

ChatBee-The Messenger for Talkative Peoples

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Abstract: Chat application is increasingly used as an alternative to older communication technologies such as telephony and telegraph. Equipped with advanced features, people can use it for education, business and socialize. Basic requirement for chatting is an ability to exchange text messages; however, recent releases include support for audio and video communications. In ChatBee application, we proposed a chat application that is based on pure peer-to-peer architecture that totally rid of centralized or third party elements. In ChatBee application, we also proposed some new feature such as, you can create the group chat which will allowed the multiple user can chat at a time. In ChatBee application admin should block or make the setting it in such a way that the users can't send message on the particular day and time which is set by Admin i.e. block the group messages by customization. In ChatBee app we will customize the message. In ChatBee application admin can block one particular user from group and Admin has the authority to the blocked user can read the group messages but that blocked user can't send messages, media and GIFs. Using ChatBee application, you will able to hide your personal chats. The only requirement they need is a simple smart phone with internet connection.

Keywords: chatbee

1. Introduction

Communication is a mean for people to exchange messages. It has started since the beginning of human creation. Distant communication began as early as 1800 century with the introduction of television, telegraph and then telephony. Interestingly enough, telephone communication stands out as the fastest growing technology, from fixed line to mobile wireless, from voice call to data transfer. The emergence of computer network and telecommunication technologies bears the same objective that is to allow people to communicate. All this while, much efforts has been drawn towards consolidating the device into one and therefore indiscriminate the services. Chat application is becoming an important digital communication tools, people use it for business, education and socialize. It offers users an ability to identify online friends, a user then just selects the one that he/she wants to communicate before begins exchanging messages at will. Basic function of chat application is to be able to exchange a text-based message although today's application is equipped with more advanced features such as audio, video conferencing to the least. The application can be developed based on Peer-to-Peer (P2P) architectures. However, P2P now turned out to be the popular architecture as it offers many advantages such as low

maintenance cost for server side and high availability content distribution system. For this reasons, many popular applications like Skype, BitTorrent and eMule rely on P2P network.

A. Aim and objective

The two main objective of this project is notification by setting time and day and other one is block a any particular user from group. Others are Inbuid lock, hide your private chats, status dot, standalone groups, copy status and announcement section. User can easily chat and file transfer each other in personally and group. In group admin have authority to add new member, remove member, block member, unblock member features included which is easily done by admin. Admin gives the permission to blocked contact can read the message in the group but cannot write the messages in group. This application is most useful for manger level employees who only give permission to read messages in the group. This is the multipurpose application which is good for education, organization etc.

B. Problem statement

In existing chat application there is absence of blocking particular member in a group with unique permissions. Current users uses the services for chat and file transfer personally and in group chat. Admin can set time and day according to his/her need. In ChatBee application, we proposed a chat application that is based on pure peer-to-peer architecture that totally rid of centralized or third party elements. In ChatBee application, we also proposed some new feature such as; you can create the group chat which will allowed the multiple users can chat at a time. In ChatBee application admin should block or make the setting it in such a way that the users can't send message on the particular day and time which is set by Admin i.e. block the group messages by customization. Whenever admin don't want to see anyone's message from particular group. In existing system these option are not available, so these all features are available in proposed system where for group admin having many more rights and customize setting. Had to regularly travel in to review the notice board for any updates. The process was slowing; valuable academic time was diverted from activity that is more useful.

2. Literature survey

Based on existing popular chat application we have compared our Chat Bee application having unique feature

Table 1
 Comparison of ChatBee application with other existing

S. No.	ChatBee	Whatsapp Messenger	Instagram Messenger	Facebook Messenger	Hike Messenger
1.	Notification By Time & Day	NA	NA	NA	NA
2.	Group Standalone	NA	NA	NA	NA
3.	Inbuild Lock	NA	NA	NA	Available
4.	Green Dot (Online)	NA	Available	Available	Available
5.	Admin Can Block One Particular User	NA	Na	Na	NA
6.	Status Copy	NA	NA	Available	NA
7.	Posting Videos & Images (sorted)	Available	Available	Available	Available
8.	Personal Chat (Hide)	NA	NA	NA	Available

which is not available in popular chat application too.

A Secure Chat Application Based on Pure Peer-to-Peer Architecture

A secure chat application is based on pure peer-to-peer architecture that totally rid of centralized or third party elements. Each user will have their own database for peer’s profiles and communication parties authenticate among each other before exchanging messages. Basic requirement for chatting is an ability to exchange text messages; however, recent releases include support for audio and video communications. But we add some new feature blocking a particular user from group and notification by using customization[1]

Internet Chat Application: A Solution to Reduce Cost of Procuring and Maintaining a PABX Phone in an Enterprise

This application provides better solution to reduce the cost. Two-tier client server architecture is employed in the design of the Internet chat application. Save and edit contacts, storage of conversations and other user information are some common features in these applications [2].

Instant Messaging Service on Android Smartphones and Personal Computers

It is mainly used for sending/receiving messages in intranet through intranet server via Wi-Fi connection without the need of taking any service from mobile service provider and without the use of internet connection. So this way it reduces the cost of communication and increases the communication between various devices the service communicates over the phone’s Internet connection using the mobile phone network. Bulestack is used for the Instant Messaging but In ChatBee; we used the p2p architecture for the messaging [3]. We are comparing our ChatBee application features with other popular chat application currently which are mostly used by the peoples.

3. Proposed system

ChatBee the messenger for talkative peoples is an application having unique features that makes you more comfortable while chatting and sharing the files online. User can change settings according to their need i.e. profile picture and many more. User can create multiple groups with family, friends, relatives and many more. User can hide the private chats with unique password or pattern lock. User also saves space of downloading

the app called Applock to set password or pattern for security purpose as we are providing Inbuild lock feature. Copying other user’s status is also available in our ChatBee application. Posting your favorite videos and images makes more attractive to user profile. Also another feature of sorted group chats and personal chat makes you more comfortable while chatting. Sharing of files, media and also posted videos or images can help you with gossiping.

If user is assign as admin in particular he can do settings according to need. After blocking a particular group member admin can modify blocking conditions accordingly. In ChatBee application admin can block one or many particular group members who continuously send unwanted forwarded messages, images and many more. Admin also can set time and day accordingly whenever he/she doesn’t want messages. Admin can make announcement in group and set time and day till which that announcement will be displayed on the top of the group chat like a sticky note so other group member has to search for an important message. User will also get to see who all other users are online with the help of status dot which is beside profile picture. ChatBee the messenger for talkative peoples is the application having following unique features that makes you more comfortable while chatting and sharing the files online.

A. Features

- *Blocking (Right with Admin):* Admin can block particular user from the group.
- *Notification Blocking (Right with Admin):* Admin can set time and day according to his/her need. Whenever admin don’t want to see anyone’s message from particular group.
- *In build Lock:* For security purpose user has to install another app from app store to lock particular application. Here we are providing in build applock for whatsapp.
- *Hiding Personal Chats:* Personal chats which are not to be seen by anyone can be hidden by using hidden mode in which you can hide chatting of people you don’t want to show.
- *User can copy anyone’s status:* Copying favorite status of other user’s makes more comfort then writing or

typing same thing.

- Standalone Group: An entire stand-alone group panel which will differentiate group chats with individual chats.
- *Status Dot*: Using this, the dot near profile image will greened out whenever user gets online.
- *Announcement section in Group Chat*: Here you can add announcement, reminder, discussion topic, quote of day and what not! For limited period of time ranging from One hour to 365 days, you can tag this announcement. In this feature, there could be one static banner at the top of group chat with details like Announcement, Name(or number) of person who made that, Time of making announcement, read more(for long writers!) and Edit option.
- *Posting media*: Posting images and videos in a sorted panel makes for comfortable for user to only view either images or videos.

4. Methodology

Following are the components that will be using in our ChatBee application.

- *Touchable*: Generally, you can use Touchable Highlight anywhere you would use a button or link on web. The view's background will be darkened when the user presses down on the button. You may consider using Touchable Native Feedback on Android to display ink surface reaction ripples that respond to the user's touch. Touchable Opacity can be used to provide feedback by reducing the opacity of the button, allowing the background to be seen through while the user is pressing down.
- If you need to handle a tap gesture but you don't want any feedback to be displayed, use Touchable Without Feedback. [6]
- *Scroll View*: The Scroll View is a generic scrolling container that can host multiple components and views. The scrollable items need not be homogeneous, and you can scroll both vertically and horizontally (by setting the horizontal property).
- A Scroll View with a single item can be used to allow the user to zoom content. Set up the maximum Zoom Scale and minimum Zoom Scale props and your user will be able to use pinch and expand gestures to zoom in and out. [6]
- *Navigating Between Screens*: Managing the presentation of, and transition between, multiple screens is typically handled by what is known as a navigator. React Navigation provides an easy to use navigation solution, with the ability to present common stack navigation and tabbed navigation patterns on both iOS and Android. 10 [6]
- *Interaction Manager*: There is only a single JS execution thread, but you can use Interaction Manager to make sure long-running work is scheduled to start after any interactions/animations have completed. The touch handling system considers one or more active touches to be an 'interaction' and will delay run after interactions () callbacks until all touches have ended or been cancelled.
- *Date Picker*: This is a controlled component, so you must hook in to the on Date Change callback and update the date prop in order for the component to update, otherwise the user's change will be reverted immediately to reflect props. Date as the source of truth. [6]
- *Accessibility, Accessible (iOS, Android)*: When true, indicates that the view is an accessibility element. When a view is an accessibility element, it groups its children into a single selectable component. By default, all touchable elements are accessible.
- *Accessibility Role (iOS, Android)*: Accessibility Role tells a person using either Voiceover on iOS or Talkback on Android the type of element that is focused on. To use, set the accessibility Role property to one of the following strings: [6]
- *Keyboard Avoiding View*: It is a component to solve the common problem of views that need to move out of the way of the virtual keyboard. It can automatically adjust either its position or bottom padding based on the position of the keyboard. [6]
- *ProgressView*: View is a container that supports layout with flexbox, style, some touch handling, and accessibility controls. View maps directly to the native view equivalent on whatever platform React Native is running on. 11 [6]
- *Slider*: A component used to select a single value from a range of values. [6]
- *Section List*: A performant interface for rendering sectioned lists, supporting the most handy features: Item separator support, Section separator support, Scroll loading, Pull to Refresh. [6]
- *Alert*: Launches an alert dialog with the specified title and message.
- *CameraRoll*: CameraRoll provides access to the local camera roll or photo library.
- *Async Storage*: Async Storage is a simple, unencrypted, asynchronous, persistent, key-value storage system that is global to the app. It should be used instead of Local Storage. The Async Storage JavaScript code is a simple facade that provides a clear JavaScript API, real Error objects, and simple non-multi functions. Each method in the API returns a Promise object.
- *Share*: In Android, Returns a Promise which always be resolved with action being Share. Shared Action.
- *Style Sheet*: A Style Sheet is an abstraction similar to

CSS Style Sheet.

5. Analysis

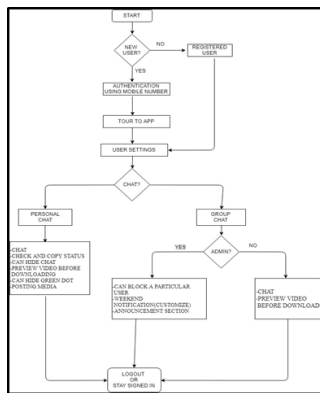


Fig. 1. User Flowchart for Chat Bee

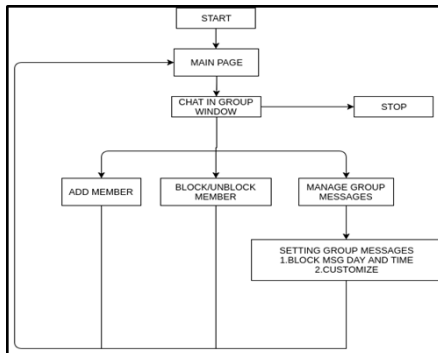


Fig. 2. Admin Flowchart for Chat Bee

6. Conclusion

Thus hereby we conclude that the proposed system removes all the drawbacks of existing system and enhanced with the automatic e-mail system and dynamic notification system. The proposed system gives the automation in all the processes like registration, updating, searching. Proposed system gets automated in the online registration all the user, activation and deactivation of the user, personalization to the user, resources to be provided online, communication between the users. The admin can see the user information and will validate it, generate the student list based on the company criteria, company details can be provided to the user, searching and sorting can be done, and reports can be generated. Overall, all the process of the training and placement department is automated.

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