

Sprint 2 - Design Inspection, Code Inspection and Unit Testing

Team 4: ChatChat

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Design Inspection

Product: ChatChat

Date: 10/11/2019

Author: Team 4

Defect #	Description	Severity	How Corrected
1	No like button in the chatroom page	Important	Added code to place a hollow heart image button in the chatroom page
2	There is no uid and email displayed in user profile page	Important	Added code to pass the uid key from mainactivity to user profile activity for data retrieval
3	When the user likes button is pushed, there is nothing changed on the chatroom page	Important	Added code to reflect changes. If the chatroom is already in the user's favorite list, a full heart will show up instead of the hollow heart.
4	When clicking on the user profile, the favorite list is not showing correctly	Workaround	Revised code to retrieve correct data from firestore database and then display on user profile page

5	Message editText will be covered by message dialog when swiping up and down.	Important	Added code in activity_chat.xml to align recyclerView's bottom to the top of the Message editText box.
6	Messages from other users are displayed on the left, and messages sent by myself is also displayed on the left.	Workaround	When binding the message dialog view to the adapter, add an if statement to check if the message is from the current user itself, if it is, display the message on the right.
7	No success message when a feedback is successfully sent	workaround	Added a notification once an email is sent
8	No direct field in feedback form that collects how much the user like this app	Workaround	Added a rating stars field in the feedback field.
9	No way to categorize the feedback	Workaround	Add separate fields in feedback form for bug and feature suggestions
10	In chat room info page, when chat room name is too long, it goes to the second line	Workaround	Modify the UI so that the chat room name is better displayed
11	In chat room info page, chat room name overlay on like count	Workaround	Modify the UI so that the textview and image is not overlaying with each other
12	When opening certain chat rooms, the app will crash.	Important	Add string to int conversion when using and updating the number of likes

Code Inspection

Product: Chatchat

Date: 10/11/2019

Author: Team 4

Defect #	Description	Severity	How Corrected
1	Invalid message inputs are not recognized	Important	Before updating the message to the database, add code to check for users' inputs.
2	When messages are updated to the database, it is not added into the subcollection of a chatroom.	Critical	Rewrite code for updating data to Database to the right collection reference.
3	There is no way to determine if a feedback is duplicated	Workaround	Give user a feedback cap per day

4	Empty feedback can happen	Important	Check if every required field is filled before submit
5	When the chat room is opened, the default value of the like toggle button is false, so it will automatically go into the toggle disabled function	Workaround	Add a default int at the beginning to be zero. When the program first hit the toggle disabled function, it will not get into it.
6	When get the "like" field from firestore, there is an error message shows up say that long cannot be cast to string and the program is crashed	Important	Change String likes = (String)chatroomDoc.getData().get(Chatroom.LIKES) to String likes = chatroomDoc.getData().get(Chatroom.LIKES).toString()
7	Add a room to favorite list which exceeds the maximum number shows no error message	Workaround	Add if statement to check if the number of rooms in the favorite list is the maximum number. If it is, then shows an error message and ask the user to delete one from the list before add new.
8	The like count in chat room info page does not check for the type of data	important	Change String likes = (String)chatroomDoc.getData().get(Chatroom.LIKES) to String likes = chatroomDoc.getData().get(Chatroom.LIKES).toString()

9	The chat room info page does not check if the description is too long to fully displayed	workaround	Modify the UI so that the text view is large enough to display a full description.
10	Too many testing buttons in profile page, which is unorganized	Workaround	Combined buttons to toolbar button list to make user profile simple and clean.

Unit Testing

Module: User Profile

Product: ChatChat

Date: 10/11/19

Author: Zhenmu Gong

Defect #	Description	Input	Output	Severity	How Corrected
1	User profile page should be updated when user upload a new image	Adding Image from photo gallery	Actual output: Only half of image was showing	Important	Use fit() function when using Picasso

2	When listing favorite list on the profile page, user can't enter the chat room	Press chatroom from favorite list	Actual output: Nothing happened	Important	Implement a redirection from userprofile to the chatroom.
3	User profile should be accessible in the chatroom	Press user image in chatroom	Actual output : Failed to load correct user information	Workaround	Using existing model to get data as object from firebase and load data into profile page
4	Username and user email are correctly displayed	Enter user profile	Actual output: Username is incorrect due to testing purpose hardcode	Workaround	Remove testing code for user profile page

Module: Favorite List Module

Product: ChatChat

Date: 10/12/2019

Author: Yiting Du

Defect #	Description	Input	Output	Severity	How Corrected
1	When adding a new chat room to the firebase, the data is not processed correctly	Input to firestore: "916PMUs w6Zx0qoC 0ts1g"	Actual output: null	Important	Implement a function to correctly process the
2	Sometimes the favorite list shows more	Clicks on the favorite list	Shows 12 rooms in the favorite list	workaround	Implement a function when adding to the

	than 10 rooms for a user	button for logged in user "charlotted yt"			favorite list, check the number of rooms already in the user's favorite list
3	The favorite list shows wrong data on other's profile page	Clicks on the favorite list button on user "123" profile page	Shows the favorite list of the current logged in user instead of the user "123" favorite list	workaround	Revise the function wrote to show the correspond favorite list using username to find the user id of that user and then fetch the matched favorite list data
4	When a user clicks on the hollow heart button to add the chatroom to the favorite list, the number of likes in the chatroom field is not changed	Clicks on the favorite button	Shows "0" in the chatroom field called "likes"	workaround	Add code to change the number of likes correspond to the chatroom when user clicks on the like button

Module: Message sending and receiving

Product: Chatchat

Date: 10/11/2019

Author: Shikang Fan

Defect #	Description	Input	Output	Severity	How Corrected
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1	Messages are not stored in appropriate places in the FirebaseDatabase	Type a message in the chat room and click send button	Actual output: The message is stored into a new collection Expected output: the message is supposed to be stored into the subcollection of the chat room.	Critical	When getting the database collection reference from Firebase, write collection("Chatroom").document("Message").subcollection().add(message)
2	Messages are not displayed in order of time	Enter a chatroom	Actual output: The messages in the chatroom is not ordered by time. Expected output: The message is ordered by time that the message is sent by other users.	Critical	Add a timestamp string into the Message map and make document id equal to the timestamp so that the message are stored automatically by date.

Module: Feedback

Product: ChatChat

Date 10/13/2019

Author: Siyu Jiang

Defect #	Description	Input	Output	Severity	How Corrected
1	Submit without giving a rating will make the rating 0.0	Submit without rating	Receiving email with 0.0 rating	workaround	Make rating a required field and block user from

					submitting without rating
2	Sometimes a user can gives a rating of 3.33333	Click a rating and submit	Receiving email with a rating with a very long digit	workaround	Round the rating the the decimal place before submit
3	Format of composed string is wrong	Enter all fields normally	Email without line break and space	Workaround	Modify the compose() function to insert line breaks between each field.
4	No check for empty feedback	Only click submit button	An email with empty field is sent	important	Modify the feedback activity to check for empty feedback

Module: chat room info

Product: Chatchat

Date: 10/11/2019

Author: Siyu Jiang

Defect #	Description	Input	Output	Severity	How Corrected
1	Likes count allow negative number	Open chat room info page	Likes count is -1	workaround	Check if the like count is valid before display
2	Not indication for empty description	Open chat room info page	Description field shows "TextView" which is the	workaround	Make the default text for description be

			default text for textview		"No description"
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Module: Chatroom name search

Product: Chatchat

Date: 10/11/2019

Author: Canyu Yang

Defect #	Description	Input	Output	Severity	How Corrected
1	Search exits out of the current view	Opening the search page	App exits	Important	The manager view was pointing to a different activity ID
2	When searching for a specific chatroom by name, recyclerView displays multiple instances of such chat room	Input specific chatroom name into search input	Fills all entries of recyclerview	workaround	In recyclerView, disable duplicate view of such input without displaying missing content