# Codechef Contest Arena

How to Start this Application?

1. Go to url http://a73d8dc1.ngrok.io
2. Sign in with Codechef credentials.
3. You will be redirected to home page where you will have access to different contests.

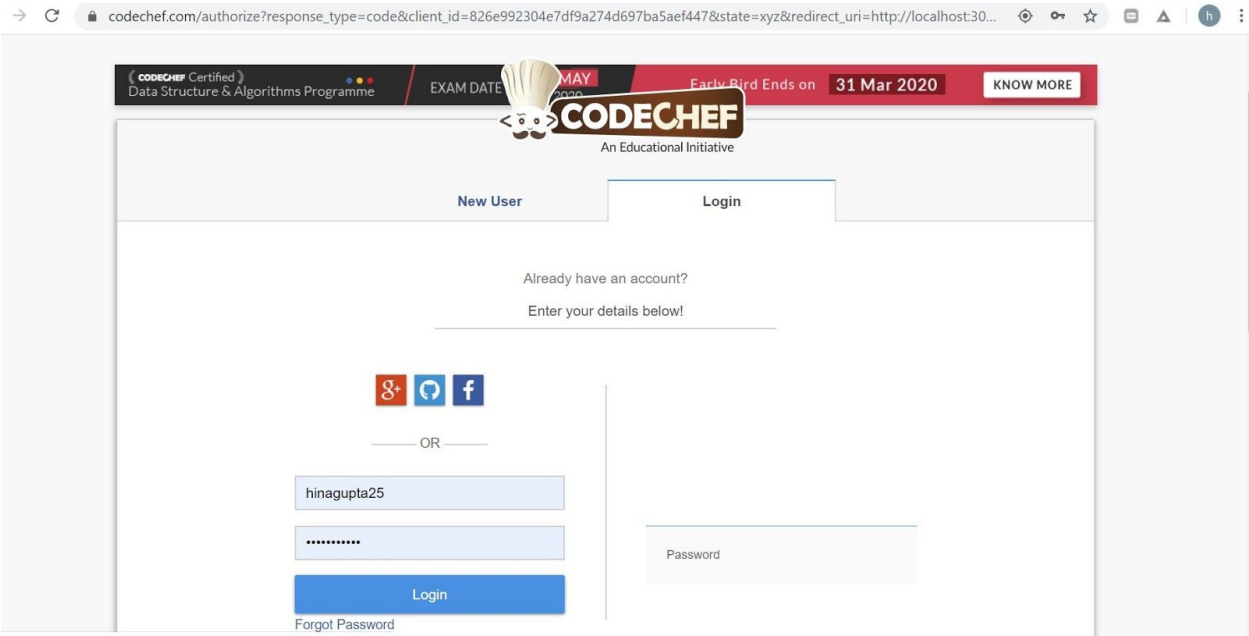
## Tech Stack

1. Javascript: Primary programing language
2. CSS: Styling web pages, HTML files
3. ReactJS: Javascript library for building User Interfaces
4. External API: Codechef

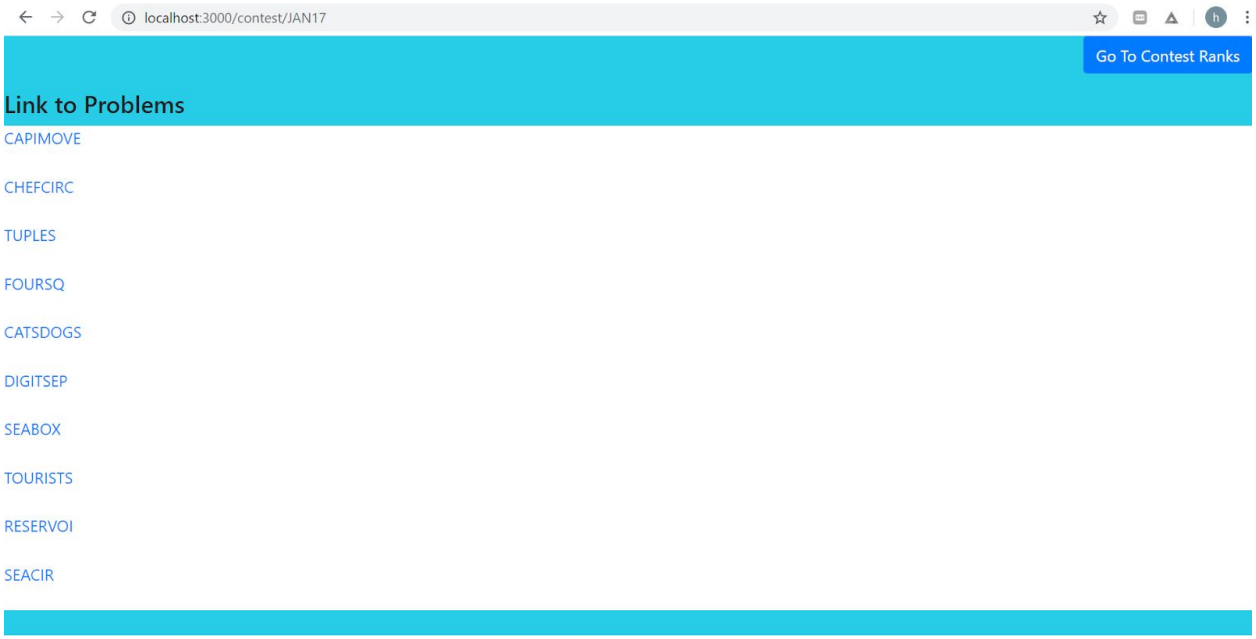
## Approach

#### OAUTH 2.0

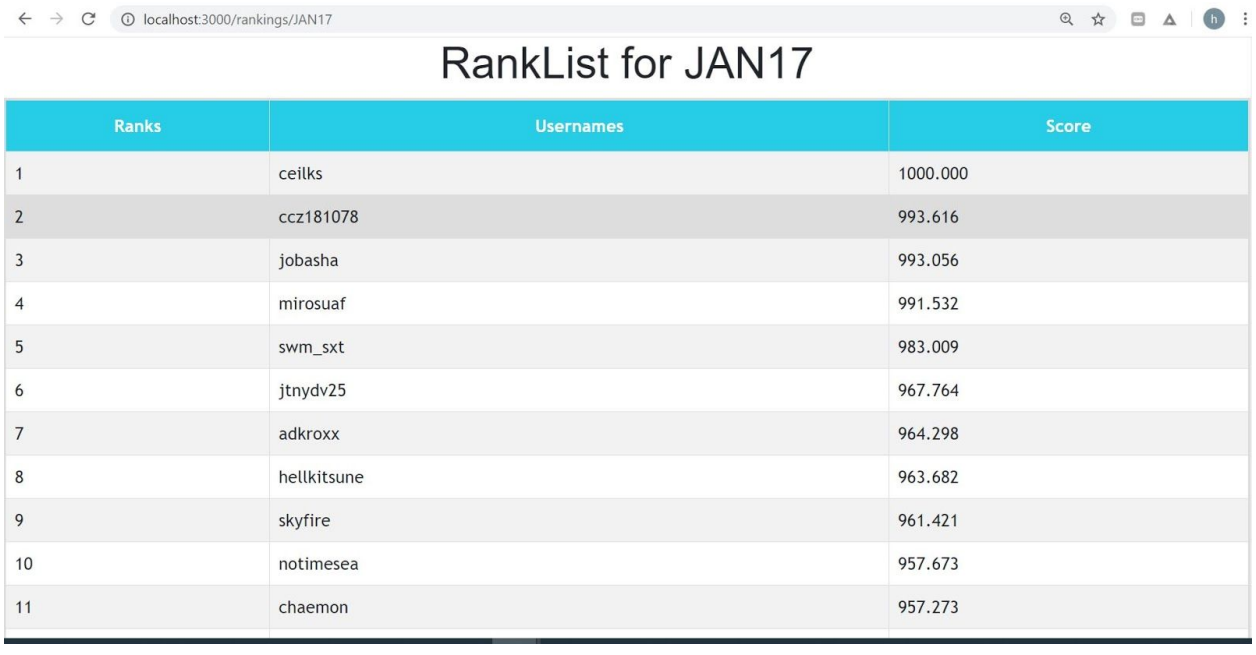
Codechef Contest Arena is  a webpage which can be used by any authorized user to participate in various contests that are conducted by Codechef. When the application loads up,the user is asked to authorize .Then a POST request is sent to the API `api.codechef.com/oauth/token` with authorization code and then AccessToken,RefreshToken are fetched which are then saved in localstorage of the browser.



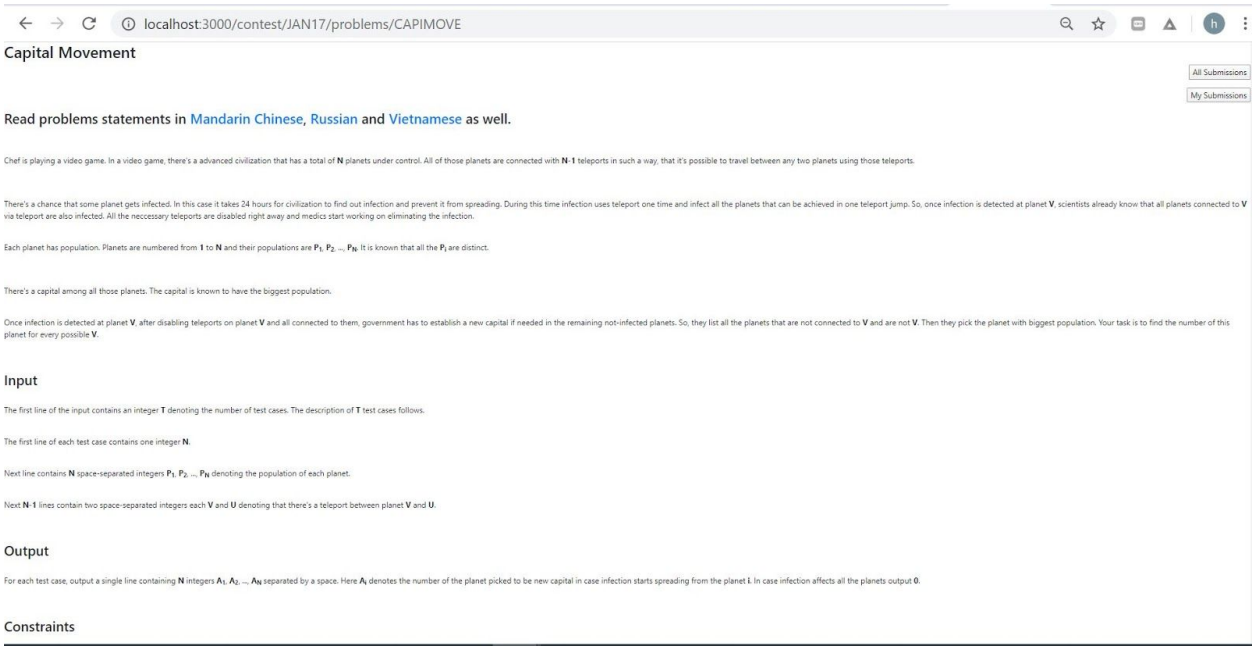

After this an AutoComplete Box is displayed which contains Contest Names and ContestCodes.When one of them is selected by the person, a GET request is sent to the API `api.codechef.com/contests/{contestCode}` and details of that contest is fetched.A clickable list of problems and Ranklist of the contest are shown.




Further when a user selects any problem by clicking on the link a GET request is sent to the API `api.codechef.com/contests/{contestCode}/problems/{problemCode}` and complete details of the problem are fetched.And if user clicks on Go to Contest ranks then another GET request is sent to the API `api.codechef.com/rankings/{contestCode}` which will give the rank list of the users with scores.




| Ranks | Usernames | Score |
|---|---|---|
| 1 | ceilks | 1000.000 |
| 2 | ccz181078 | 993.616 |
| 3 | jobasha | 993.056 |
| 4 | mirosuaf | 991.532 |
| 5 | swm_sxt | 983.009 |
| 6 | jtnydv25 | 967.764 |
| 7 | adkroxx | 964.298 |
| 8 | hellkitsune | 963.682 |
| 9 | skyfire | 961.421 |
| 10 | notimesea | 957.673 |
| 11 | chaemon | 957.273 |




Further users can view submissions for the problem by clicking on the All Submissions button .A GET request will be sent to the API `api.codechef.com/submissions/?problemCode={problemCode}&contestCode={contestCode}` and a list of users with all information about submissions will be fetched.


| Id | Language | Username | Result | Score | Time | Memory |
|---|---|---|---|---|---|---|
| 12600336 | C++ 4.9.2 | ysumit99 | CTE | 0 | 0 | 0 |
| 12600326 | C++ 4.9.2 | pushkar_2196 | AC | 50 | 0.75 | 5036 |
| 12600309 | C++ 4.9.2 | thanatoz | WA | 0 | 0 | 3292 |
| 12600298 | C++14 | aanchal1308 | WA | 0 | 0 | 0 |
| 12600283 | C++ 4.9.2 | pushkar_2196 | AC | 20 | 0 | 3288 |
| 12600258 | C | as7664 | AC | 50 | 0.25 | 11552 |
| 12600237 | PYTH | phoenix108 | AC | 20 | 0.01 | 7752 |
| 12600220 | C++ 4.9.2 | pushkar_2196 | AC | 20 | 0 | 3288 |
| 12600196 | C++14 | sunayan_1996 | AC | 100 | 0.36 | 5020 |
| 12600141 | C++ 4.9.2 | pushkar_2196 | AC | 20 | 0 | 3288 |

## Folder Structure


## NPM packages used

- react-html-parser

- query-string
- Browser Router,Link,Route
- PropTypes
- react-dom

I really enjoyed working on this web app. Through this project I have learnt a lot as it was my first web application.

## Author

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