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# Project 250 Final Submission Presentation

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## The Problem

We spent most of our time in mobile phone. But there is no app by which we can see country-wise standing. If we want to see upcoming contests, we have to go to different sites. Also to see my friend's submission in the running contest, we have to go to standing page.

# Solution Proposal

~~We can merge all~~  
of those and  
create a new  
mobile  
app, Contest  
Update.

# Contest Update

Ultimate mobile app for  
competitive programmer.





# Motivation

We both teammate love competitive programming from the beginning of our university life. We always wanted to make something which will be our a daily friend in cp journey. That's why we work in this project.



# Objectives

- Contest schedule
- Contest standing
- Contest remainder
- Friends activity



# Technology Stack

- Language: Java,XML
- API: REST API
- Service: Android studio
- Client Hosting: Firebase Hosting





# **Features**

**Lets see some of  
our features**

# Contest scheduler

We can see any upcoming contest name, contest site of that contest, time left before the contest and registration link in this feature.





# Contest Standing

We can see country standings, expected rank and points for any past contests of 'Codeforces' for all country. Here, I select 'Bangladesh' as a country and 'Codeforces round 755 (Div1)' for example.

CODEFORCES ROUND #758 (DIV.1 + DIV. 2)

ТЕХНОКУБОК 2022 - ОЗНАКОМИТЕЛЬНЫЙ РАУНД 3

EDUCATIONAL CODEFORCES ROUND 118 (RATED FOR DIV.

Select a country

🔍 bang



Bangladesh

CLOSE

EDUCATIONAL CODEFORCES ROUND 117 (RATED FOR DIV.

TECHNOCUP 2022 - ELIMINATION ROUND 2



# Contest standing

Moreover, Here colors of contestants tell their current rank in Codeforces. For example, Blue color stands for 'Expert' rank.

RANK	NAME	EXPECTED RANK	POINTS
1(137)	ANT_MAN	271	2240.0
2(324)	SEROTONIN	295	1310.0
3(448)	ALFEH	452	922.0
4(461)	CURLY_BRACES	492	854.0
5(553)	ADNAN_TOKY	509	488.0
6(574)	BI11A1	515	484.0
7(574)	AST_THECODER	558	484.0
8(586)	ARNOB	545	476.0
9(604)	IRIDESCENT_53	446	230.0
10(605)	DMC_TOPPER	509	0.0

## Friends activity

. One user of Cp Diary can add 15 friends on this app. If any of his friend solve problem in running contest of codeforces, he/she (User of Cp Diary) will be notified about his friend through Email. For example, I add 'Raiden' , 'Alfeh' , 'Yo\_Bro.' as friend.

### Friend List

- 1) Alfeh
- 2) Raiden
- 3) Yo\_Bro.

User-name

ADD USER



# Friends activity

il



**customizedak47@gmail.com** 2 Jan  
Raideen Solved problem 1616D name : Keep the Average High



**customizedak47@gmail.com** 2 Jan  
Raideen Solved problem 1616C name : Representative Edges



**customizedak47@gmail.com** 2 Jan  
Raideen Solved problem 1616B name : Mirror in the String



# Contest remainder

At last, We can see the 'Reminder' feature. Here, We can choose the online judge from which we'll be notified about the upcoming contests. We will get two notification 12 hours and 10 minutes before of that contest. If we click on the notification we'll be directed to contest registration link.

11:07



- ☒ CodeForces
- ☒ CodeForces::Gym
- ☒ TopCoder
- ☒ AtCoder
- ☒ CS Academy
- ☒ CodeChef
- ☒ HackerRank
- ☐ HackerEarth
- ☐ Kick Start
- ☐ LeetCode
- ☒ Toph





# Contributor

We both teammate works equally on our UI design. Our app mainly has 4 features: **contest scheduler, contest standing, friends activity and contest remainder**. Alfeh Sani(2018331119) mainly works on contest standing and contest remainder and Omar Sultan(2018331077) works on contest scheduler and friends activity. But we both helped each other when the other faced any difficulty. Our batchmate, Faridul Reza sagor helped us in lot of ways. We also learned many things from different sites on Internet.





# Bugs and optimization

We face some difficulty implementing this app. Query in Codeforces API is limited, hence it's limited to some features. Query on user information is quite slow due to some limitation in url length. We face some difficulty in firebase realtime storage. They stop client service after 30 days. We are unable to do friends activity in other site except codeforces, since we have to do login first to retrieve the data using json query. But it seems impossible to us. We spent lot of time but couldn't find any solution.