**Developer Contributions**

**Deepayan Sanyal (Lead QA)**

* Took the lead in designing the backend
* Iterated through multiple database structures like Relational SQL Databases, Graph-based GraphQL, finally settling on document-based Firestore
* Implemented database architecture with a horizontally-scaling, NoSQL database using Firestore
  + This can be seen in the Database UML which explains the structure of the database
* Implemented authentication with Firebase
* Oversaw test cases to make sure they were up-to-standard when doing test-driven development.
* Worked with Viraj and Mikey on the frontend to integrate with backend in:
  + pubspec.yaml
  + group.dart
  + group\_label.dart
  + signup\_page.dart
  + login\_page.dart
  + home\_page.dart
  + group\_home.dart
  + group\_drawer.dart
* Wrote utility methods/classes for use in communicating with the backend:
  + authenticate.dart
  + database.dart
  + group\_label.dart

**Viraj Goyal (Lead PM)**

* Assisted the team, assigned tasks, and spent hours resolving merge conflicts on GitHub.
* Built a majority of the frontend logic and functionality --> I had the ideas for how everything would connect
* Worked with Deepayan on the method getGroupData and explained what I needed from the backend to implement the frontend pages
* I worked on:
  + account\_drawer.dart
  + group\_drawer.dart
  + group\_home.dart
  + home\_page.dart
  + login\_page.dart
  + signup\_page.dart
  + group\_label.dart
  + group.dart
  + message.dart
  + poll.dart
  + user.dart
  + pubspec.yaml
  + Uploading pictures of HangEZ logo to app
  + Resolving a plethora of merge conflicts each week using the command line
  + Generating the code through which we could run/test our app on Chrome
  + Test Documentation – Frontend
  + Project Spec
* Kept the team in check and ensured everyone was completing their tasks. Acted as the big thinker who mapped the whole workflow and recognized what technologies we needed to use to accomplish our goal.
* Worked heavily on integrating Deep’s backend code to Mikey’s frontend code.

**Mikey Halim (Lead UI)**

* I took the lead in developing the UI for our app. This involved designing the logo, creating the button displays, creating the complex layouts/app screens, as well as adding functionality to certain parts.
* Screens designed:
  + Account.dart
  + Create\_group.dart
  + Faq\_page.dart
  + Group\_home.dart
  + Home\_page.dart
  + Login\_page.dart
  + Member\_view.dart
  + Poll\_page.dart
  + Signup\_page.dart
  + Chat\_page.dart
  + pubspec.yaml

In multiple instances, I had to work on adding functionality and navigation to certain buttons. For example, on the home page, I had to make the join group and create group buttons functional and had to create popups that would display based on if joining a group was successful or not.

* Worked with Viraj on frontend, worked with Deep on linking the front and backend, and worked with Adam to implement the API.
* Demonstrated my commitment and reliability towards finishing the project in all situations – always doing what I was asked in a timely fashion.

**Adam Melamed (Lead Dev)**

* Took charge of much of the documentation, including the Object Classes UML and Main Flowchart.
* Performed research on various technologies, especially Firebase, to help others implement their part. Designed code and utility methods for Firebase that were later used by Deepayan.
* Wrote code to organize polling
  + Responsible for which polls the group votes on and in which order