

COP290: Design Practices

User Registration App

Akshit Tyagi (2014EE10710)
Rishabh Kumar (2014PH10817)
Karan Dwivedi (2014CS10227)

15 January 2016

‘User Registration App’ is a simple Android app to test communication with a server using Volley JSON library. It takes in the names and entry numbers of team members through its user friendly GUI and sends it to the server when Submit button is pressed. We also check if the user types invalid (or blank) input.

The app also receives the server response and shows it to the user. In case the server sent a “Registration failed” message, the app prompts the user to try again later.

1 User Interface

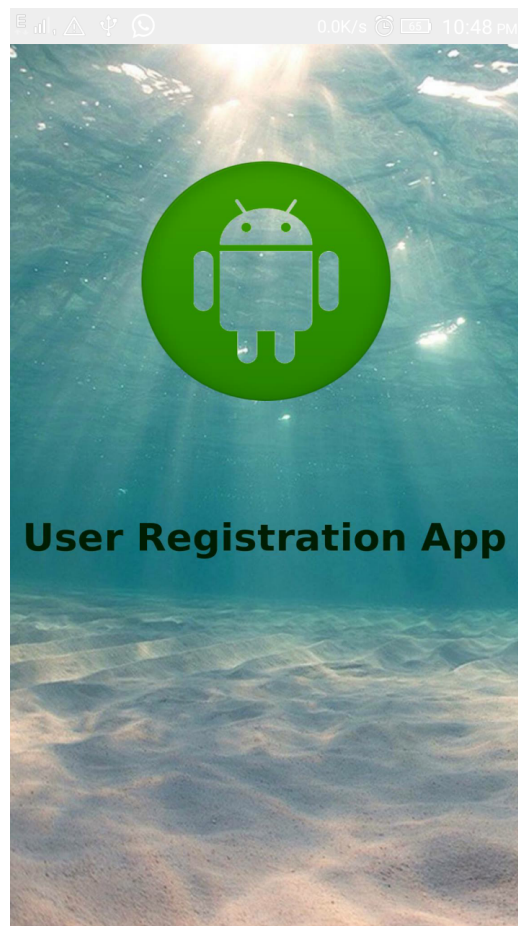


Figure 1: Splash Screen

- Details of the screens visible to the user

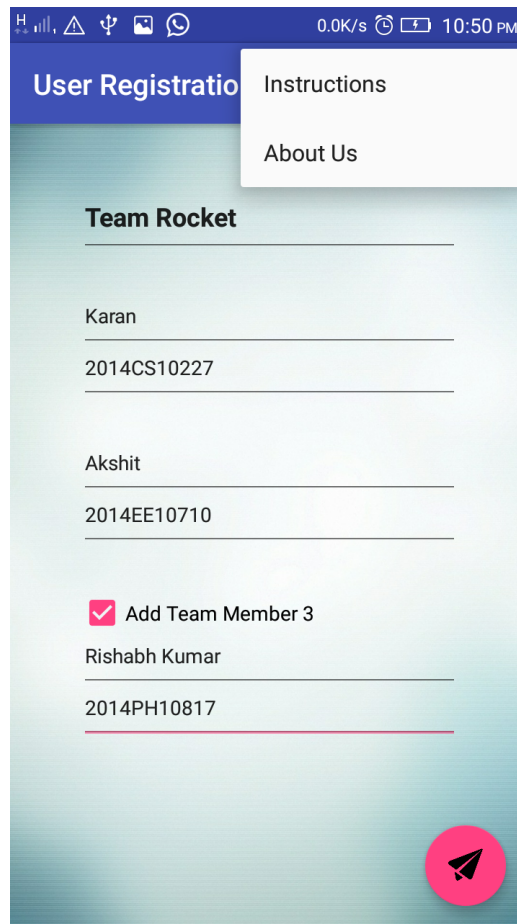


Figure 2: User Input Screen

The app has only one activity which is visible to the user. The activity has 6 input fields and a floating submit button. To register on the web server, the user enters the input using inbuilt keyboard and taps the submit button. In case there is an error in the input or the server response, the user is prompted via a Toast.

- Animations, buttons (enabled/disabled under what conditions)

Following Google's material design principles, the screen has a floating submit button, which connects to the server only after the user has entered valid input in all fields. Otherwise, it highlights the incorrect inputs and prompts the user to correct them.

- Actions performed when a user enters information, presses a button/icon etc.

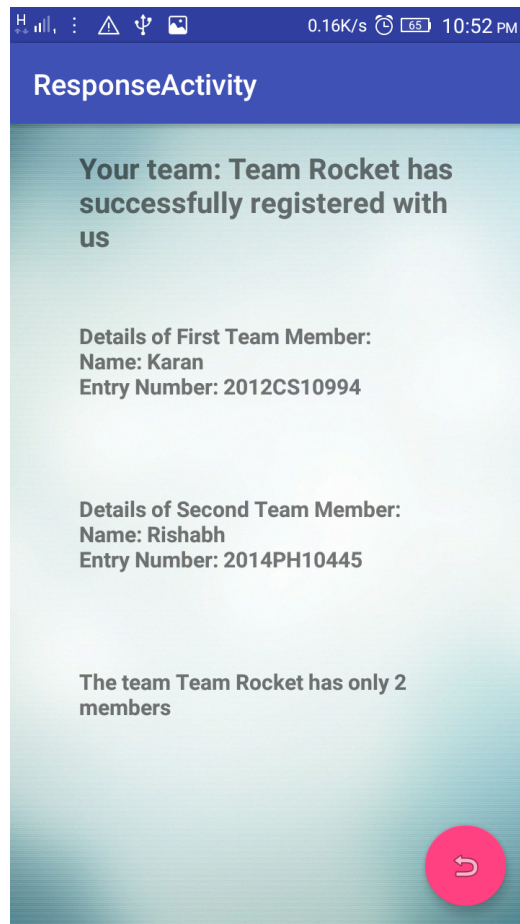


Figure 3: Server Response Screen

When the user taps any input field, the keyboard shows.

If the user leaves an input field without entering valid data, the field is highlighted.

On pressing the submit button, the app checks the input and if found valid, sends it to the web server and receives its response.

2 Implementation Details

- Organization of user information (Is it in a special User class, or is it distributed in arrays for each user entry)

Data

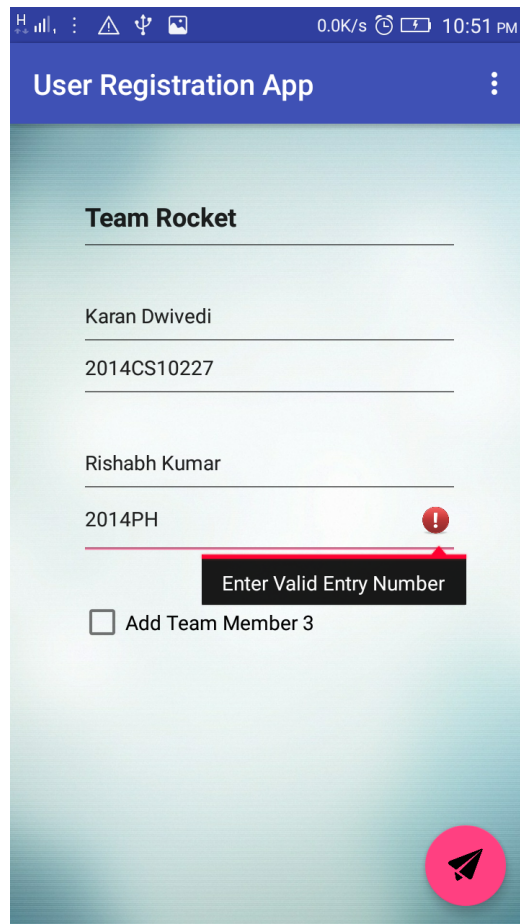


Figure 4: Error Handling

JSON Object

- Methods to verify the user information: Highlight the errors handled by the code

Once on leaving the input field

Once on pressing the submit button

- High level functions/methods used and descriptions of each one

sending

recieving

oncreate

- Methods for network communication. You can cite material that you used to create the application [?].

3 Error Handling

- error scenarios and handling method
- How to make sure that the user is entering a valid entry number
- How to make sure that the user is entering a valid name
- E.g. user is asked for Entry number but gives an invalid one

The code for the project is being maintained in this repository:
*[https://prathmesh_kallurkar@bitbucket.org/prathmesh_kallurkar/
user-registration-app.git](https://prathmesh_kallurkar@bitbucket.org/prathmesh_kallurkar/user-registration-app.git)*.