech.com/api/v2/instruments`

**Method:** GET

**Response:** CSV with list of instruments

**Example:**

Request

```
curl 'https://prototype.sbulltech.com/api/v2/instruments'
```

Response

```
Symbol,Name,Sector,Validtill
BAJFINANCE,Bajaj Finance Ltd.,Financial Services,2021-10-29 08:59:06
KSCL,Kaveri Seed Company Ltd.,Consumer Goods,2021-10-29 08:59:06
DLF,DLF Ltd.,Construction,2021-10-29 08:59:06
RELCAPITAL,Reliance Capital Ltd.,Financial Services,2021-10-29 08:59:06
```

### Quotes API

(NOTE: This API is provided by Sensibull)

**Method:** GET

**Endpoint:** `https://prototype.sbulltech.com/api/v2/quotes/{symbol}`

**Response:** Array of quotes for the given symbol

**Example:**

Request

```
curl 'https://prototype.sbulltech.com/api/v2/quotes/SBIN'
```

Response

```
{
  "success": true,
  "payload": {
    "SBIN": [
      {
        "time": "2021-10-28 12:03:46",
        "price": 17388.932633802062,
        "valid_till": "2021-10-28 12:03:48"
      },
      {

```

```
    "time": "2021-10-28 12:05:22",  
    "price": 16644.677657986853,  
    "valid_till": "2021-10-28 12:03:22"  
  },  
  {  
    "time": "2021-10-28 12:07:59",  
    "price": 17399.191923387705,  
    "valid_till": "2021-10-28 12:03:03"  
  }  
]  
}  
}
```