

Thank you for being willing to participate in this exercise! At Branch, our first value is being passionate about our customers. This includes offering world-class customer service through our in-app chat.

Our customer service agents respond to inbound inquiries using our web-based app (see [here](#) for screenshots). In this project, the challenge is to build a simple mobile version of this app that could be used to respond to customer inquiries while on the go.

Please build an Android app that interacts with the provided REST API to fulfill the requirements detailed below. Feel free to use any libraries and resources that you normally would use. Your submission should be an Android Studio project compressed into a zip file.

This project is designed to be completed in 3-5 hours.

## Requirements

You will be assessed on your ability to complete all the below features. You will not be judged on how beautiful you can make your UI, but please try to use layout margins/padding to space your views appropriately, and specify text sizes to make things more readable, where necessary. The documentation for the REST API that should be used for these tasks is included at the end of this document.

### 1. A login screen

- Customer Service agents provide a username and password and tap a button to submit.
- If the provided credentials are rejected by the server, then an error should be displayed.
- If valid credentials are provided, then the app should advance to the next screen, and use the auth token in the response for all subsequent requests.
- Your username will be **your** email address, and your password should be **your email address in reverse**. Please make sure to use a real email address that you own for this exercise.

### 2. A screen that displays all message threads

- Display a list of message threads, where each customer's messages should be treated as a separate private thread.
- The latest message of each thread should be surfaced in this list. At a minimum, please display the message body, timestamp, and agent OR user id (whichever of these is relevant) of the sender.
- If any of the message threads in the list is tapped upon, then the app should advance to the next screen.

### 3. A conversation screen to view an individual message thread and respond

- A sorted list of all messages (both customer and agent) relevant to the thread should be displayed here.
  - The agent should be able to respond to the customer using an input field.
  - At a minimum, please display the message body, timestamp, and agent OR user id (whichever of these is relevant) of the sender.
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## API Docs

The root URL for all the endpoints below is: <https://android-messaging.branch.co/>

Request bodies and responses should all be in JSON. Use request header "Content-Type: application/json".

**Endpoint:** api/login - log in as a customer service agent.

**Method:** POST

**Parameters:**

- **username:** your email address
- **password:** your email address reversed

**Response:** {"auth\_token": *your\_auth\_token* }

All other requests below require that you send a request header like:

"X-Branch-Auth-Token: *your\_auth\_token*"

**Endpoint:** api/messages - get all messages from all message threads

**Method:** GET

**Response:** An array of message objects, each with the following fields:

- **id:** the integer id of the message
- **thread\_id:** the integer id of the thread
- **user\_id:** the customer id associated with this thread.
- **agent\_id:** the id of the customer service agent who wrote this message, or null if this message was written by a customer.
- **body:** the body of the message
- **timestamp:** the time when this message was created

**Endpoint:** api/messages - create a new message as the logged in customer service agent

**Method:** POST

**Parameters:**

- **thread\_id:** the id of the thread to which you are responding.

- **body:** the message body.

**Response:** The newly created message as JSON in the same format as in the GET request.

**Endpoint:** api/reset - for testing purposes, you may wish to delete all messages you have sent as an agent. This endpoint will reset everything so you can start fresh.

**Method:** POST

## Web App Screenshots

*There is no need to copy all the functionality from these screenshots. This is only here for reference. Your app will have a subset of the functionality/information displayed here.*

Id	Sender	Receiver	Body	Created At	CC	Reply
+ 338350536	<a href="#">Kathleen</a>	Branch	Why can't I quality for a loan with you even after I cleared a Long overdue lian and got a clearance from CRB last year.	Jul 03, 2019 1:23 PM	ke	<a href="#">Reply</a>
+ 338321750	<a href="#">Cheruiyot</a>	Branch	Iav applied for aloan,but you denied for the next one wr	Jul 03, 2019 10:50 AM	ke	<a href="#">Reply</a> By: <a href="#">Robert Brambley</a>
+ 338338030	<a href="#">Nicky</a>	Branch	Sorry you blook me for so long?	Jul 03, 2019 12:25 PM	tz	<a href="#">Reply</a> By: <a href="#">Robert Brambley</a>
+ 338360194	<a href="#">Donald</a>	Branch	They paid me late that's why i was late to pay my loan	Jul 03, 2019 3:39 PM	ke	<a href="#">Reply</a>
+ 338337177	<a href="#">Boniface</a>	Branch	Dear rrhrh3	Jul 03, 2019 12:19 PM	ke	<a href="#">Reply</a>
+ 338333131	<a href="#">Eunice</a>	Branch	Why do I not qualify for aloan yet I clear though I repayed late? It as now some months.	Jul 03, 2019 11:54 AM	ke	<a href="#">Reply</a>
+ 338276050	<a href="#">Christine</a>	Branch	how to have validated financial account	Jul 03, 2019 7:58 AM	ke	<a href="#">Reply</a>
+ 338357759	<a href="#">Abdub</a>	Branch	Please I requested for a loan and not yet received, kindly assist	Jul 03, 2019 2:49 PM	ke	<a href="#">Reply</a>

## Message Dennis

94m

Legal Name: Dennis

| Country: ke | App Version: 1.29.2

User does not qualify to apply for a loan. Reason: Defaulted on Branch  
User has been flagged for potential fraud. Reason: User has defaulted in past.

System	Our system has reviewed your application, and unfortunately you do not qualify for a loan at this time. <a href="#">Learn About Eligibility Criteria</a>
Dennis	Getting difficulty to complete my loan
Lucy	Hi Dennis, unfortunately we cannot approve your loan application at this time because you defaulted on your last Branch loan. Read more here: <a href="#">branch://faq/repayment/clear_default</a>
Lucy	Hi Dennis, kindly help Lucy understand how they're doing. <a href="#">Click here to rate the conversation.</a>

Reply

Hi Dennis,

Channel

Push & Chat



Send

Close

Send and Resolve

Escalate

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Rejection: Defaulted on Branch	rejection
Rejection: Defaulted on Branch When?	rejection
Rejection: Defaulted on Branch Frus.	rejection
Account: Defaulter/Paid/Pending	account
Account: Why X Days?	account
Account: Batch Number	account
Account: Defaulter/Paid/Cleared	account
Device: Shared Device, Other User	device

151 Rechazado credit score

x merged\_from\_user

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