

# Technical Assessment - Messaging App

**AppRocket**  
**Full-Stack Engineer**  
**Prototype Development**

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Thanks a lot for considering us as the next step in your career. At AppRocket, we aim to foster a high-growth environment where you get exposure to the latest trends in tech, while working on top-notch assignments with outsized impact.

As part of the recruitment process, AppRocket requires all candidates to build a small prototype in the MERN stack. In building this prototype, we provide guidance on what the app should enable consumers to do. Sample screens are provided at the end of this document.

We do lean heavily on the prototype as a useful proxy to understand how you think and operate. Hopefully, it turns out to be a fun mini project. We are available for any questions as needed. After viewing this doc, let us know when you would like to meet to present and discuss the prototype. We request that you share the demo link prior to the presentation, so that we are able to review it in detail ahead of time.

Thanks again for engaging with us thus far.

I'm really excited to move further along and get to know you better!

## **Objective**

Make a messaging platform in React, Node and a database of your own choice where users can private message, create groups and message in the groups or broadcast a message.

## **Requirements (in order of priority)**

1. User should be able to login with the username and password (s)he signed up with. For starters this can be a username & password directly entered into the database.
2. User should be able to search everyone on the platform
3. User should be able to private message anyone on the platform.
4. User should be able to create a group.
  - a. User should be able to message in the group
  - b. Everyone in the group should receive the message
5. User should be able to sign up with a unique username and a password
  - a. Username should be case insensitive
6. User should be able to send broadcast messages to everyone on the platform

## Some thoughts

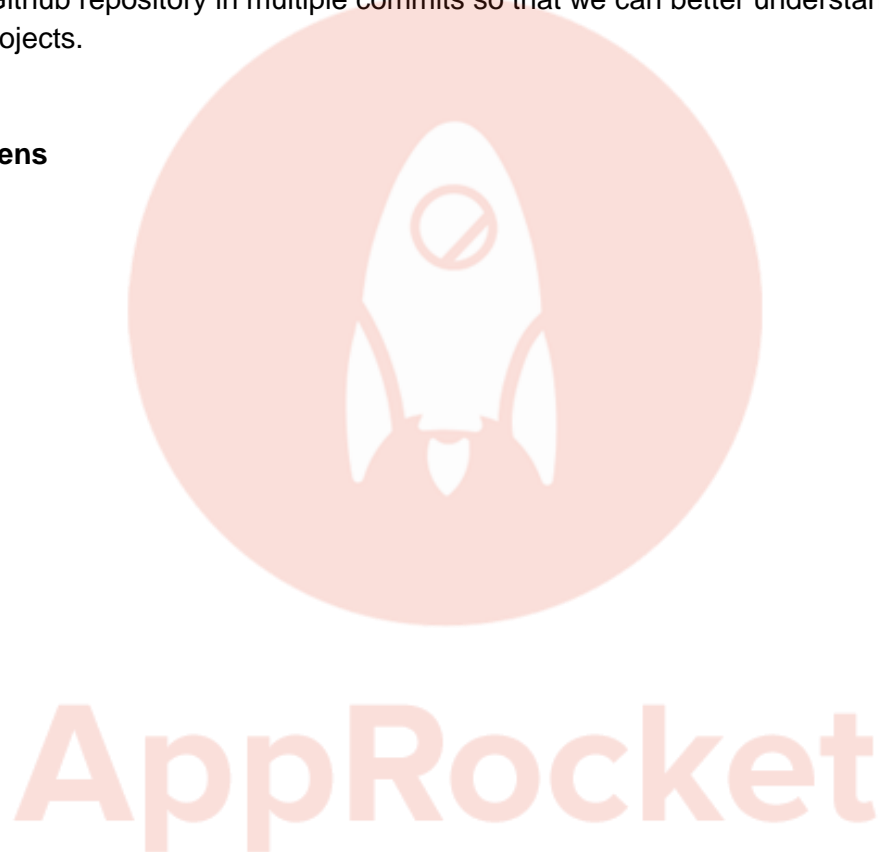
In closing, feel free to make assumptions for variables that may be unknown to you. Our suggestion is to view the above requirements as a starting point. You should ask yourself what additional requirements you want to include (or exclude).

Ultimately, we're curious to see if you can build and present a prototype (and what you end up delivering). ***You have full autonomy in how you go about it, what path you take, and what you prioritize. You do not need to fully complete the assignment, but this is what we will be looking for:***

- Clean, modular code with descriptive variable names and appropriate use of imports, functions, etc. to break down complex features into smaller problems
- Ability to create a UI screen with multiple elements
- Ability to fetch data from APIs and update UI accordingly
- Ability to work with sockets and/or push notifications
- Understanding of user authentication/login

We request that you provide us a demo link to the application and source code before you come in and present the prototype to us. Ideally, you would have pushed the code to a Bitbucket or Github repository in multiple commits so that we can better understand how you think about projects.

## Sample Screens



Login

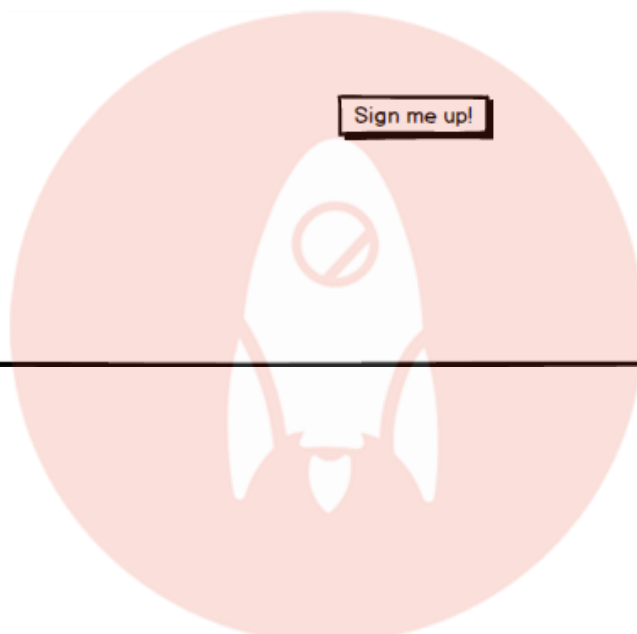
Signup

Sign Up

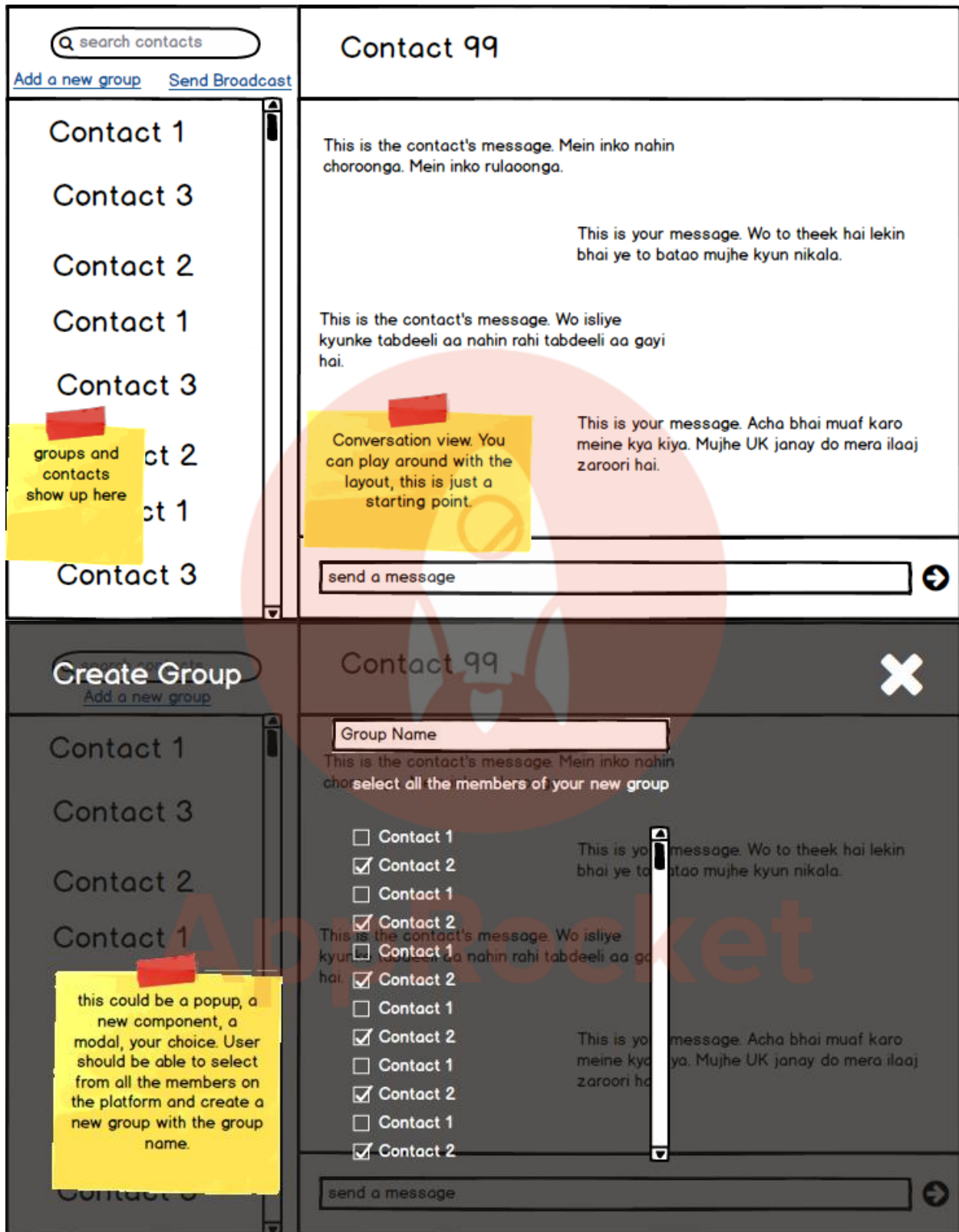
Username

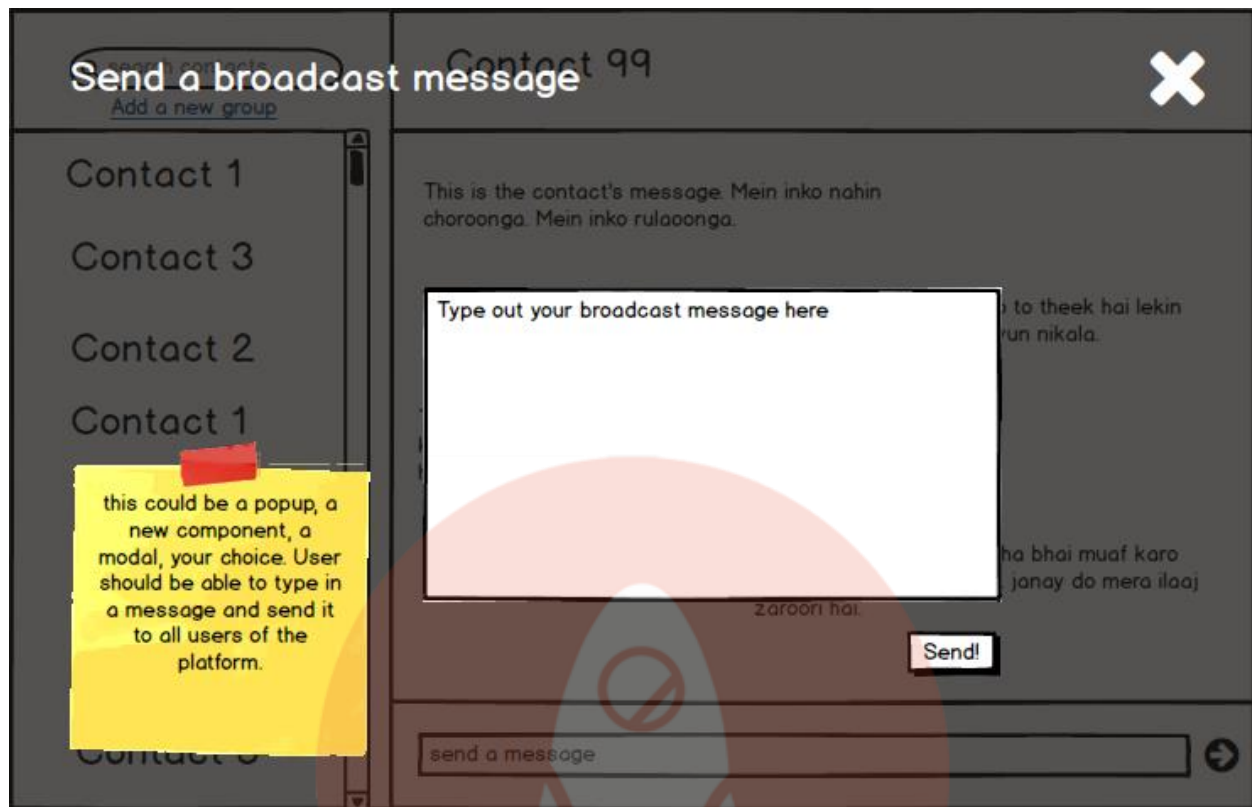
Password

Sign me up!



## Login





# AppRocket