A6: medium-fi prototyping



Virtual companions to make hard days feel less lonely.

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Problem and solution

PRIMARY USERS

ALONG supports people coping with the loss of a loved one or pet, or with a loved one’s serious illness.

THE PROBLEM

Loneliness and low motivation can make everyday activities, such as going outside or eating a meal, difficult to begin.

OUR SOLUTION

ALONG pairs a virtual animal companion with small everyday activities. This Figma prototype uses photos to simulate the intended AR camera experience.

VALUE PROPOSITION

Virtual companions to make hard days feel less lonely.

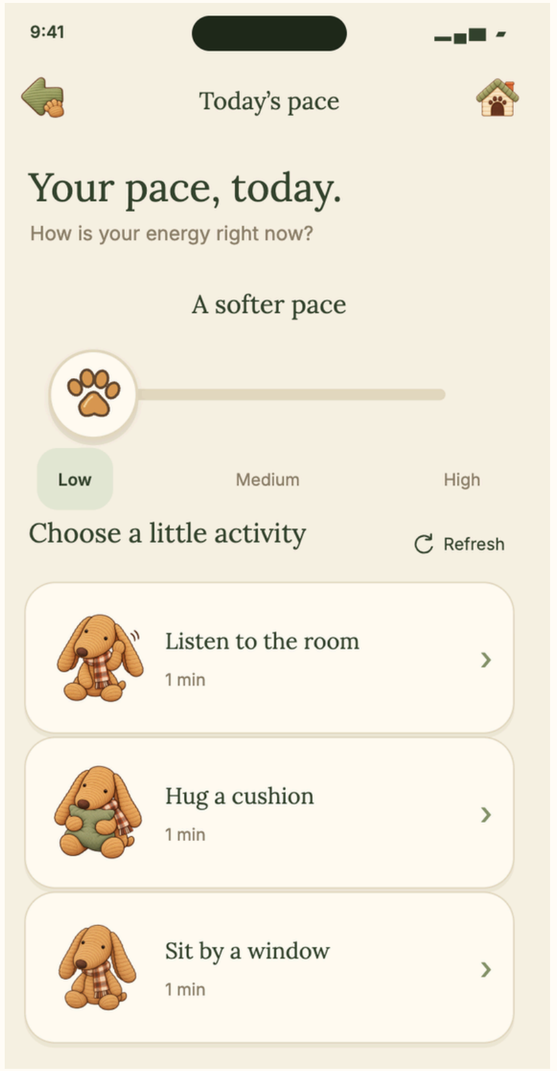
Values in design

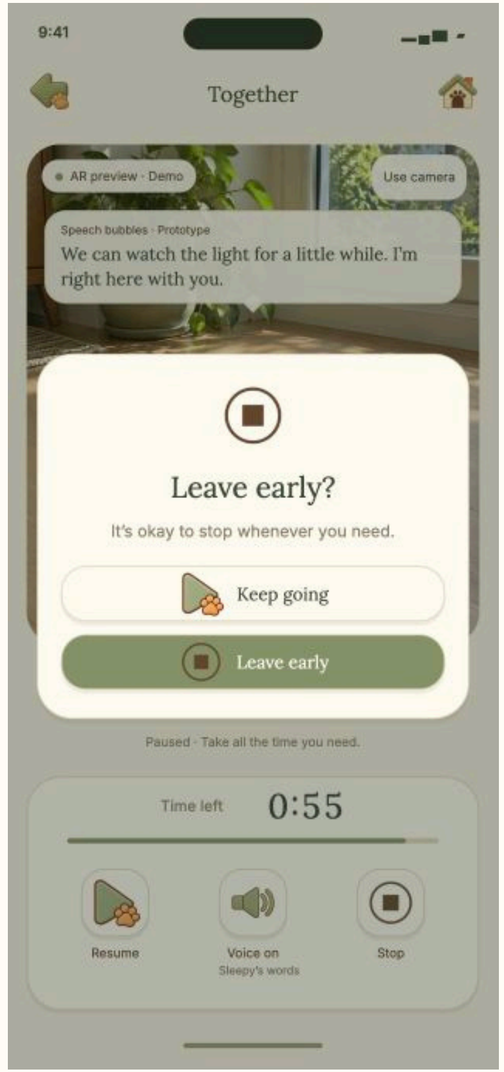
Agency

Agency means users decide what feels manageable today and when to stop.

Low, Medium and High show three activities and their durations, so users can judge the effort before starting. Refresh offers another set.

Pause and Resume preserve the remaining time. Leave early keeps earlier familiarity points, so stopping does not erase past progress.





Values in design

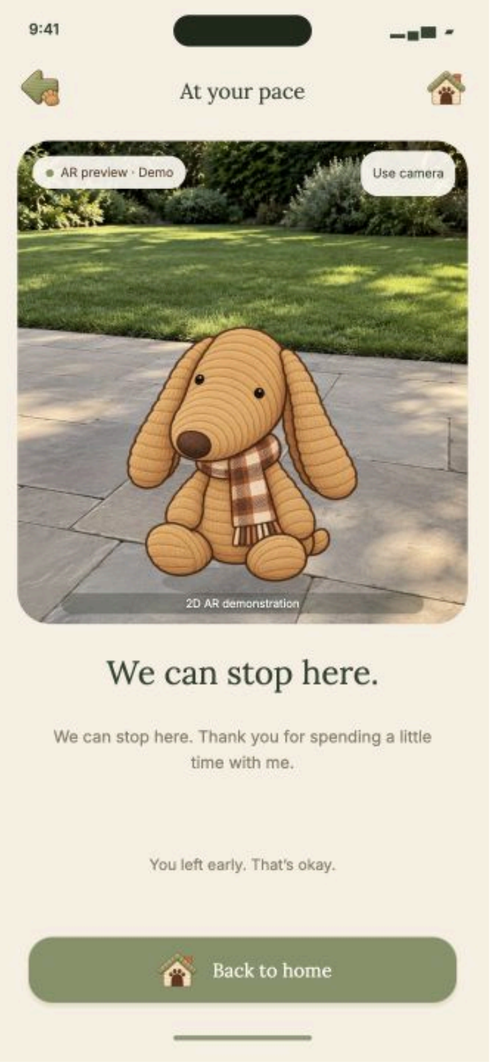
Gentle companionship

Gentle companionship means having company without having to keep talking or finish an activity.

Sleepy holds a cup during a water break to join the same small action. Voice off hides his speech bubbles while the activity continues, leaving room for quiet.

Leaving early receives "We can stop here." The reply acknowledges the user's choice without asking them to continue.





Value tensions

Encouragement and agency

Completing Low / Medium / High activities adds +2 / +5 / +10 familiarity. Every 100 points unlocks a companion. Higher rewards may push someone toward more effort than they feel ready for, or make leaving early feel like missing out.

Warmth and transparency

Warm replies and a companion in a photo scene suggest shared presence. Users may mistake this for evidence that ALONG sees their surroundings or understands what they say.

Response

Leave early adds or deducts no points and replies, "We can stop here." Unlocking a friend keeps the current companion selected.

Next test: compare the current rewards with equal rewards, and ask whether users still feel free to choose Low or stop.

Response

Labels identify photo scenes, preset input and prewritten replies. The prototype has no live camera or full AR.

Next test: ask users to explain what the companion can perceive and respond to after they try a task.

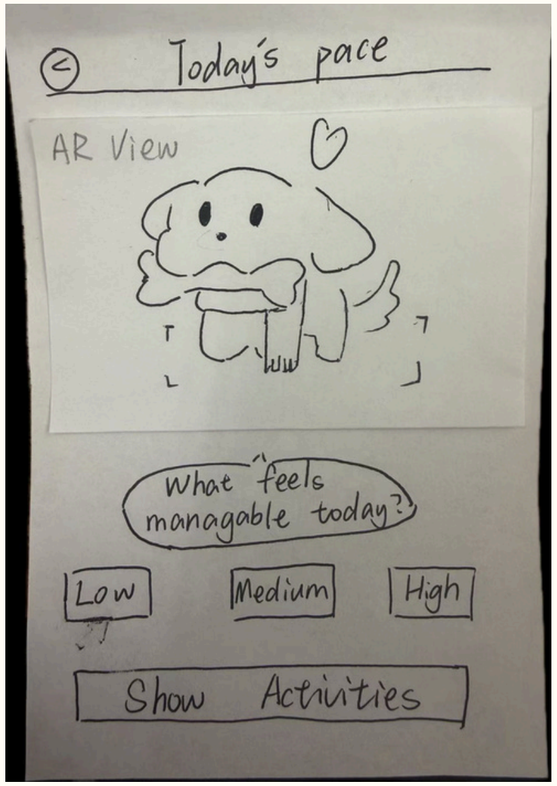
Three representative tasks

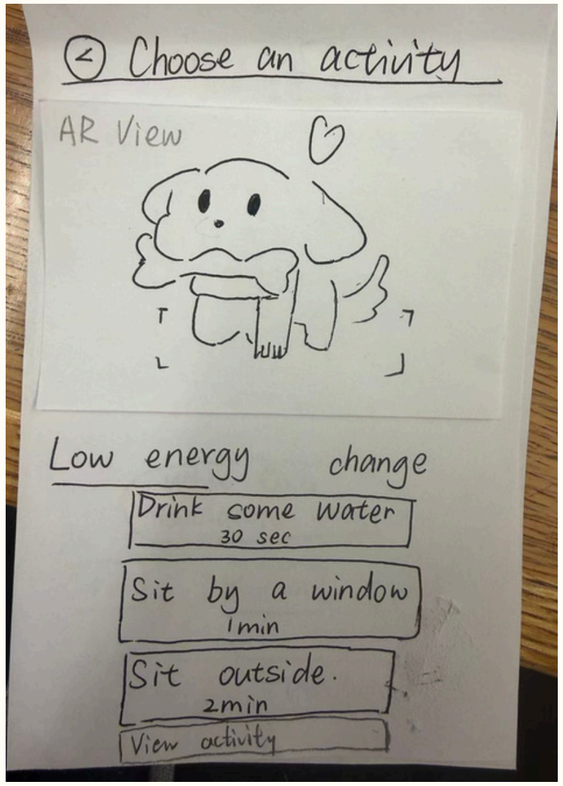
The three tasks are the same as those in A5.

01	SIMPLE **Choose a manageable activity** Choose your energy level, review the activities and select one to do with your companion.	WHY THIS LEVEL?	All users will find a manageable activity proposed by the companion to start with for everyday support.
02	MODERATE **Spend time with a companion** Begin a short activity and finish at users' own pace.		Most users will regularly complete suggested self-care activities as part of their routine.
03	COMPLEX **Invite your companion** Invite your companion to share an everyday activity.		Intended for power users who regularly share their lives and initiate/propose activities with the companion.

Major Changes: Energy and activities in one view

Before

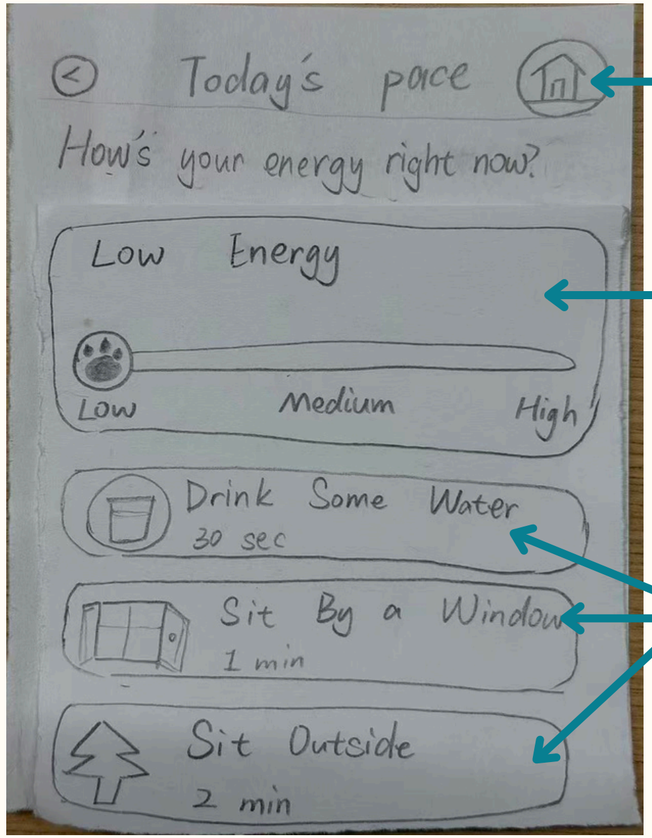




Energy selection

Separate activity list

After



Home button added on all pages

Paw slider keeps energy visible

Three activities on the same screen

Test finding

Five of six testers reported too many selection, review or confirmation steps before starting an activity.

Expected benefit

Showing energy and three activities together should reduce screen changes and help users choose independently.

Revised Screen in Context

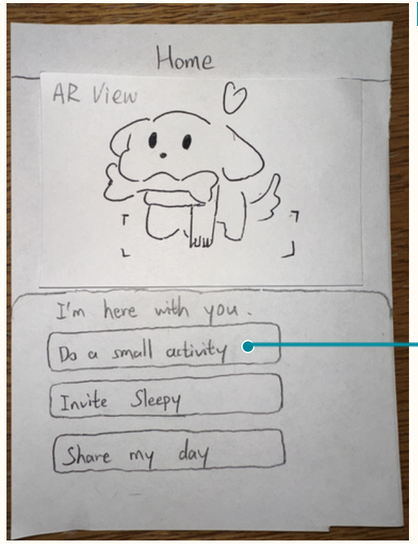
Orange = changes from the tested low-fi prototype

1 MERGED

Before: separate energy and activity screens

→ Now: energy + activities in one view

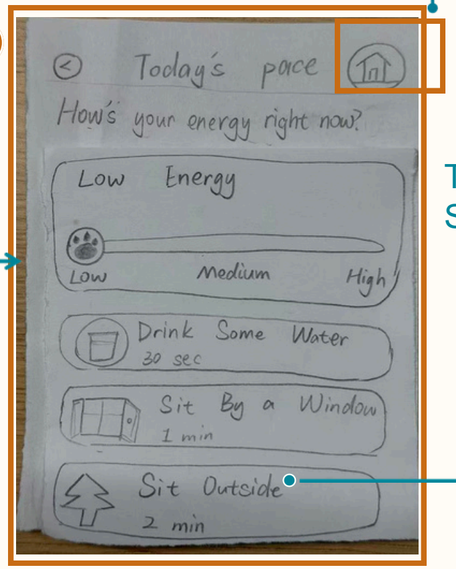
01 Home



Back to Homepage 1

Do a small activity

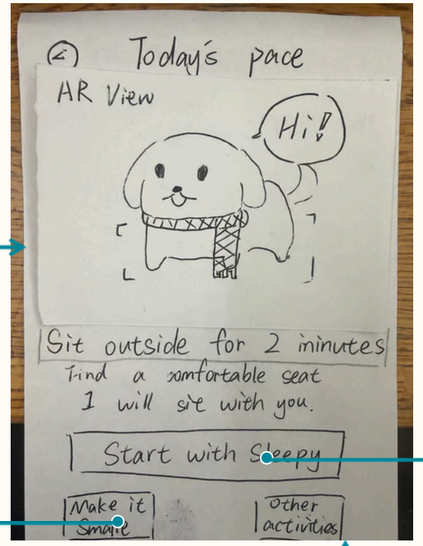
02 Energy + activities



Energy changes in place.
Tap an activity card to open its details.

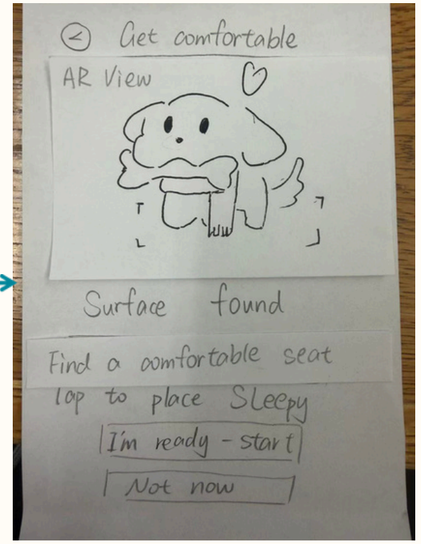
Tap Sit Outside

03 Activity details



Start with Sleepy

04 Get comfortable

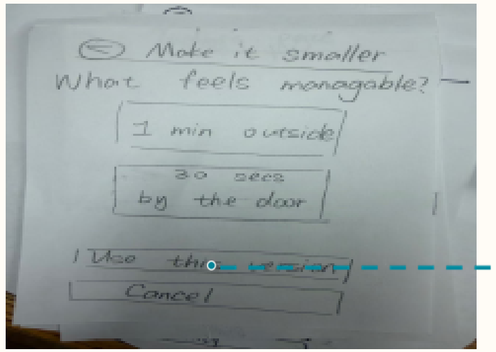


Continue in Task 2

Other activities returns to 02.

Make it smaller

Optional: a smaller version



Use this version

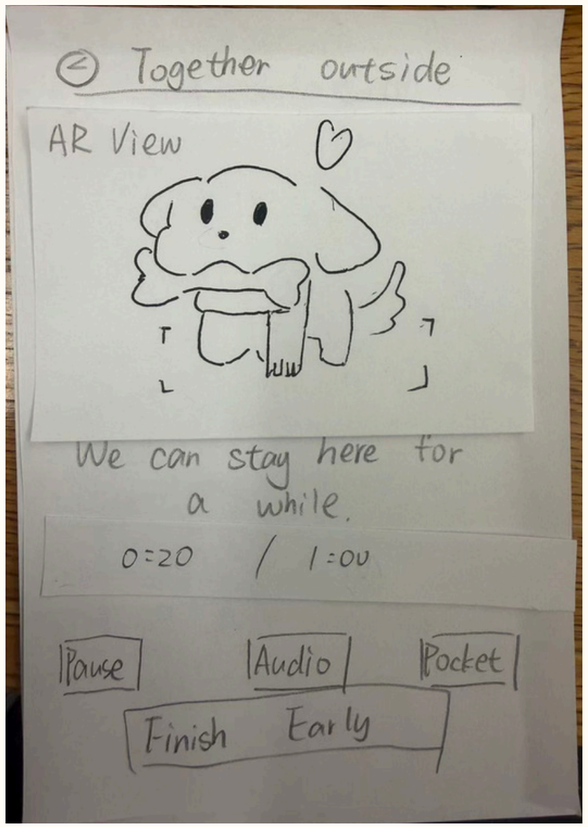
Return to details showing 1 minute.
Cancel keeps the original duration.

Example smaller option: 1 minute outside

Start from the detail page when the activity feels manageable.

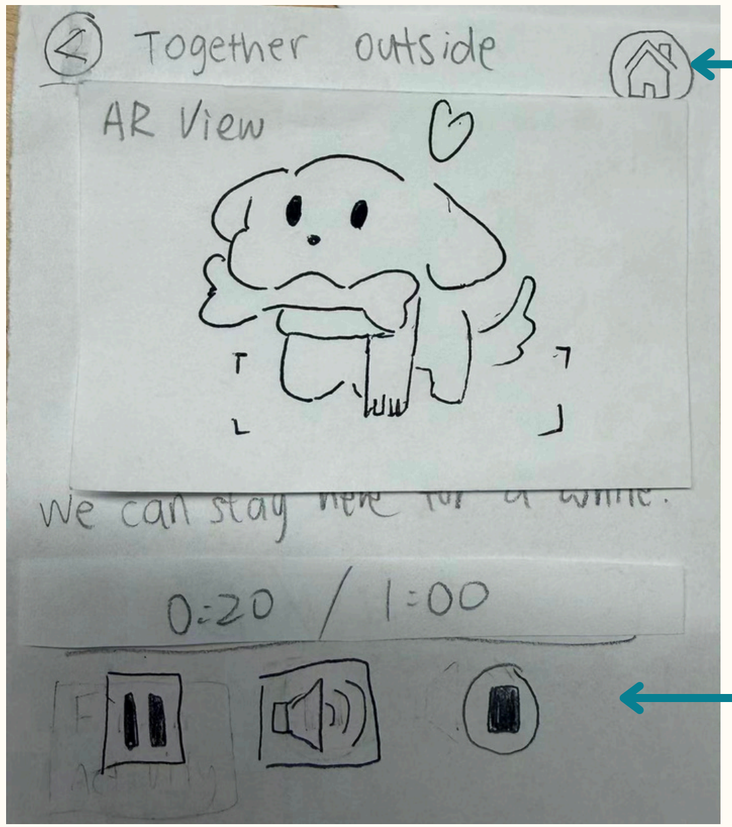
Major Changes: A simpler control area

Before



Four text actions

Revised



Pause, voice and stop controls

Home button added on all pages

Pause, Voice and Stop in one row of icons

Test finding

Three testers questioned what Pocket or the sound options meant. Another needed help understanding the activity controls.

Expected benefit

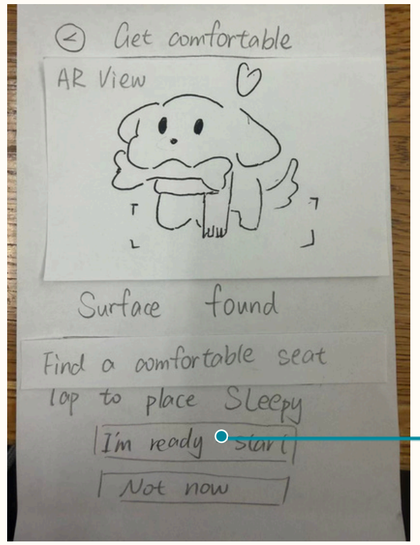
Grouping familiar Pause, Voice and Stop icons below the timer should make the controls easier to find.

Revised Screen in Context

Orange = changes from the tested low-fi prototype

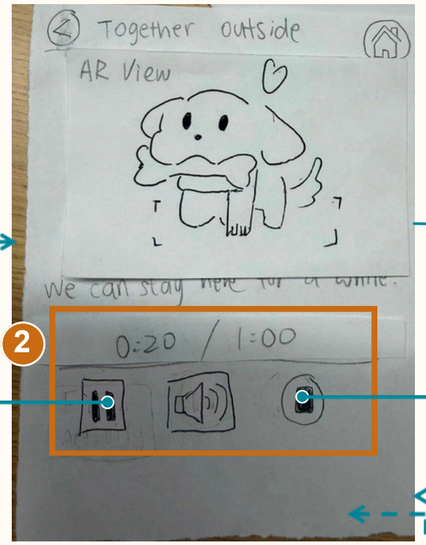
2 SIMPLIFIED Before: four text actions → **Now: one row of Pause / Sound / Stop**

01 Get comfortable



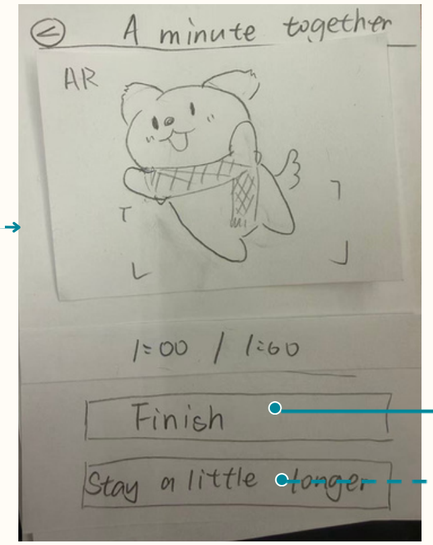
I'm ready – start

02 In progress



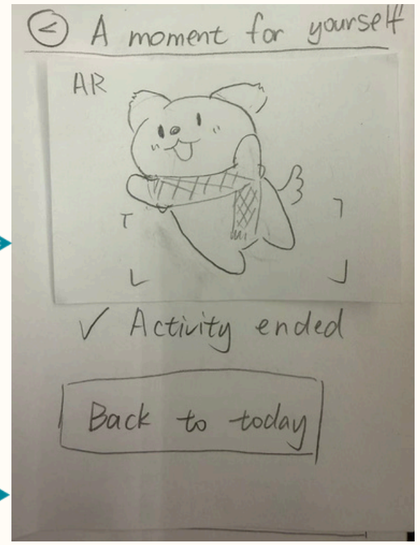
1 minute passes

03 One minute passed



Finish

04 Activity ended



Back to today returns to Task 1.

Stay a little longer

Time continues; no new limit.

Resume

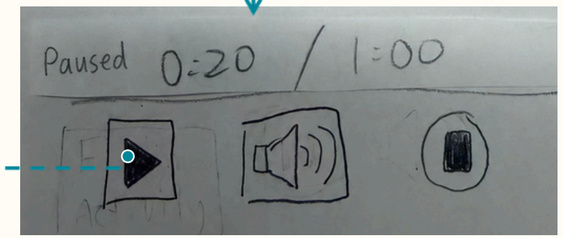
Pause

Stop

REMOVED: Pocket Mode

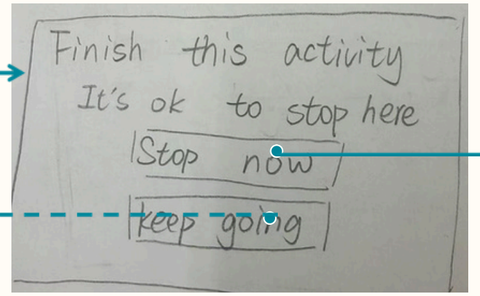
Explored sound and phone-lock behavior. The final prototype demonstrates speech bubbles only.

Paused — same activity



0:20 stays 0:20 while paused.

Stop confirmation



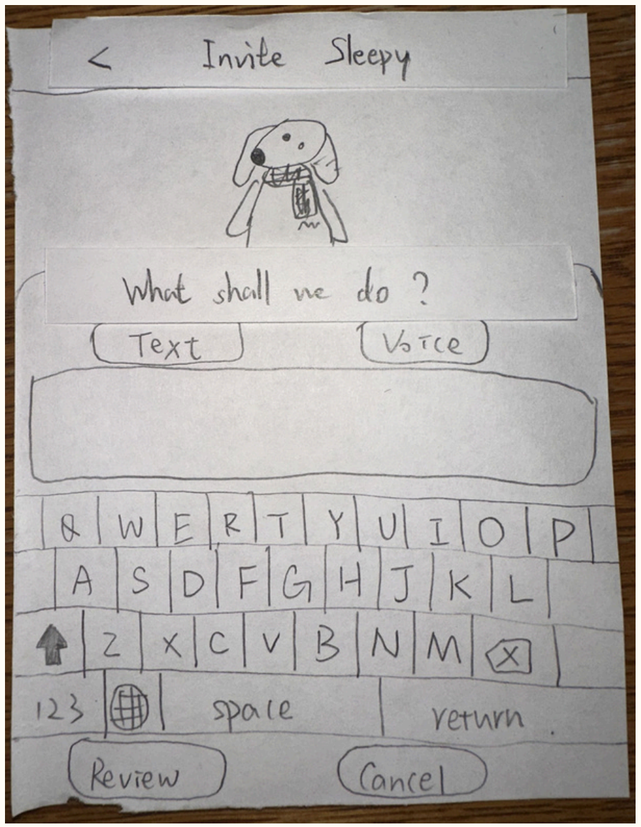
Stop now

Keep going

Stop also works while paused.
Keep going restores the prior state.

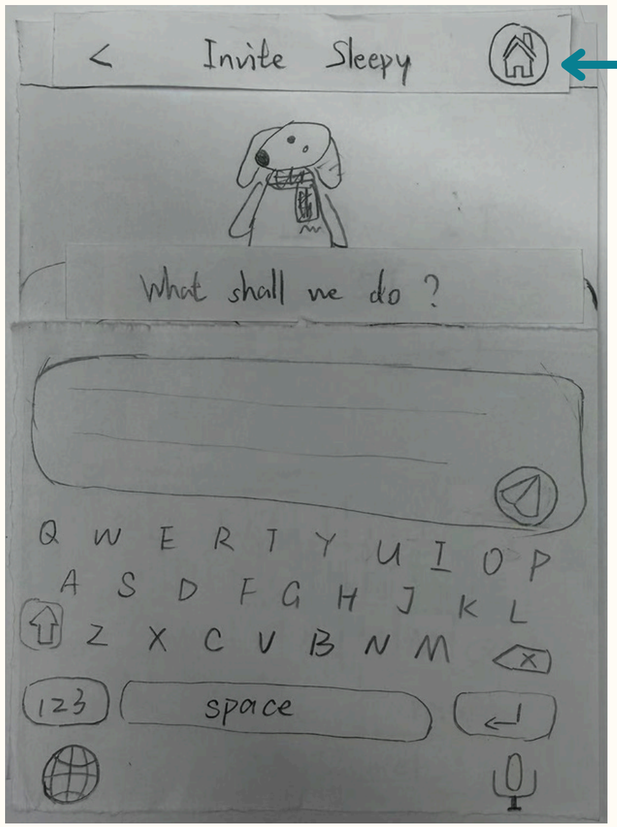
Major Changes: Clearer invitation sending

Before



Separate input modes and review

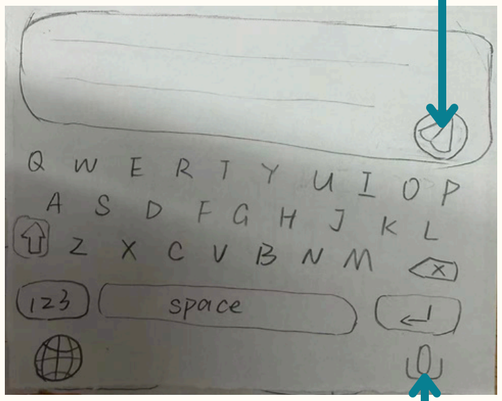
Revised



Sketch explores one shared composer

Home button added on all pages

Send control



Microphone in the keyboard

Test finding One tester expected a mic beside text input. Two could not tell whether Review had sent the invitation.

Final decision Use a familiar phone keyboard, keep Type and Mic together, and label the final action Send invite.

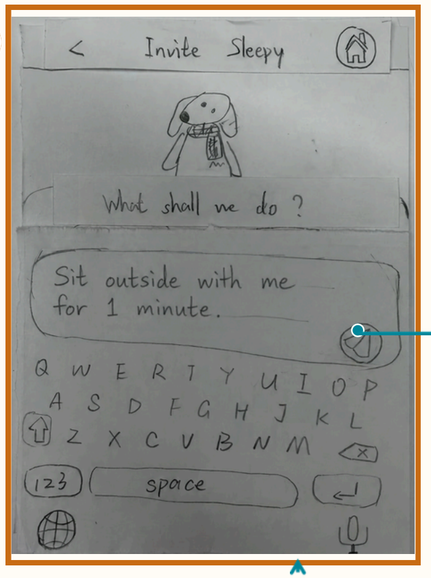
Revised Screen in Context

Orange = changes from the tested low-fi prototype

3 STREAMLINED Before: Text / Voice modes + Review screen

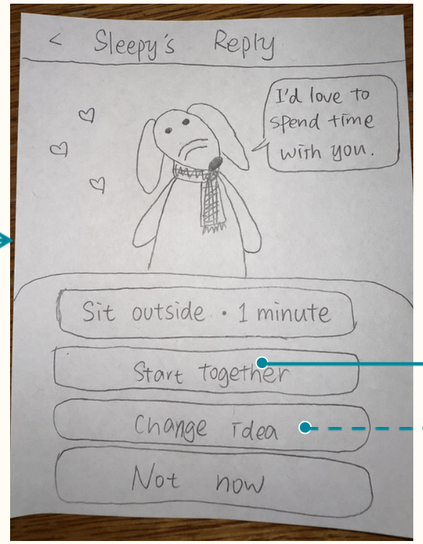
Explored: one composer + direct Send

01 Write or dictate



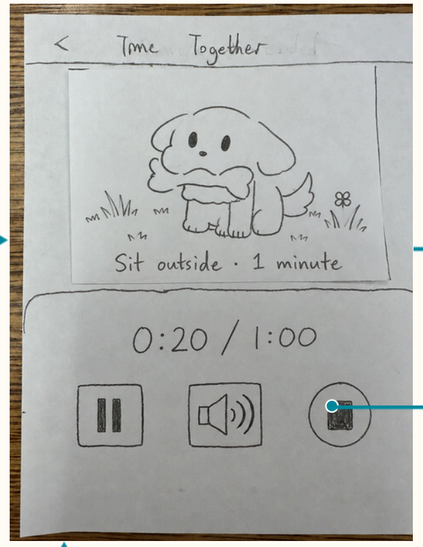
Send

02 Sleepy's reply



Start Together

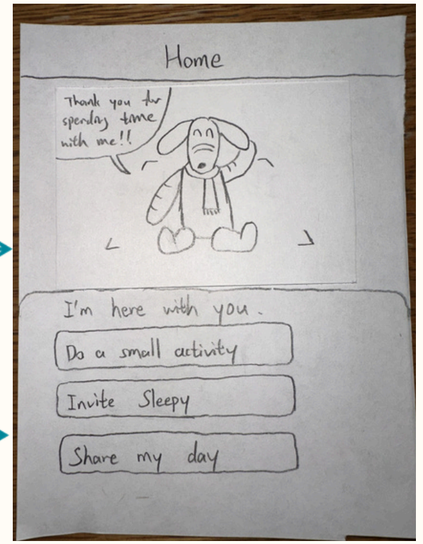
03 Time together



At 1:00: Finish

Stay longer: continue the activity

04 Home / goodbye



Change Idea: edit the same message

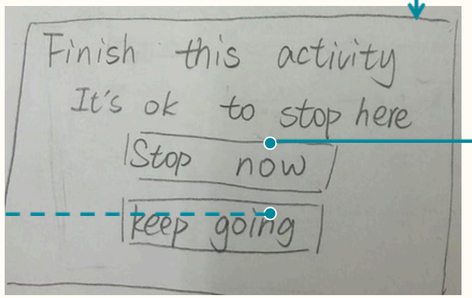
SKETCH: Direct-send proposal

This sketch explores one composer. The final prototype keeps Type/Mic and reviews voice input before Send invite.

Not now returns Home before starting.

Stop

Stop confirmation



Keep going

Stop now

Proposed controls follow Task 2. The final timer completes automatically.

Usability goals and baseline

Results from the six participants tested the low-fi prototype.

Goal 1 / Independent completion

Measure: the share of users who finish each task without hints or assistance.

Goal 2 / Perceived ease

Measure: mean SEQ after each task, from 1 (very difficult) to 7 (very easy).

TASK	INDEPENDENT COMPLETION	MEAN SEQ
Choose an activity	**2 / 6**	**4.17 / 7**
Spend time together	**4 / 6**	**5.00 / 7**
Invite Companions	**4 / 6**	**4.33 / 7**

What the results tell us

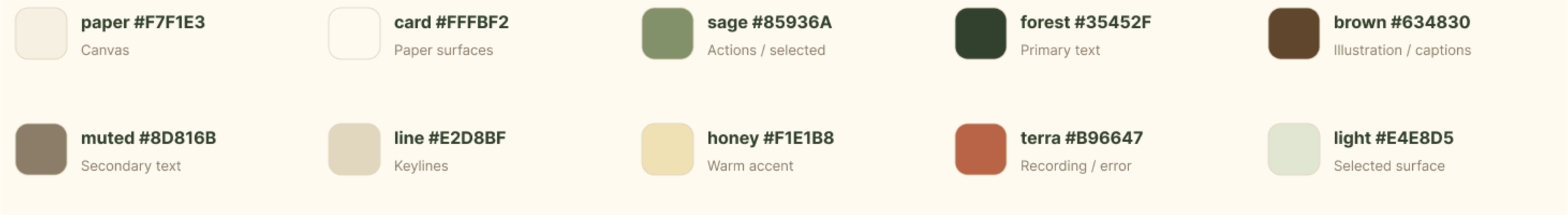
Activity selection needed the most support: only 2 of 6 users finished without help.
Both goals were partly met. The revisions focus on fewer steps and clearer controls.

How the revisions support our goals

The flows are revised. Next, we will repeat the tasks and compare unassisted completion and SEQ with A5.

TASK	CHANGE AND EXPECTED BENEFIT	WHAT WE WILL CHECK
Choose an activity	Energy and three activities now share one screen. Fewer screen changes should make it easier to choose without hints.	Can users select a suitable activity without help?
Spend time together	Pause, Voice and Stop sit together below the timer. Familiar controls should make the session easier to manage.	Can users pause, resume and leave early without help?
Invite Companions	Type and Mic stay together, with an explicit Send invite action. The label separates reviewing from sending.	Can users send an invitation and recognize that it was accepted?

Design system / Color and mood



Warmth and nature

Cream and honey echo Sleepy’s warm fabric colors. Sage brings the greens of leaves and grass into the interface.

Hierarchy and feedback

Forest is the main text color. Sage marks actions and selected states. Terra marks recording and errors.

Contrast to refine

Forest on paper: 9.12:1. Light text on sage: 3.19:1. Muted text on card: 3.71:1. The latter two need more contrast at small sizes.

Normal-text contrast target: 4.5:1 (WCAG AA).

Design system / Typography

Lora

Page heading · Lora · 28 px

Your pace, today.

Activity heading · Lora · 22 px

A photo, shared.

Navigation · Lora · 17 px

Today’s pace

Primary action · Lora · 15 px

Start together

Lora carries the storybook feel into headings and main actions.

Inter

Prompt · Inter · 14 px

How is your energy right now?

Conversation · Inter · 13 px

I’m glad you told me.

Duration · Inter · 12 px

1 min

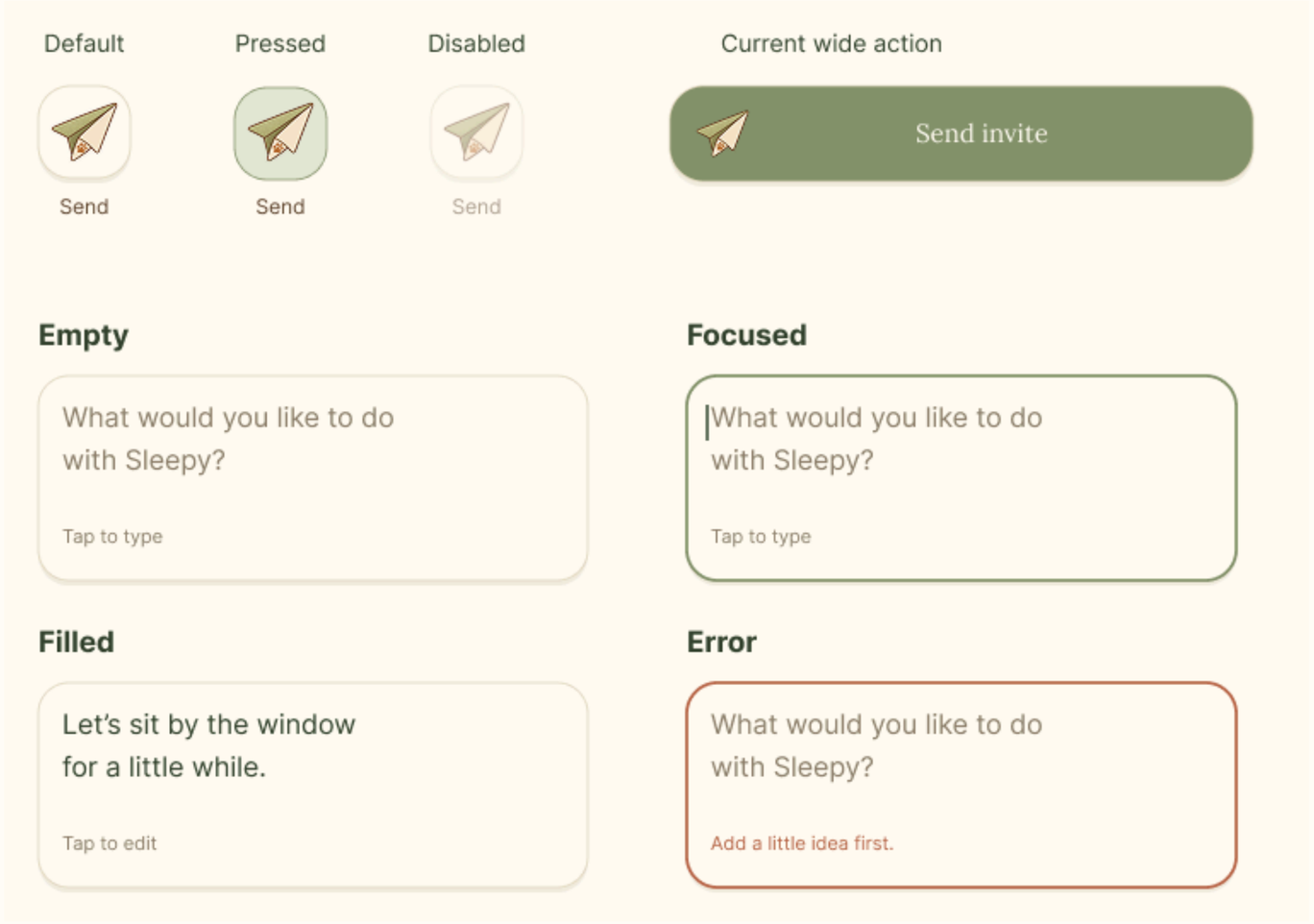
Control caption · Inter · 10 px

Pause

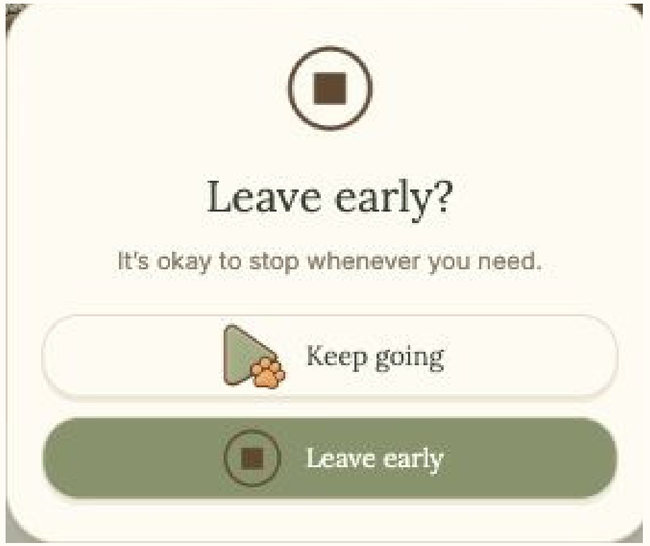
Inter keeps prompts, conversation and supporting details easy to scan.

Design system / Reusable components

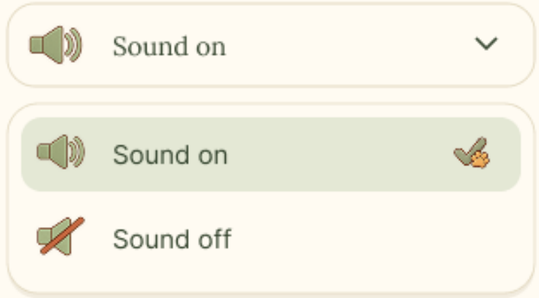
Button and input states



Modal



Dropdown



Design system / Icon library

Sleepy is our default companion and cover puppy. Paw accents connect the UI to Sleepy. Familiar symbols stay prominent. The library includes explored actions.


Back


Home


Activities


Invite Sleepy


Low


Medium


High


Drink water


Sit by window


Sit outside


Companion


Timer


Pause


Resume


Voice on


Voice off


Stop activity


Camera on


Camera off


Type


Mic ready


Recording


Stop recording


Send


Start


Place Sleepy


Move Sleepy


Choose


Activity ended


Make smaller


Change activity


Edit idea


Record again


Review


Close


Not now


Stay longer


Keep going


Share my day


Goodbye

Activities alt

Volume

Save privately

Discard

Rabbit

Hamster

Squirrel

Snake

Fox

Pig

Alpaca

Tabby cat

AR scan

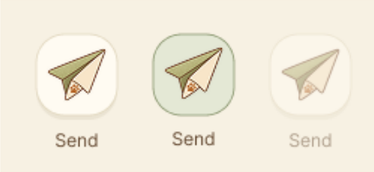
Tea together

Design system / Assets in use

The same controls, scene backgrounds and character poses appear across the activity and sharing flows.

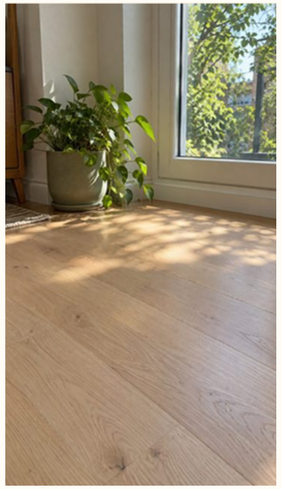
Shared controls

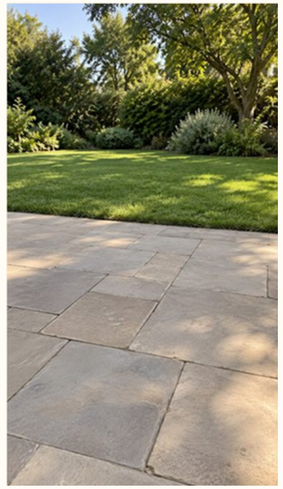




Type, Mic and Send use consistent controls across invitation and sharing.

Scene backgrounds

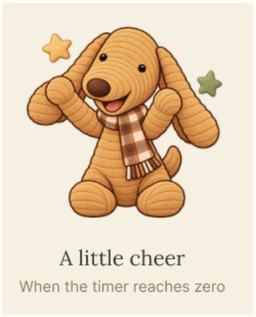




Room and garden photos simulate the camera view where a companion would appear.

Activity poses





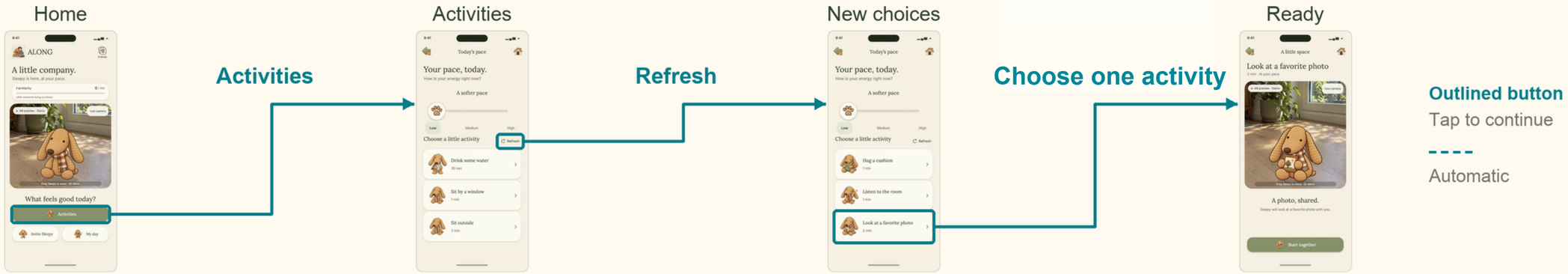
Sleepy's activity poses show how he joins everyday actions.

Prototype flows

Task 1

Choose a manageable activity

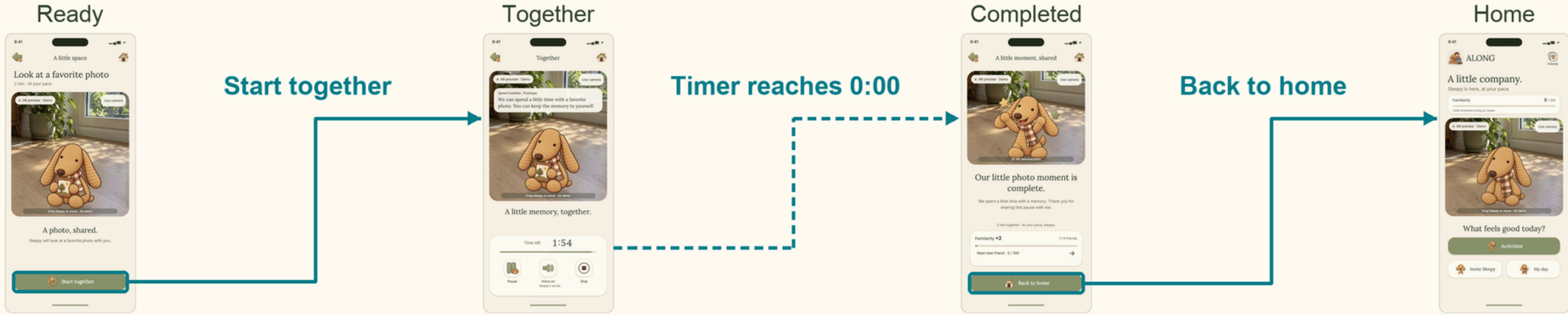
Example: Low energy



Task 2

Spend time with Sleepy

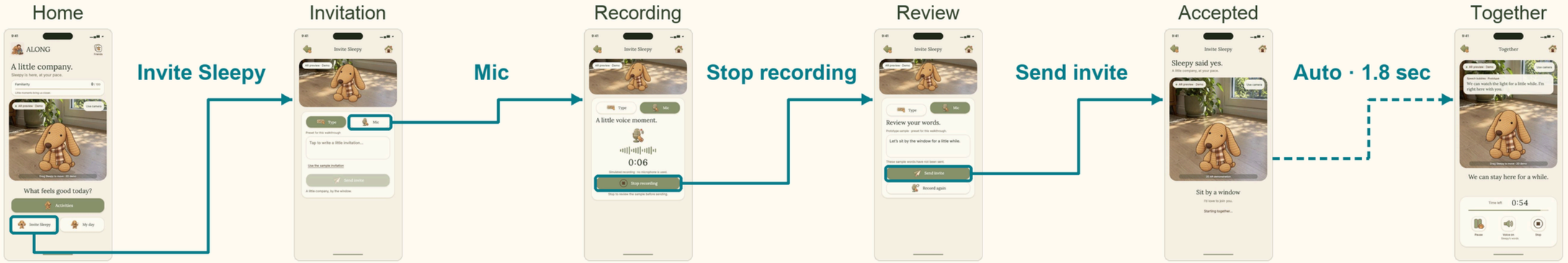
Same photo activity



Task 3

Invite Sleepy

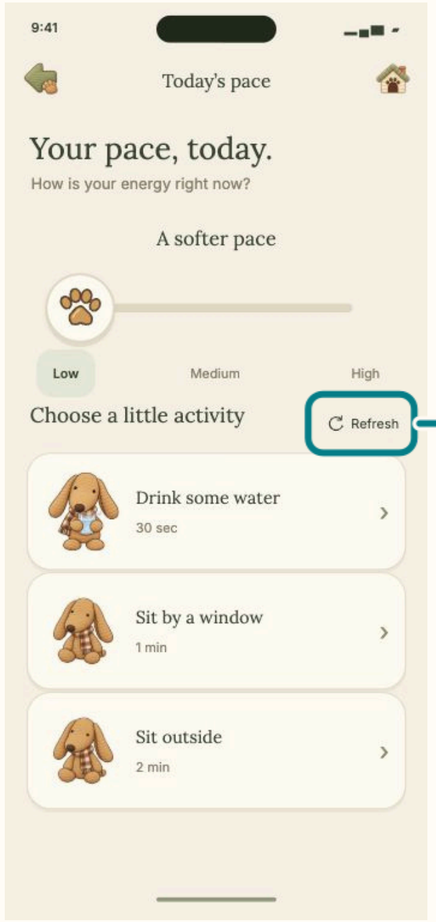
Voice invitation example



Task 1 / Choose a manageable activity

SIMPLE · Choose an activity for your energy. Refresh for other options.

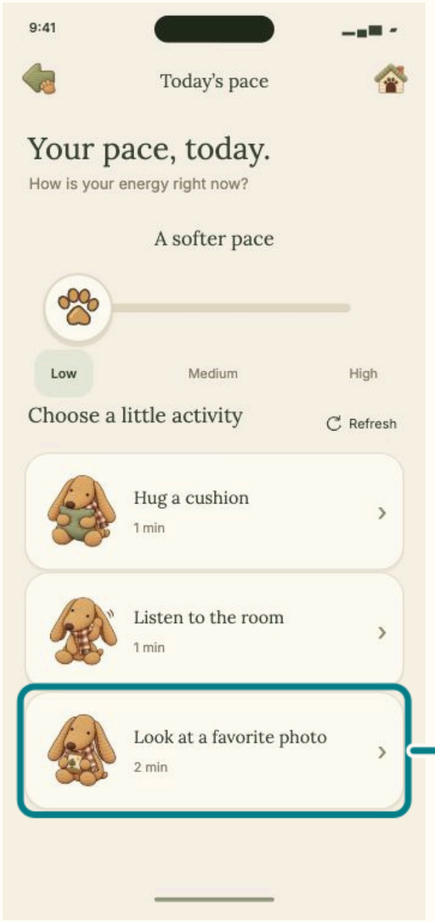
01 Choose your pace



Drag the paw or tap Low, Medium or High. Each visit draws three of six choices per level.

Tap Refresh

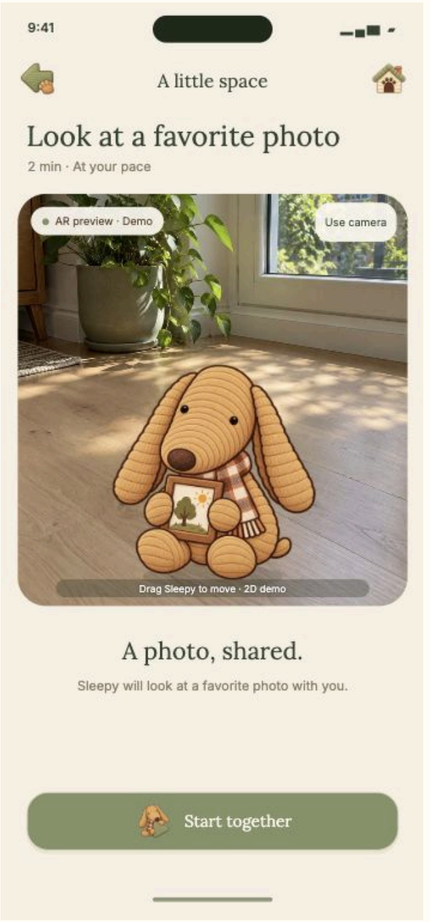
02 Refresh choices



Refresh changes this level's trio. Switching levels keeps this visit's lists. Individual activities can repeat.

Tap photo activity

03 Activity selected

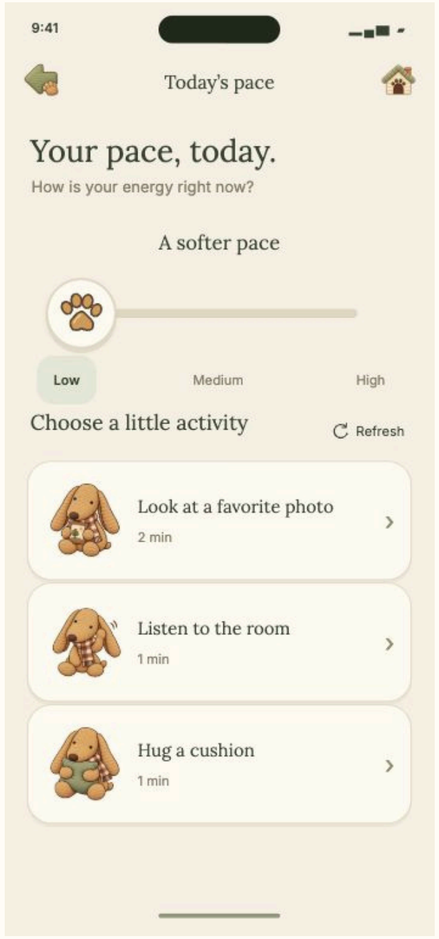


See the activity, duration and how Sleepy joins you.

18 activities, different choices each visit

The prototype has six activities (for now) per energy level, with three shown at a time.
Refresh demonstrates changing choices from the larger library we plan for the product.

Low energy



A favorite photo, listening to the room and hugging a cushion.

Medium energy



Caring for a plant, folding a towel and reading a page.

High energy



Making a snack, a collage and a paper bird.

Task 2 / Spend time with Sleepy

MODERATE · Spend a little time with Sleepy. This example continues the two-minute photo activity.

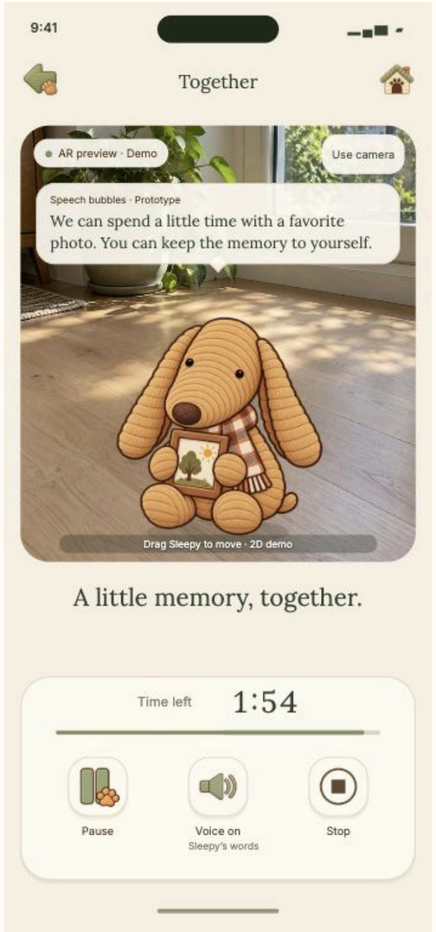
01 Ready to begin



Choose Start together to begin the two-minute photo activity.

Tap Start together

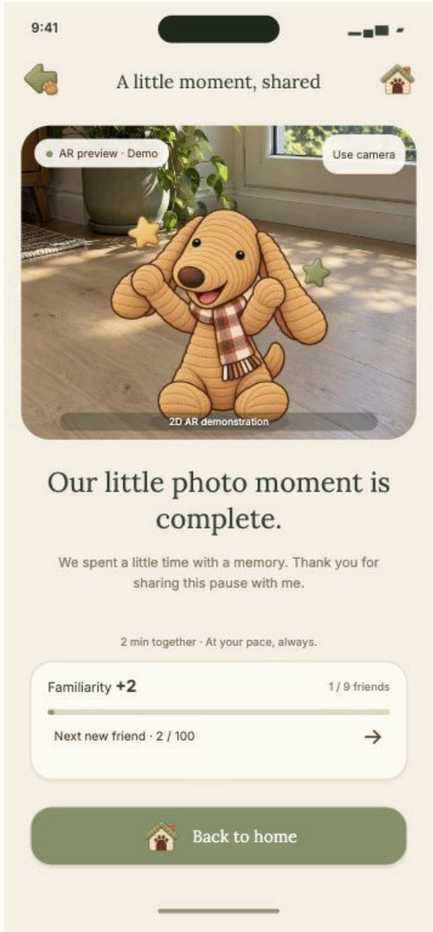
02 Time together



Pause, change Voice or Stop while the timer runs.

Timer reaches 0

03 Moment complete

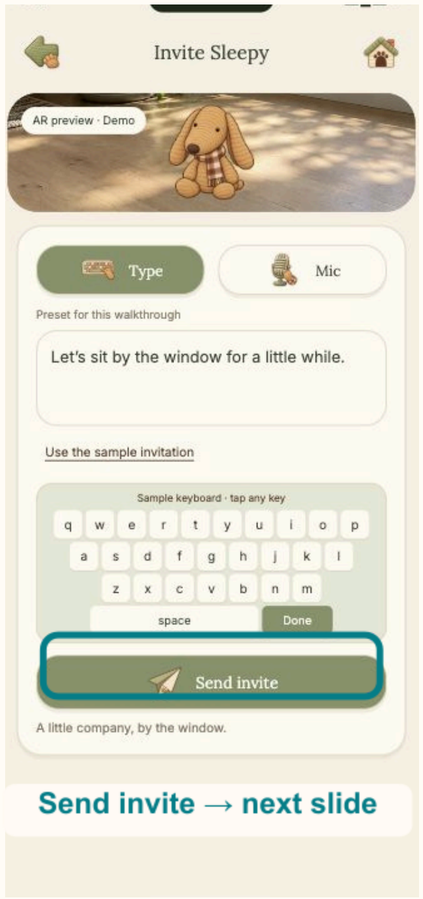


The timer completes automatically and awards +2 once. The reward card opens Friends. Back to home ends the session.

Task 3 / Invite Sleepy

COMPLEX · Open Invite Sleepy from Home. Type and Mic offer two ways to send the sample invitation.

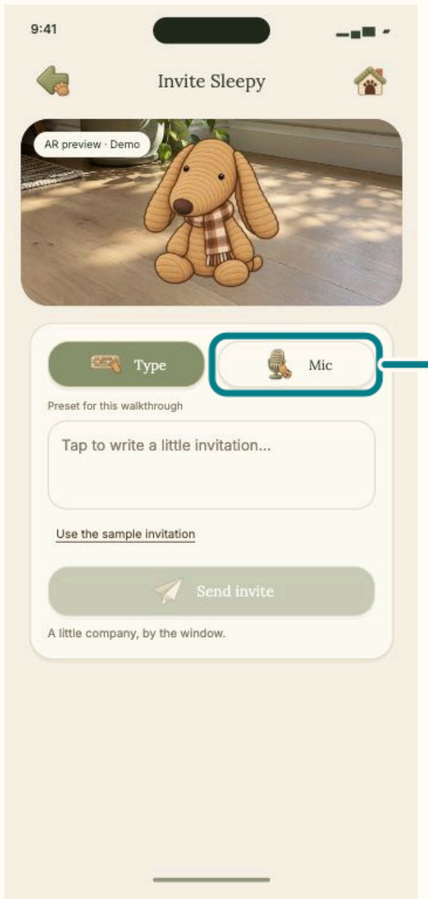
01 Type sample



Type fills a preset invitation. Done hides the keyboard. Send invite sends it.

or

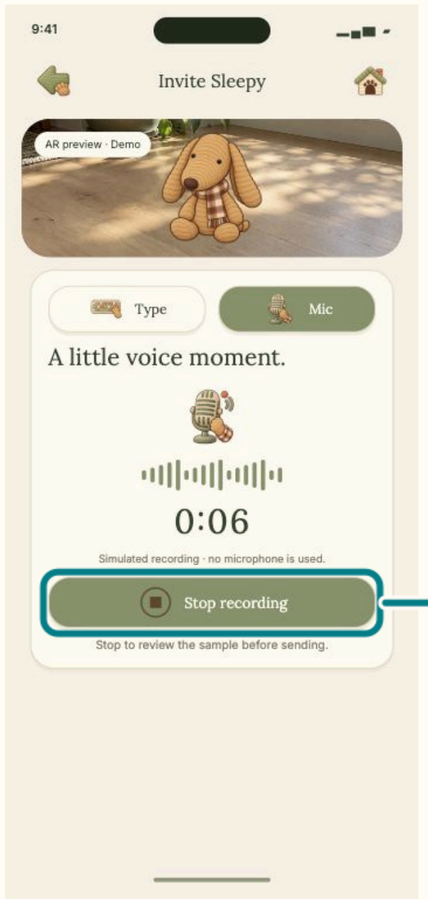
02 Or choose Mic



Choose Mic for a voice sample. Type remains available in the same composer.

Tap Mic

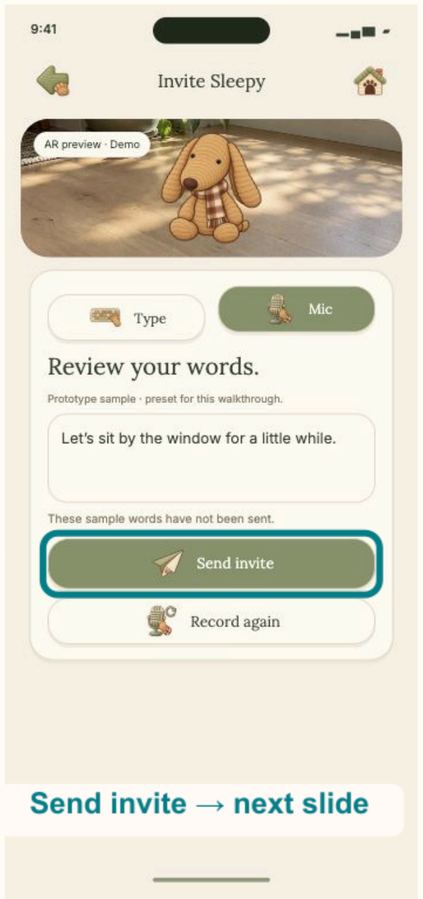
03 Sample recording



Mic shows a running timer and waveform. Stop recording opens the preset transcript.

Tap Stop recording

04 Review sample



Send invite sends the sample. Record again restarts Mic. Type switches to the keyboard.

Task 3 / Invite Sleepy

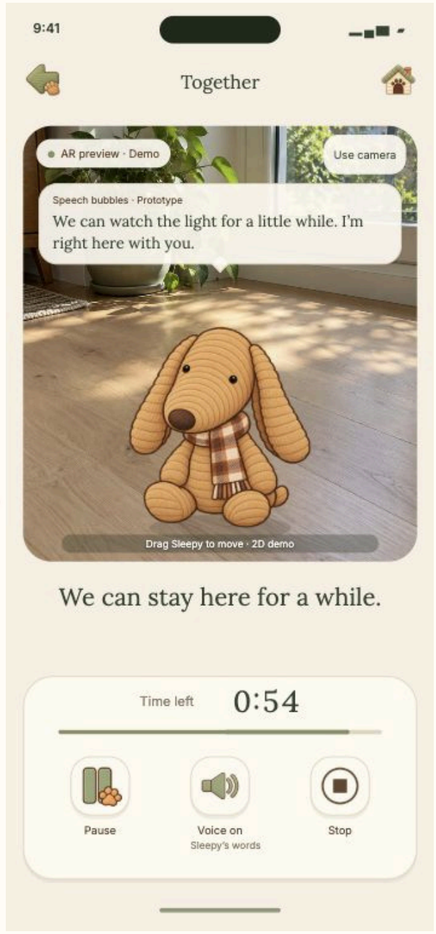
COMPLEX · Send the invitation, receive a reply, and complete the shared activity.

05 Accepted



Sleepy accepts a one-minute window break.

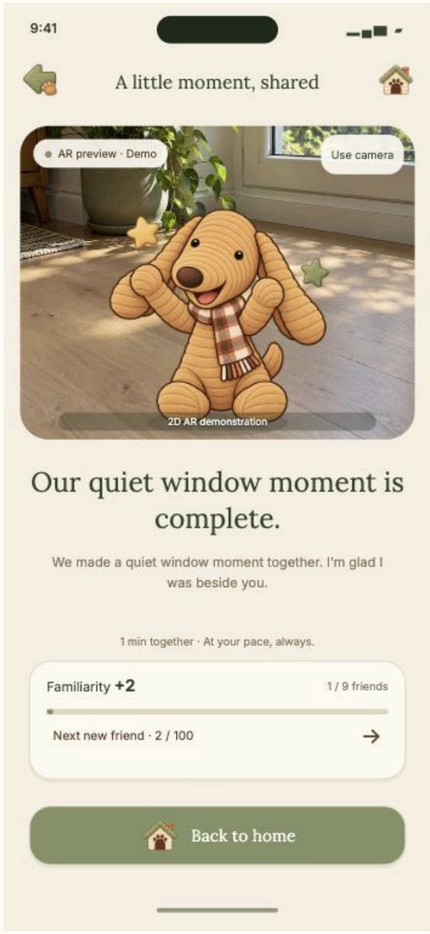
06 Together



The one-minute activity starts automatically after acceptance.

Timer reaches 0

07 Moment complete

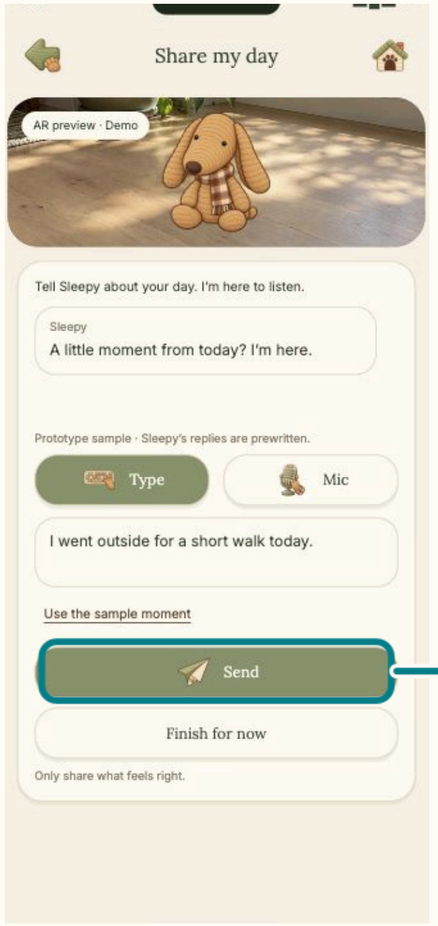


One minute complete. +2 familiarity. Back to home closes the session.

Beyond the tasks / Share my day

Open My day from Home to share a moment with your selected companion. Replies are prewritten.

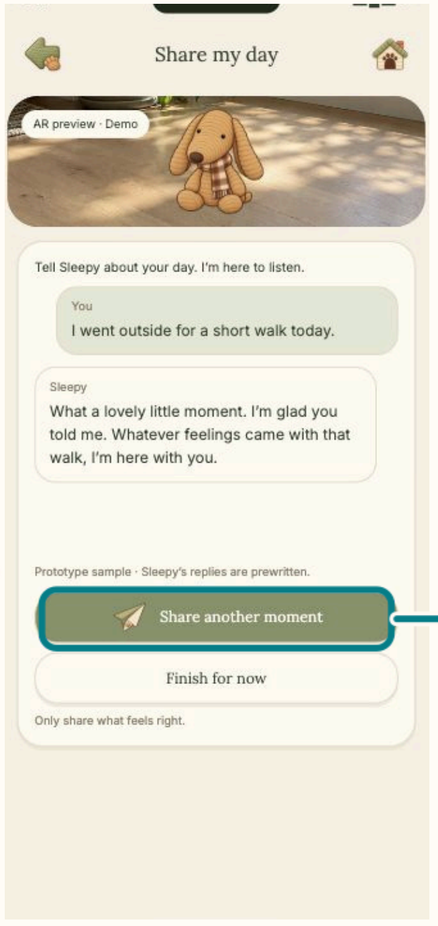
01 Share a moment



Use Type or Mic and send the sample. Mic uses the same record-and-review steps as Invite.

Tap Send

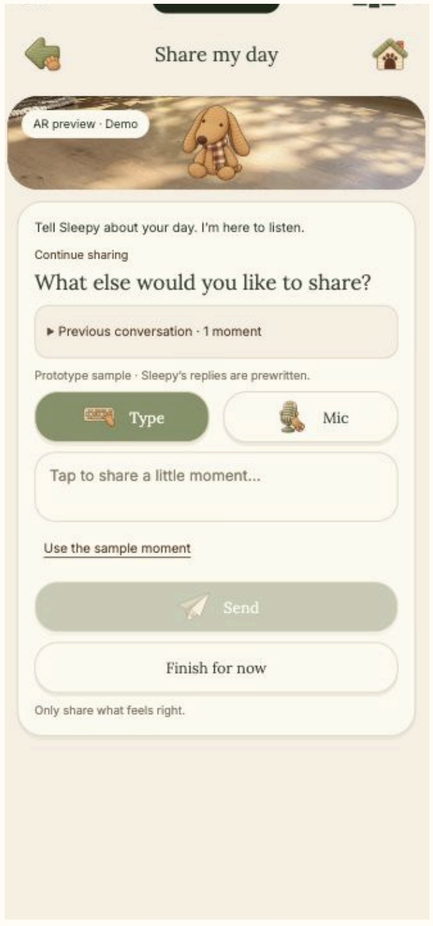
02 Read the reply



Your companion replies. Share another moment opens the next sample.

Tap Share another moment

03 Continue sharing



Previous conversation opens earlier turns. Finish for now clears the chat and returns Home.

Beyond the tasks / Friends and familiarity

Sleepy is the only available companion at first. Familiarity unlocks the other eight.

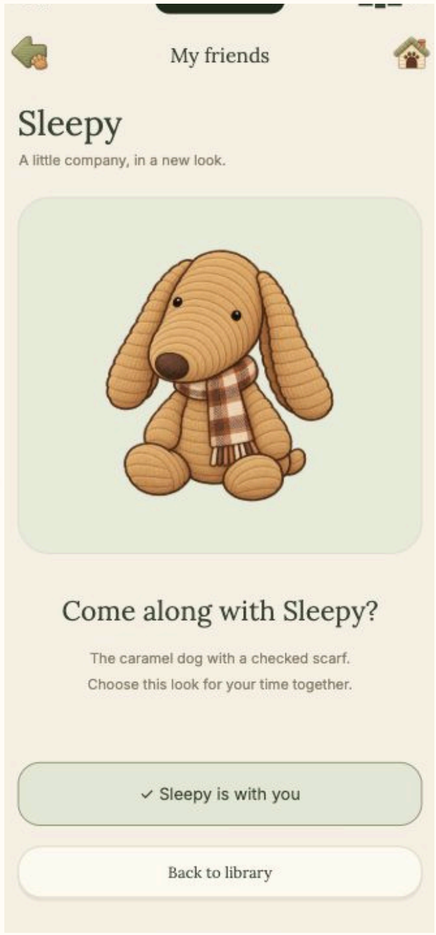
01 Browse friends



Friends or Familiarity opens nine companions. With you marks the current choice. Silhouettes show friends not met yet.

Tap Sleepy

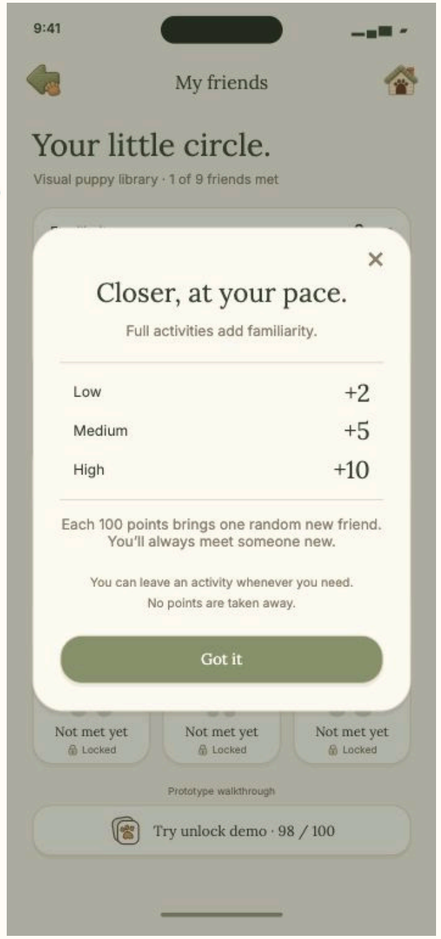
02 View a companion



Tap a friend for details. Sleepy's page confirms he is with you. Back to library returns to the collection.

Tap How familiarity grows

03 Growth rules



Full activities add Low +2, Medium +5 or High +10. Every 100 points unlocks a random new friend. Points still grow after all nine are met.

Activity controls /Pause and leave early

Stop or Back opens the exit dialog. Home leaves immediately without a reward. Pause keeps your place.

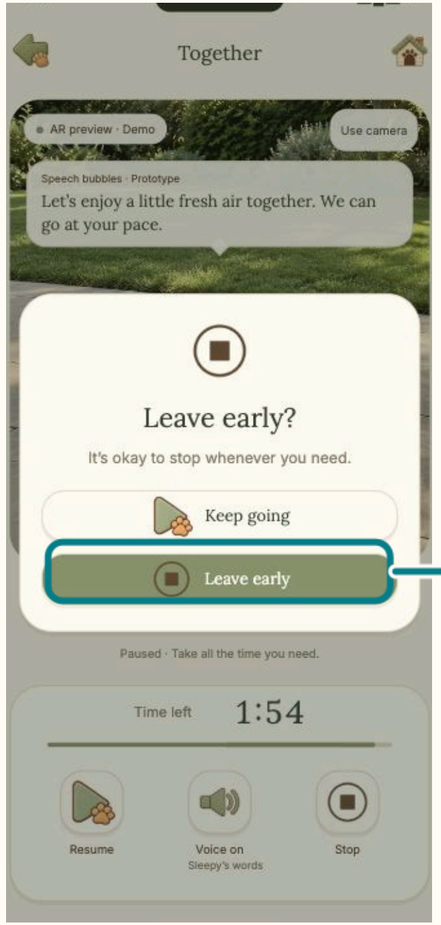
A Paused



Pause freezes time and bubble changes. Resume continues both.

Tap Stop

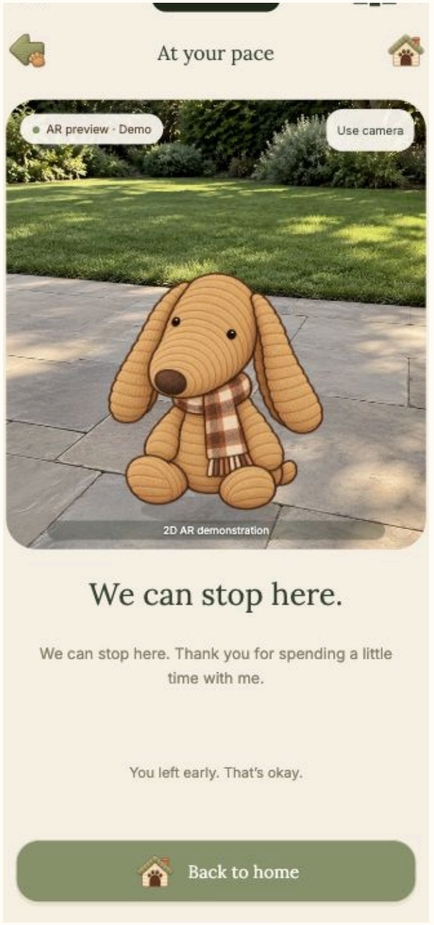
B Exit confirmation



Stop pauses time and opens this dialog. Keep going restores the previous timer state. Leave early ends the session.

Tap Leave early

C Ended early



Sleepy acknowledges the exit. Points stay unchanged. Back to home closes the session.

Activity controls / Company or quiet

Voice controls the companion's words. Muting keeps the activity running.

Voice on



Bubbles change every six seconds.

Tap Voice

Voice off



Bubbles hide while the timer continues.

Move within the preview





Before dragging / After dragging

Drag Sleepy within the scene. Arrow keys also move the focused companion.

Photos simulate the future camera view. Camera access and full AR are unavailable in this Figma prototype.

Speech bubbles stand in for spoken dialogue. No audio plays. Tap Voice again to show or hide the words.

Companions / Meet and choose a friend

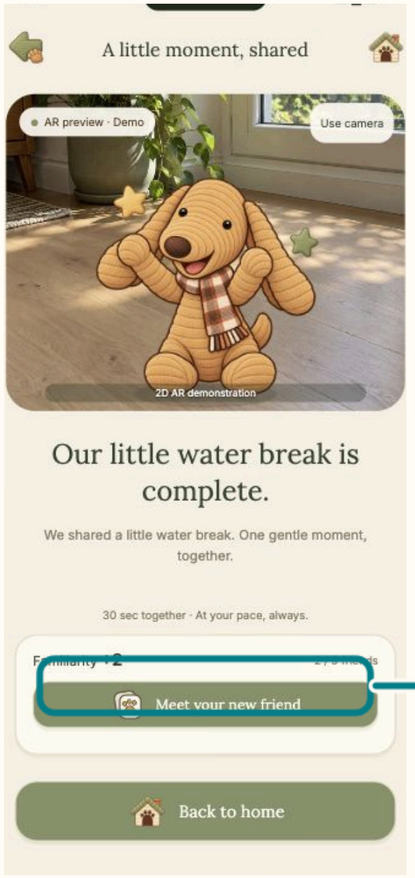
Try unlock demo shows how meeting and choosing a companion works.

01 Sample collection



Water break
Start together
30-sec timer

02 Complete an activity



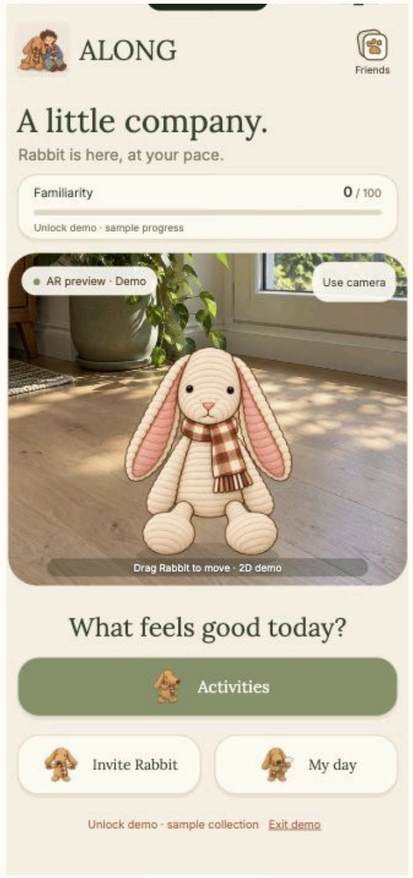
Tap Meet your new friend

03 Meet your friend



Tap Choose Rabbit

04 A new companion



The sample collection starts at 98 / 100. Tap Try a 30-second water break.

Finish a 30-second water break for +2. Meet your new friend opens the reveal.

Choose Rabbit changes your companion. Keep Sleepy with me keeps your current choice.

Your selected companion appears on Home, in activities and in My day. Invite uses their name.

Design tools / Pros and cons

Figma Design defines the interface. A Code Layer makes the prototype interactive.

Figma Design

PROS

Reusable styles and components keep the UI consistent.
A shared file makes screens and assets easy to review.

CONS

Frame-based flows become cumbersome when timers, pause/resume and saved progress need to stay in sync.

Figma Code Layer

PROS

HTML, CSS and JavaScript support working timers, dragging, activity refresh and saved companion progress.

CONS

More code to maintain and debug.
A browser preview cannot fully represent native AR interactions.

Why we used both

Figma keeps the visual system easy to revise. The Code Layer adds the stateful interactions we need to test complete task flows, without building a native app.

Prototype limitations

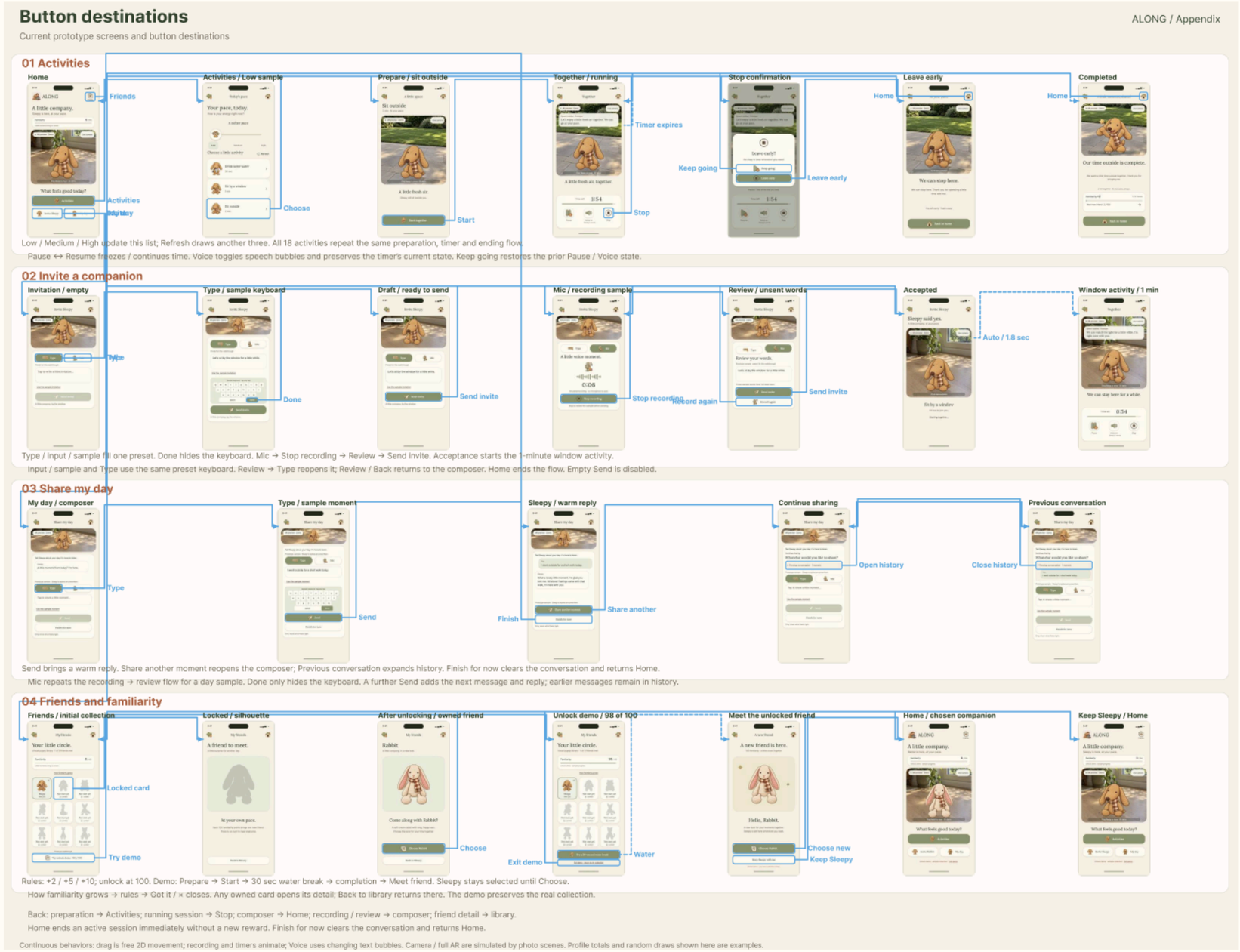
WHAT WE BUILT	WHY WE USED IT	EFFECT ON THE EXPERIENCE
AR and companion speech Photo scenes, a draggable 2D companion and timed text bubbles.	Lets us test placement and session controls without building full AR and audio.	Users can move Sleepy and control the session. Spatial tracking and spoken dialogue are not represented.
Input and replies / Wizard of Oz Preset Type/Mic text and prewritten replies. Every invitation starts a one-minute window activity.	Keeps the invitation and sharing flows easy to repeat during testing.	Users can review and send a sample, but cannot try their own wording or a personalized response.
Activities and familiarity 18 authored activities, three choices per energy level, and fixed reward and unlock rules.	Provides enough variety to try choosing, refreshing and meeting a new friend.	Refresh changes suggestions within a fixed catalog. Companions do not have exclusive activities.
Saved progress Companions and familiarity save in this browser. Chats and active sessions clear on reload.	Lets users revisit their collection without an account or backend.	The collection can remain between visits. Chats and activities cannot resume after a reload.

Thanks!





Appendix



Play ALONG

Open the playable prototype

Inspect the flow map

Figma button destinations and branch details