



Link'd

Centralizing social connection through an
instant messaging hub

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Value Proposition

A product that links different **instant messaging** platforms, with in-app response, **bridging the gap** between different instant messaging apps and making you the center of your work and social life.

Problem and Solution Overview

Problem: The difficulty of using multiple messaging platforms with same person because of not being able to keep track of multiple chat histories

How might we help people remember their previous conversation in a different app?

Solution: is to create an app that links different instant messaging platforms, with in-app response.

Values encoded:

- We've coded link'd to encapsulate the values of efficiency and health.
- The ability to have access to all your IM apps in one place allows you to work efficiently, avoiding the burnout of having to always check every IM app on your phone.
- However, having all your all messages in one place could be overwhelming, conflicting with our value of health.



Review of Tasks

- 1. Read Message (Simple)**
- 2. Add a new IM platform (Moderate)**
- 3. Import & Export Chat (Difficult)**

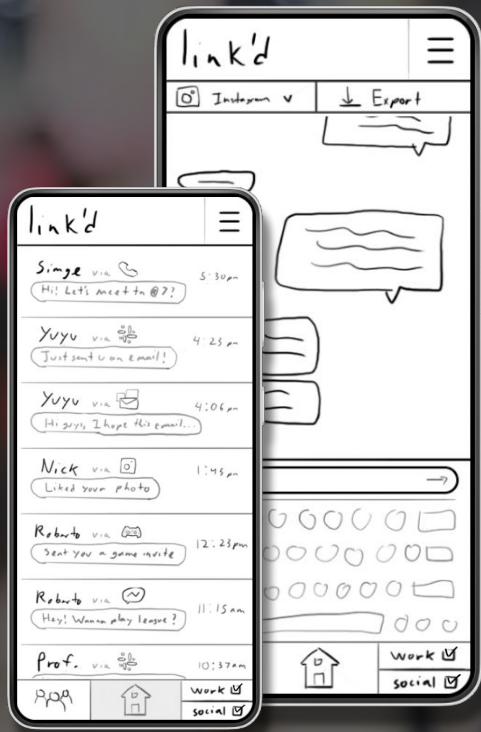
Note: We switched the moderate and difficult tasks after redesigning the user interface & experience for conducting these tasks.

Goals and Measurements

Goal	Metric	Success Criteria
Robust	Total number of wrong clicks	0 wrong clicks
Efficient	Total time for each task	<1 minute to complete each task

Progression: We are progressing along well. We have to do some more testing on our task flows and tasks to make sure that they coincide with the values we have encoded link'd with.

Potential Improvements from low-fi testing



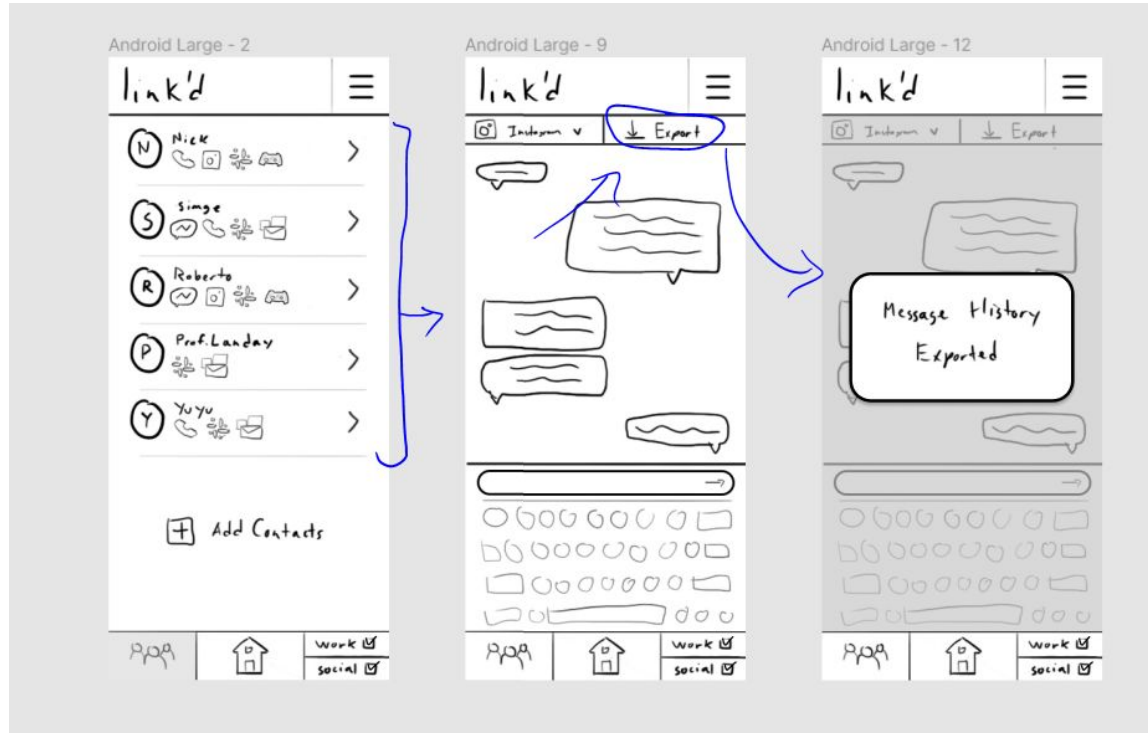
- Moving export function to settings
- Improve integration for IM channels
- Add a search bar for contact list
- Add a search bar for chat histories

A modern, open-plan office space with people working on laptops, a dog, and a bar area. The office is bright and airy, with large windows on the left side. In the foreground, a woman and a man are sitting on a grey sofa, both using laptops. A dog is sitting on the floor next to them. In the background, there is a bar area with stools and a person standing. The ceiling is high with exposed ductwork and modern lighting fixtures. The overall atmosphere is professional and collaborative.

Revised Interface Design

Change 1: Export/Import

Before



Change 1: Export/Import

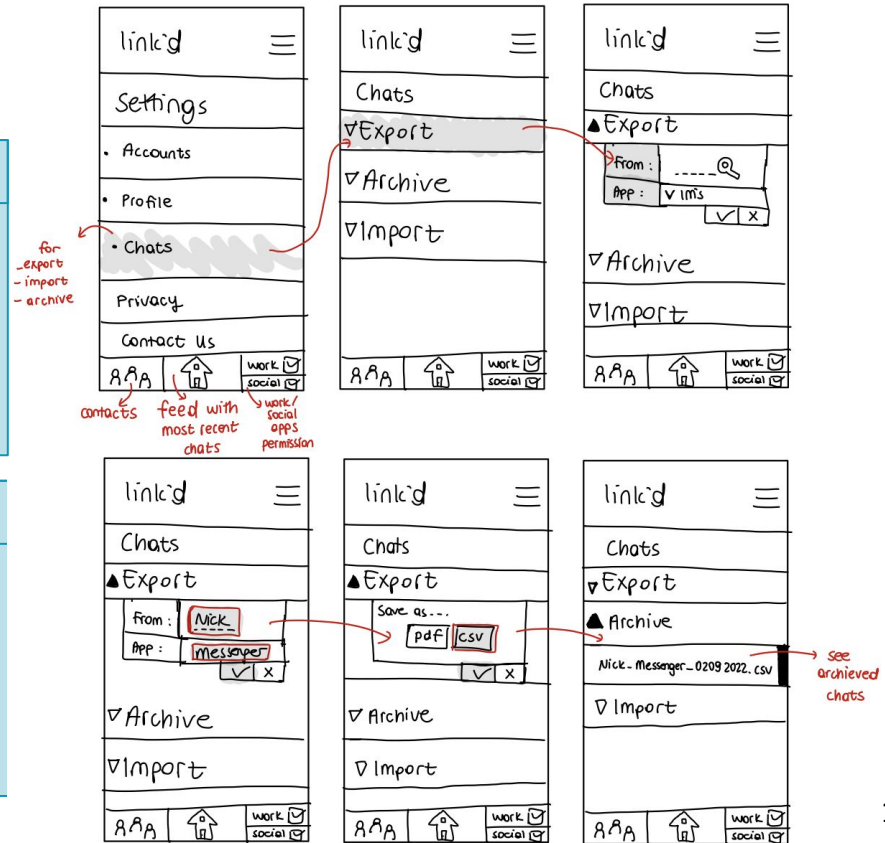
After

Changes

- Export is moved to the 'Chats' section under the 'Settings' screen.
- Import is added as a follow-up task after export.

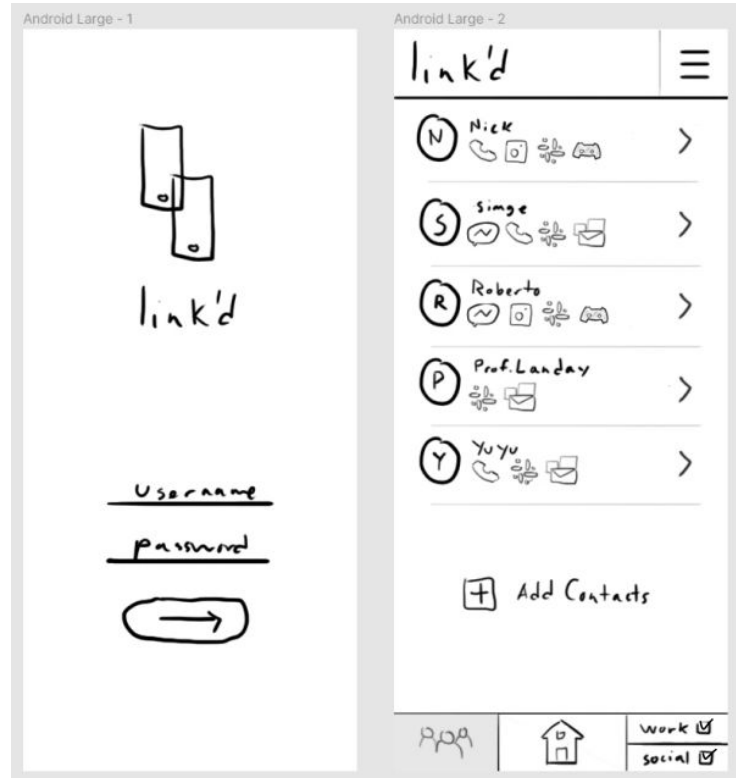
Rationale for the Change

Users expressed that they would not use export and import function daily, so they do not need in on the main chat interface. Exporting alone is not sufficient for interoperability.



Change 2: Navigate to a contact

Before



Change 2: Navigate to a contact

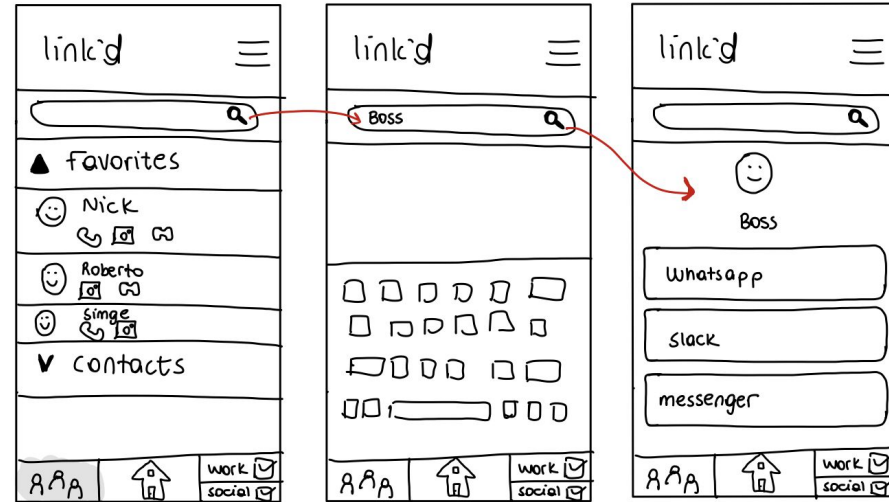
After

Changes

- Instead of scrolling through the contact list, we added a search bar to find the contact.
- For different IM apps, we added corresponding button that leads different chat windows.

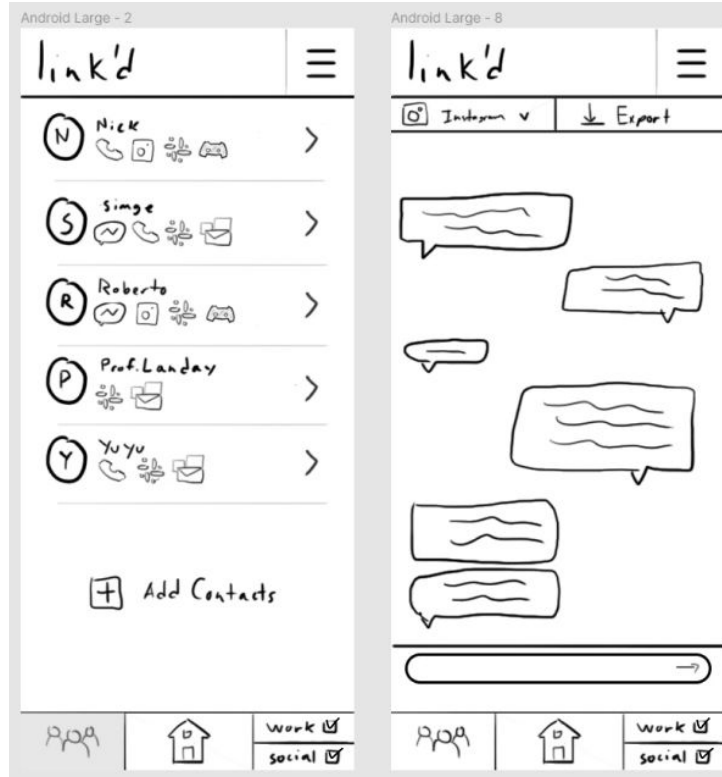
Rationale for the Change

Users expressed that they would like to see different chat channels separately under the contact page.



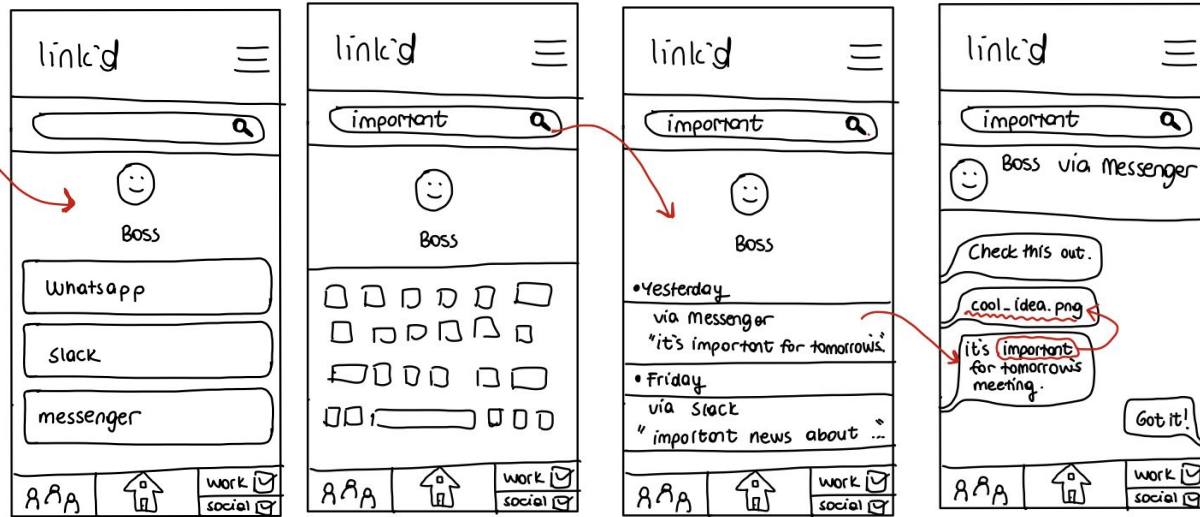
Change 3: Find a message

Before



Change 3: Find a message

After



Change

- Our concept video indicates that user needs to scroll down to find an important png file.
- Instead, we added a search bar for easy access using keywords.

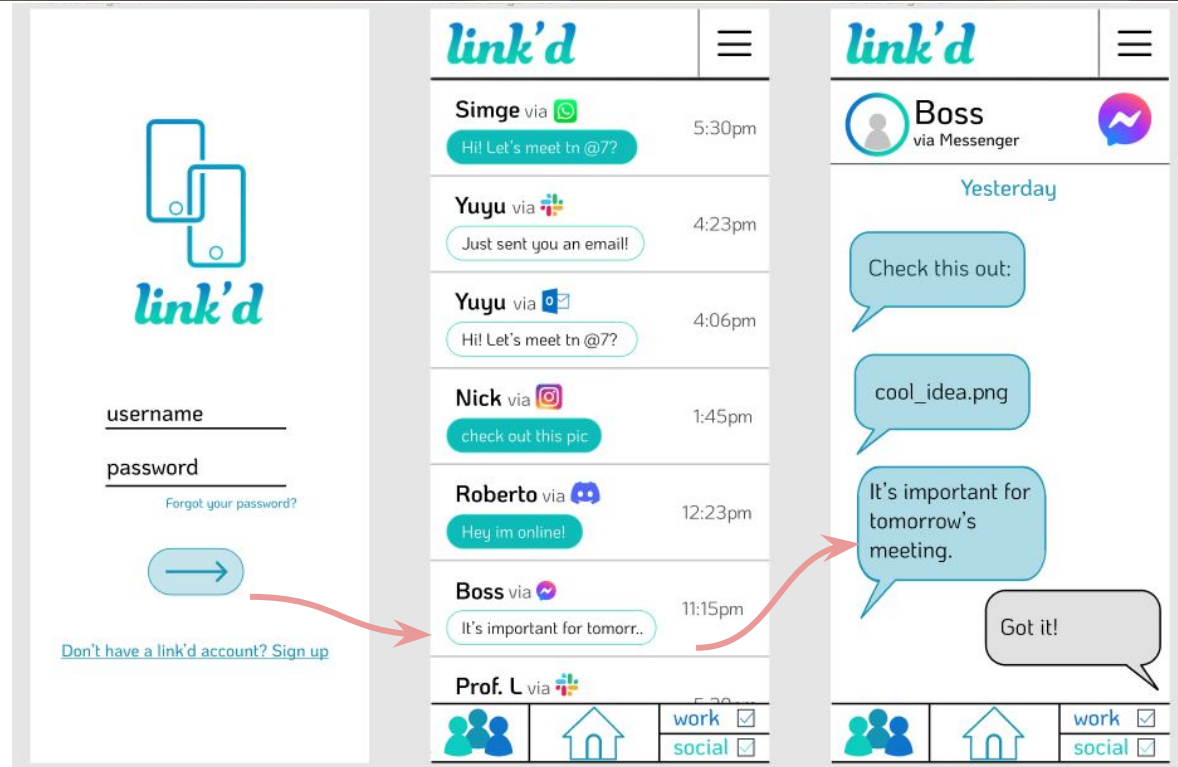
Rationale for the Change

As there are more contacts and IM accounts linked, it will take more time for users to reach information when they need it.

A modern, open-plan office space with people working on laptops, a dog, and a kitchen area. The office is bright and airy, with large windows on the left side. In the foreground, there are two large, cylindrical ottomans, one light grey and one light blue. A dog is sitting on the floor between them. In the background, several people are working on laptops at desks. A man is sitting on a stool at a long desk on the left, working on a laptop. A woman is sitting on a sofa in the center, also working on a laptop. A dog is sitting on the floor in front of the sofa. In the background, there is a kitchen area with a counter and stools. The ceiling is high with exposed pipes and lights. The overall atmosphere is professional and collaborative.

Medium-Fi Prototype Task Flows

Task 1: Find & Read Message (Simple)

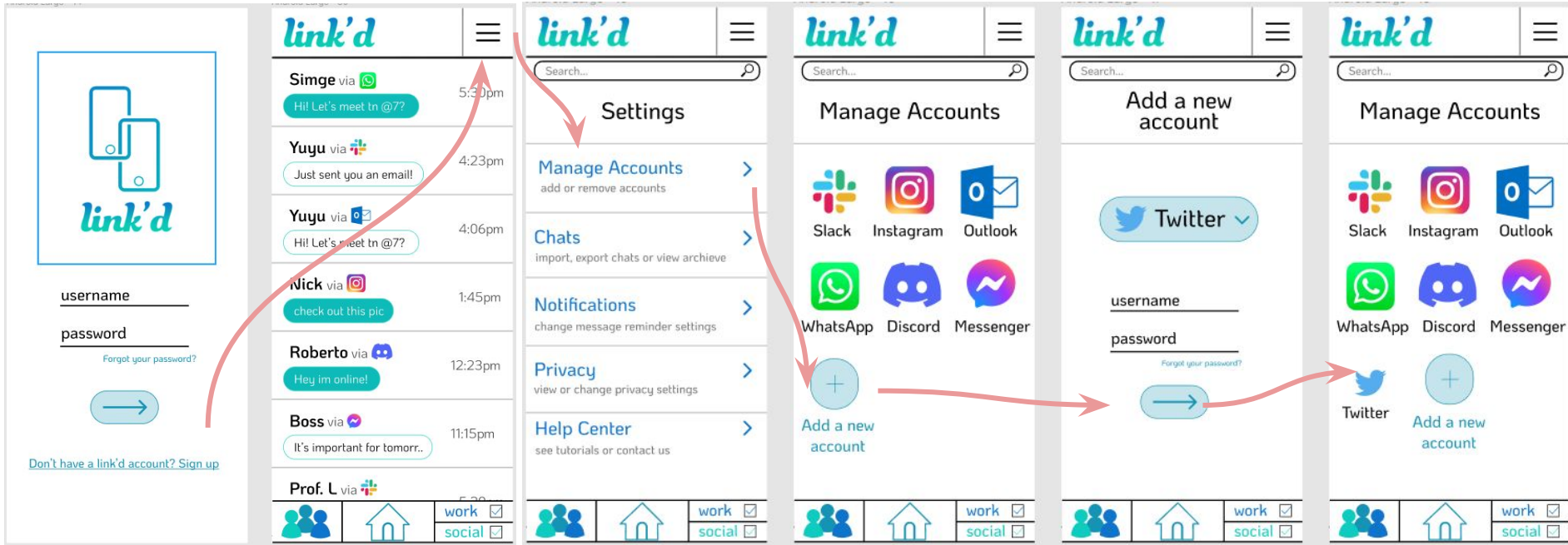


Click on arrow to sign in

Click on 'Boss'

Read message history

Task 2: Add an IM Account (Moderate)



Click on arrow to sign in

Click on 'Settings'

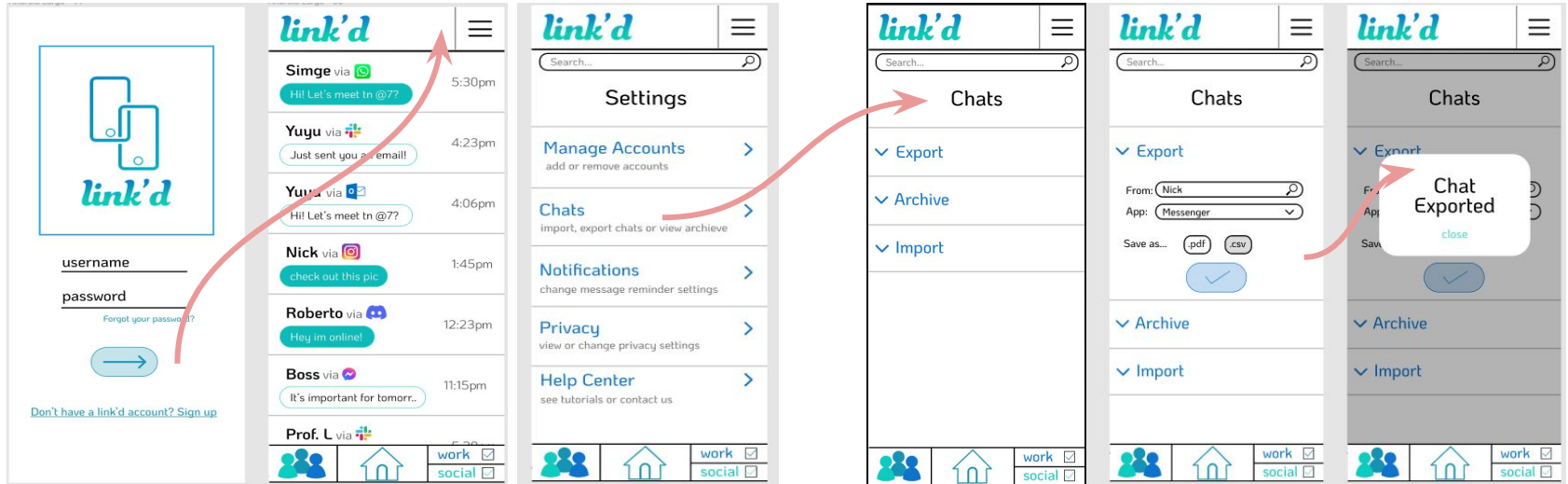
Click on 'Manage Accounts'

Click on 'Add a new account'

Click on arrow to sign in Twitter

Confirm that Twitter is linked

Task 3: Export & Import Chat (Difficult)



Click on arrow to sign in

Click on 'Settings'

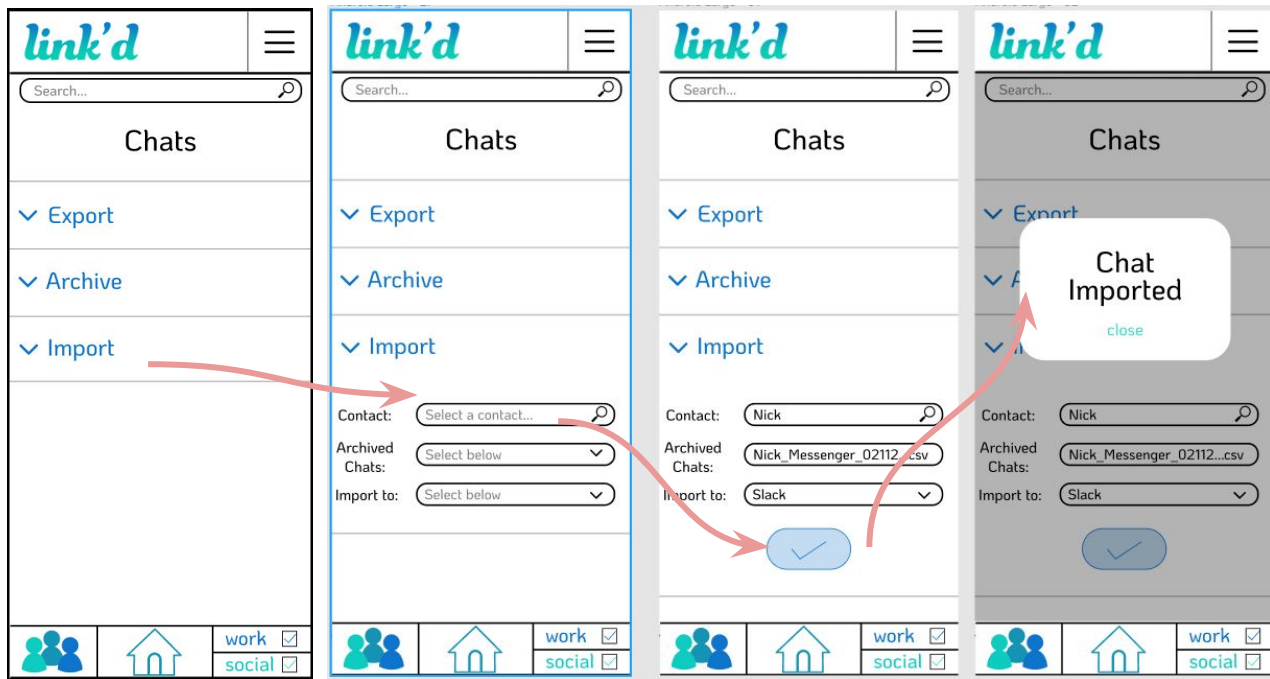
Click on 'Chats'

Click on 'Export'

Click on arrow to export

Read confirmation

Task 3: Export & Import Chat (Difficult) con't



Click on
'Import'

Click on
'select a
contact'

Click on
arrow to
import

Read
confirmation

A modern, open-plan office space with a high ceiling, exposed ductwork, and large windows. In the foreground, a man sits on a grey sofa using a laptop, with a dog sitting next to him. A woman is seated at a long table on the left, also working on a laptop. In the background, several other people are visible, some standing and some sitting at a bar area. The overall atmosphere is collaborative and professional. A white rectangular frame is centered over the image, containing the text "Prototype Overview".

Prototype Overview

Prototyping Tool: Figma

The screenshot displays the Figma prototyping tool interface. On the left, there is a sidebar with a 'Layers' panel showing a hierarchy of elements: Pages (Lofi Prototype, Medfi Prototype), Android Large - 6, Android Large - 30 (selected), and a list of UI components like Rectangle 61, bottombar, Group 52, image 15, image 14, image 15, image 16, image 11, toolbars, feed, and Rectangle 44. Below this are more Android Large frames (8, 2, 14) and a list of assets like linkd-color-logo 1, linkd-color-logo-full-blue, Rectangle 3, and linkd-screens_0000_splash sc... The main workspace shows a grid of mobile app screens for 'link'd' in Android Large format. A 'Flow 2' diagram is overlaid, consisting of blue lines that connect specific UI elements on one screen to corresponding elements on another, illustrating the user flow. The screens include 'Settings', 'Chats', 'Share', 'Address Book', and 'Boss' profiles. The right sidebar contains a 'Design' panel with 'Prototype' and 'Inspect' tabs. Under 'Prototype', there are settings for 'Flow starting point', 'Interactions', 'Overflow scrolling', and 'Removing a connection'. The 'Removing a connection' section includes a 'x' icon and the text: 'To delete a connection, click and drag on either end.' Below this is the 'Running your prototype' section with a play button icon and the text: 'Use the play button in the toolbar to play your prototype. If there are no connections, the play button can be used to play a presentation of your frames.' At the bottom right, there is a question mark icon and the page number '21'.

Prototyping Tool: Figma

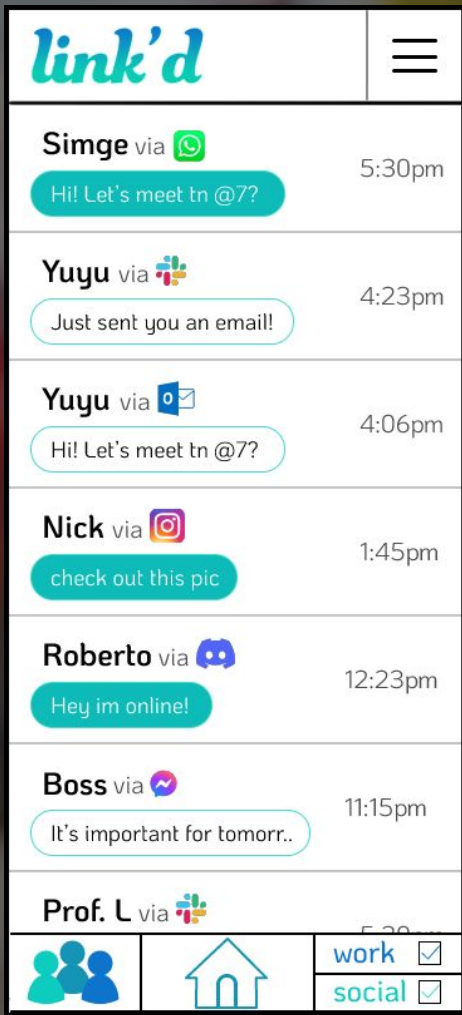
We used Figma for our app development and Photoshop for our logo and other images

Pros

- Figma allows for quick prototyping and testing. Has a really nice workflow.
- Easy to use and pick up.
- Can collaborate with others easily.
- Photoshop is an amazing tool that can handle any of your image editing needs.

Cons

- Figma can be buggy and leads to some frustration.
- Connecting buttons to frames can get very messy. Sometimes not clear what you just did in Figma.

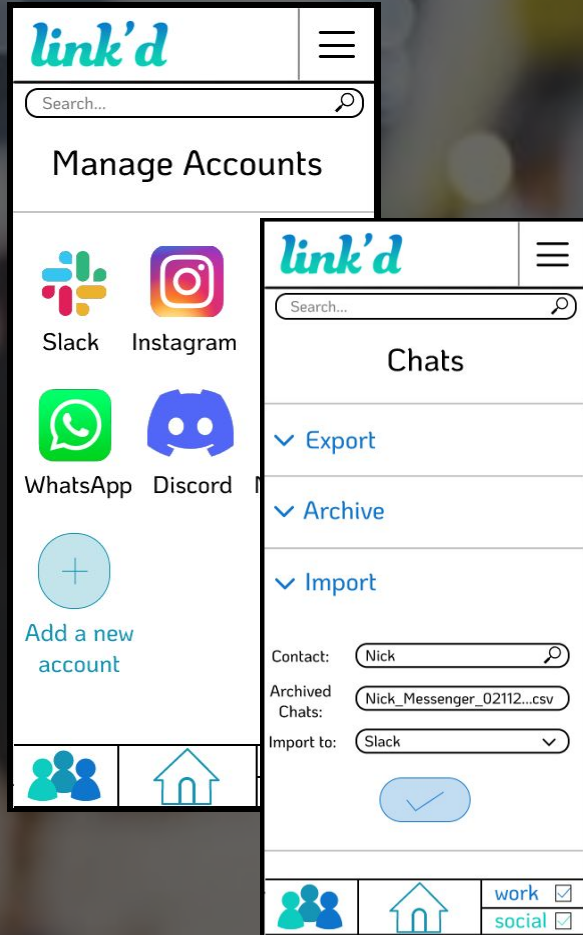


Limitations

- The limited content: the only conversation designed is with 'Boss'.
- The settings only allow you to click on 'Manage Accounts' and 'Chats'.
- No functionality to actually type to enter usernames, passwords, or send a message to others.
- Shortcuts such as importing before exporting chats. This is currently an error that we did not have time to correct.

Wizard of Oz

- The instant messaging (IM) accounts are currently not linked to the app. To eliminate potential API errors, we would have to be Wizard of Oz to manually open the chats between users on different IM accounts.
- In addition, we type as a Wizard of Oz when the user tries to click on the areas that they are supposed to type. Since they cannot type during the interaction with the user interface, we use previously fully or half-filled texts for them to proceed to the next screen. An example is when the user searches for 'Boss' in the contact list, we show a screen with 'bo' written and allow them to click on 'Boss'.



Hard-coded Features

- The icons of IM apps that we show as linked to the app.
- The conversations between users are hard-coded. Currently, none of the IM apps are actually linked, so the conversations cannot be retrieved as well.
- The import and export functionalities. Users currently cannot choose which conversation to export or import. We autofill the contact (Nick), the IM account (Messenger), and format (csv) to be exported and imported.

Summary

Medium-Fidelity Prototyping

Incorporated the user feedback in the previous stage and designed the medium-fidelity prototype of Link'd, by revising three selected task flows.

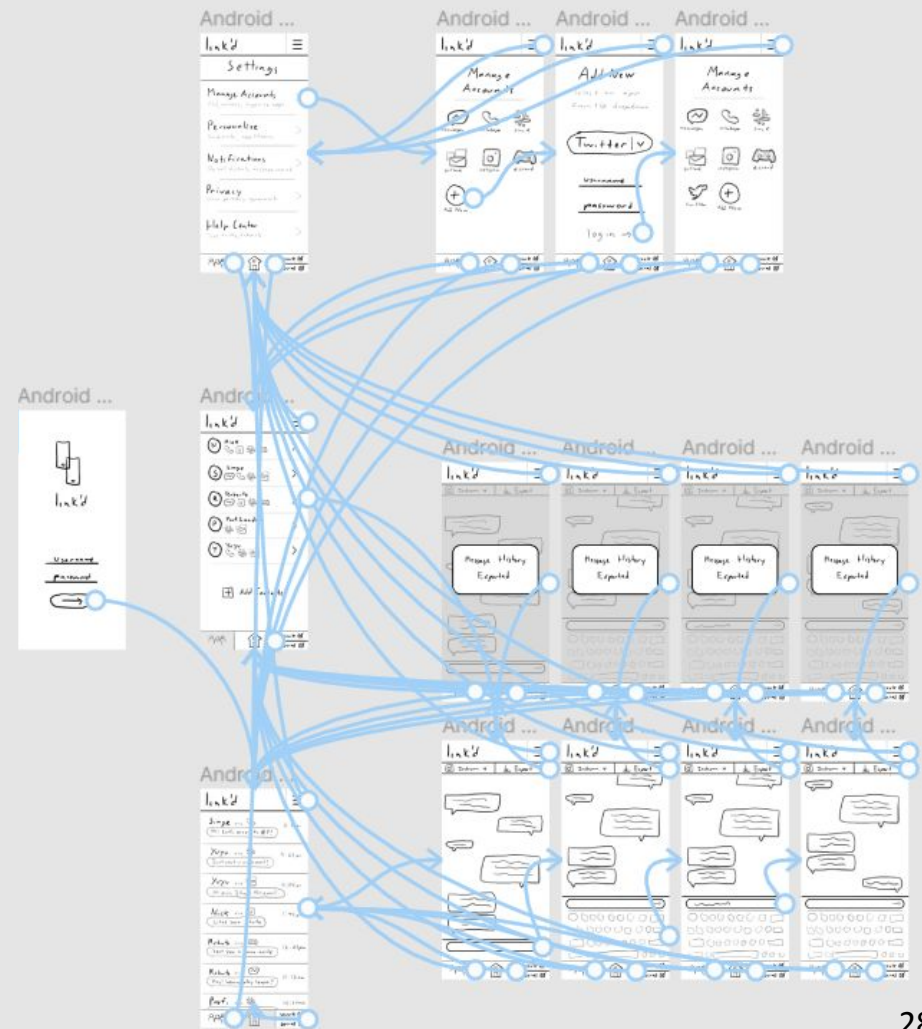
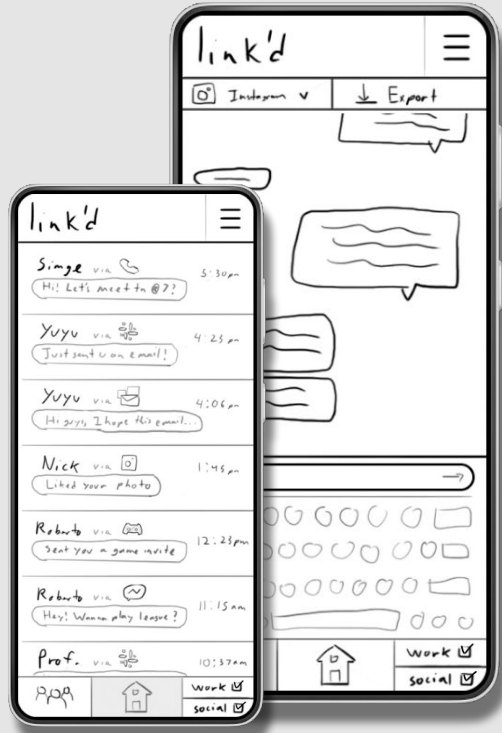
Next Steps

Integrating feedback from heuristic evaluations, design excluded features and screens, polish app UI, and work towards high-fidelity prototype.

A modern, open-plan office space with people working at desks and on a sofa, a dog, and a kitchen area. The office has a high ceiling with exposed ductwork and large windows. In the foreground, a man is sitting at a long wooden desk with a laptop. To his right, a woman is sitting on a grey sofa, also working on a laptop. A dog is sitting on the floor in front of the sofa. In the background, there is a kitchen area with a counter and stools, and several other people are working. The word "Appendix" is overlaid in the center of the image.

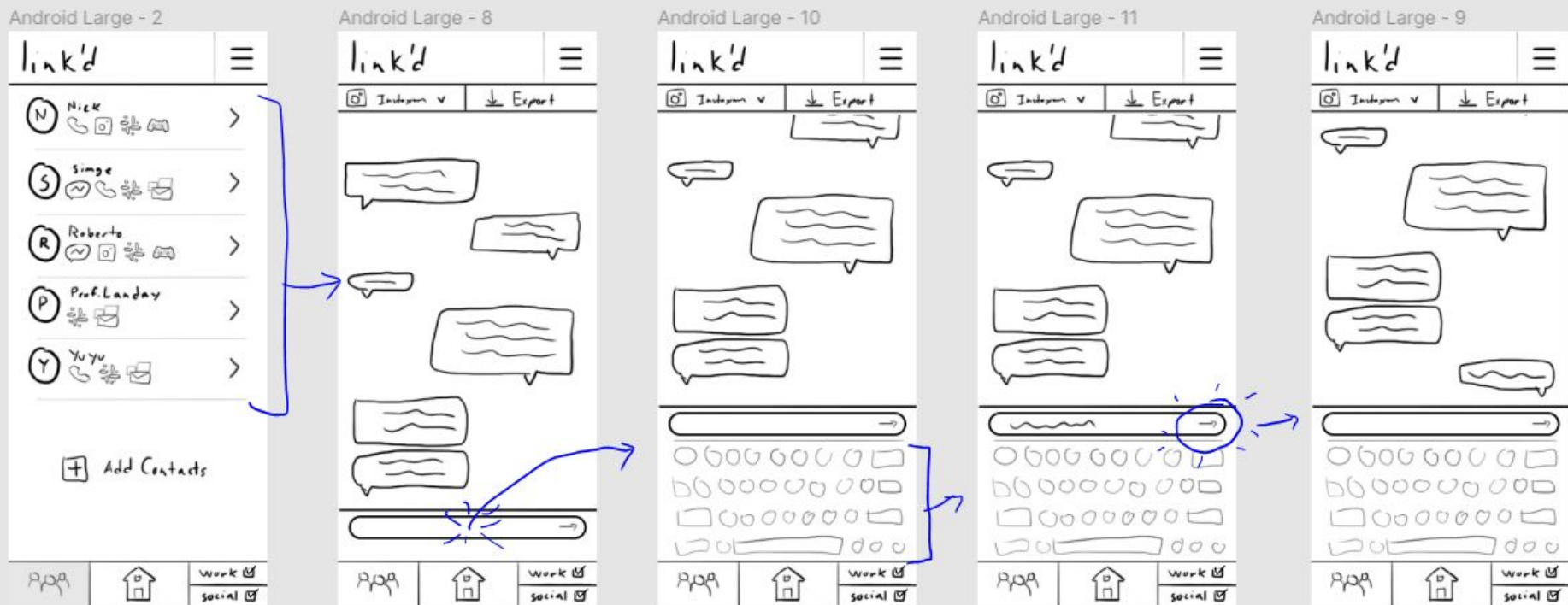
Appendix

Low-fi Prototype Task Flow



Task 1

Reviewing message history and sending messages



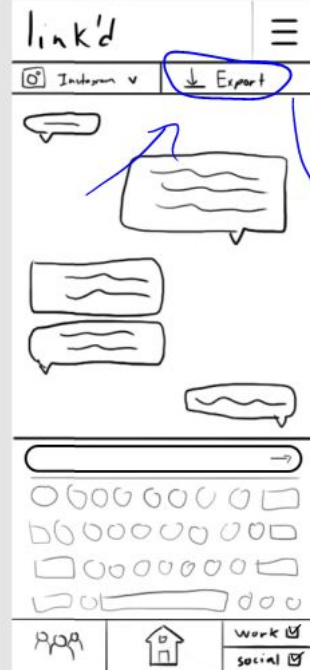
Task 2

Export message history to file

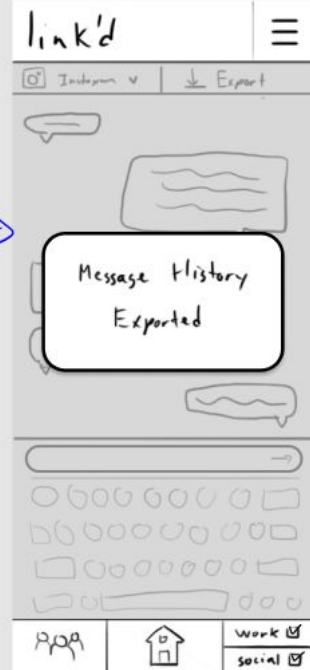
Android Large - 2



Android Large - 9



Android Large - 12



Task 3 Linking a new IM account

Android Large - 2



Android Large - 7



Android Large - 3



Android Large - 5



Android Large - 4

