OS X Installation guide:

1) Install Parity from the following link: https://github.com/paritytech/homebrew-paritytech
    a) after installing parity run 'parity --chain ropsten'

2) Install Thunderbird from the following link: https://www.mozilla.org/en-US/thunderbird/

3) Install Stack if it not already installed using the following command inside a new terminal window:
    a) brew install haskell-stack
    b) run 'stack setup' in terminal

4) Place the 'comms' folder into the '~/' directory

5) In terminal navigate (cd) to '~/comms' and run 'stack install'

6) The executable will be copied into "~/.local/bin/". To add the executable to your PATH you can do the following in terminal if "~/.bash_profile" does exist:
    a) sudo nano ~/.bash_profile
    b) copy "~/.local/bin:" immediately after "PATH="
    c) hit ctrl + x
    d) hit 'y'
    e) hit enter

if "~/.bash_profile" does not exist:
    a) sudo nano ~/.bash_profile
    b) copy "PATH=~/.local/bin:$PATH" into the file
    c) hit ctrl + x
    d) hit 'y'
    e) hit enter

7) Again in terminal navigate to "~/comms" and run the command 'comms run'
    a) Copy your wallet address that has already been generated for you the Participant Information file
    b) Enter "3000" for the SMTP port
    c) Enter "3001" for the POP3 port
    d) Enter "http://localhost:8180/"

8) Inside any browser navigate to: http://localhost:8180/
    a) Setup the initial account by following the prompts
    b) Click on the "Accounts" tab
    c) Click "+ Accounts"
    d) Click "Private Key" then "next"
    e) Copy and paste your private key from the "participant information" doc into the 'private key' field
    f) Fill out the remaining fields with whatever you'd like
    h) Make sure to delete the original account you created

9) Setting up mail client
    a) Launch ThunderBird
    b) Click on "create a new account: email", fill out the 'email address' and 'password fields' with whatever you'd like and click continue
    c) Click "Manual Config" and fill it out with the following information:

		Server hostname	Port	SSL	Authentication
Incoming:	POP3	localhost	3001	None	Normal password
Outgoing:	SMTP	localhost	3000	None	No authentication

    d) Note that to do the following steps, the Ropsten network needs to be completely synced, if you look at the terminal window that is running parity you can see what block it is currently syncing under 'Imported #{block number}'. There are currently ~2.2 mil blocks on the Ropsten network. If the block number that is being imported is ~2.2mil then it is synced or close to being completely synced and you can continue onto step 10

10) Receiving a message:

    a) Open a new terminal window, make sure you are in the "~/comms" directory and run the command "comms publish", look at the terminal window that is running parity and be on the lookout for a message that says "Transaction mined" and copy the entire hash and paste it into the "participant information" file under "contact card", you can think of this hash as your 'email address', telephone number or contact card. You are now ready to receive e-mails. You can exchange this transaction hash with someone else that is using our service to receive messages from them

    b) To check for messages you can simply click on 'Get messages' in the top left hand corner of Thunderbird.

11) Sending a message:

    a) To send a message you have to import the recipient's contact information. To do this you will have to have received their transaction hash. To import a contact in terminal make sure you are in the "~/comms" directory can run 'comms import {recipient email address} {recipient Transaction hash}', where the recipient's email address is whatever you want to set it as and the transaction hash is their corresponding 'contact card.'

    b) You will have to do this for every user you want to message, but it only needs to be done once

    c) Note if you receive the error message "bad transaction hash" in terminal, make sure that the transaction hash has a leading '0x' in front of it, if it does contain that prefix than the Ropsten network has probably not finished syncing.

    d) Please import all of the contacts under the file "contact cards" file

    e) You are now ready to send messages. In Thunderbird you can click on "write message" at the top left hand corner and compose an e-mail the same way you would do so in any other mail client. Make sure that the 'to' address is exactly the same way you spelled it when you did step 11.a.

    f) Trying sending a message to each person that you added.

12) After you do this please answer the questions under "Participant questions"

Content of Participant Questions:

    1. On a scale 1 to 5 how tech savvy would you say you are?
    2. Were you able to install our service? If not you can skip to step 11.
    3. Were you able to launch the server correctly?
    4. How many contacts did you successfully import?
    5. How many messages were you able to send?
    6. How many messages did you receive?

7. Can you shut down and re-launch the local server?
8. Can you terminate then rerun the local server and still receive and send messages?
    a. Did the recipient receive the message?
9. Did your contacts remain unchanged?
10. What if the computer shuts down and restarts?
    a. Repeat steps 8-9
11. Please complete the following survey: https://docs.google.com/forms/d/e/1FAIpQLSd74OQXfnx2sWUmO2OrE415-EqE-zztOa7a9L8JSbqRG06mpA/viewform