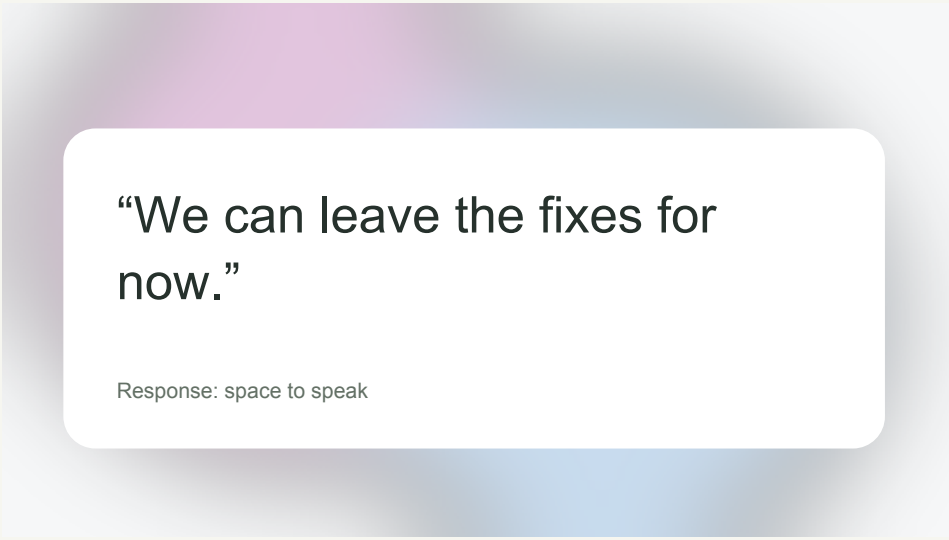
01 / PRODUCT BRIEF

EmoBall: a visual language for AI chat.

A proposed Human-AI Interaction system, developed from the original EmoBall / GlasSphere exploration.

Start with what happened.

When an everyday situation is bothering me, let me describe it and receive a response suited to what I need - without requiring me to name a feeling.



Working audience

Adults already using English-language mobile AI chat. This is an audience hypothesis, not a recruited or validated segment.

Current scope

Phone chat first. Light-based robot expression is a later extension.

THE PROPOSED CONTRIBUTION

Connect a response approach, its words and its visual expression in one revisable exchange.

Existing aesthetic retained. New semantic rules remain provisional.

02 / WORKING JOURNEY

From an unresolved event to a useful next step.

A design hypothesis assembled from the project intent and desk research. No observed-user journey is claimed.

01 / ARRIVE

Describe the situation

Acknowledge the event; clarify once if necessary

Failure to avoid

Premature label or support-mode gate

02 / CONTINUE

Be heard or make progress

Respect venting or a clear task request

Failure to avoid

Unwanted advice or repeated questions

03 / REVISE

Correct what matters

Update the current account; keep history

Failure to avoid

Changing only a colour while ignoring the correction

04 / LEAVE

Act, pause or stop

Complete the task or close; preserve feedback choice

Failure to avoid

New engagement prompts or a lingering field

03 / RESEARCH TO DESIGN

Turn references into constraints.

Focused primary-source reading and design inference; no source is treated as validation of EmoBall.

01	Google / The UX of AI Primary source	Keep the interface familiar when AI behaviour is complex.	One primary Send action. Secondary controls appear on demand.
02	Microsoft / HAX guideline 9 Primary source	Support editing and recovery when an AI output is wrong.	Correction changes the next response; history remains.
03	Jonauskaite & Mohr / 2025 Primary source	Colour associations are many-to-many; contextual effects remain open.	Treat palette meanings as conventions; explain the referent.
04	Apple / ELEGNT Primary source	Separate expressive primitives from functional objectives.	Distinguish preparing, responding and withdrawing before physical adaptation.

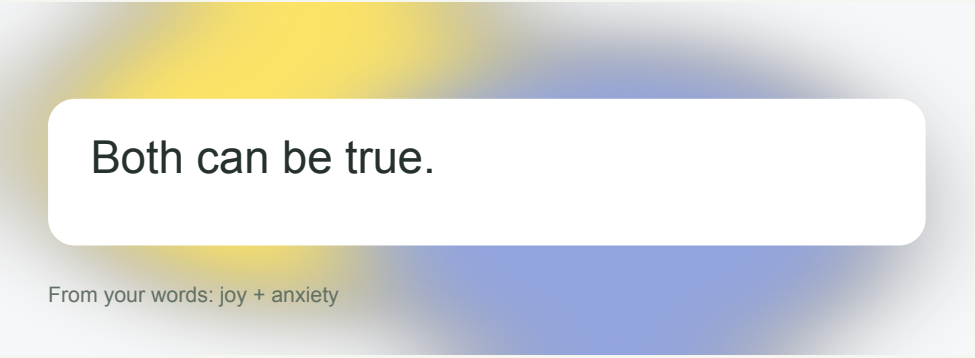
Original research chain

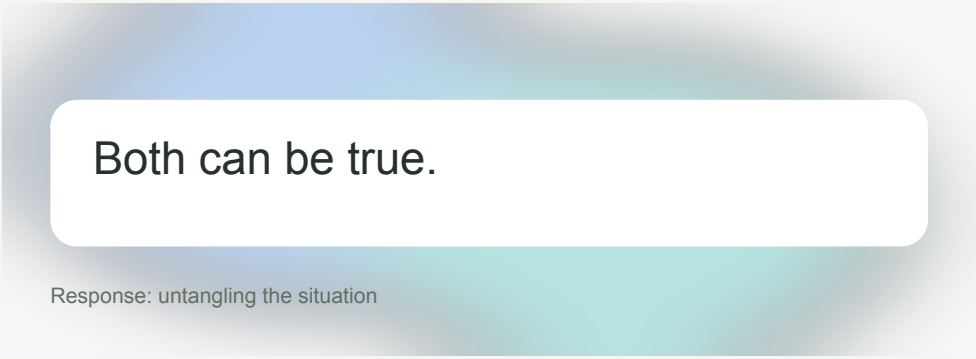
Standpoint report 09 and claim audit 10 retain the earlier conversation research and its reading limits.

04 / MECHANISM SELECTION

What does the colour refer to?

Keep A and B as explicit alternatives. A polished visual is not evidence of semantic clarity.





A / Described feelings

Keeps the person’s explicit account visible.

Tradeoff / Can feel categorising; ambiguous feelings must stay open.

B / Response approach

Can accompany help before a feeling is named.

Tradeoff / May be decorative or make a poor reply feel reassuring.

DEVELOP B PROVISIONALLY

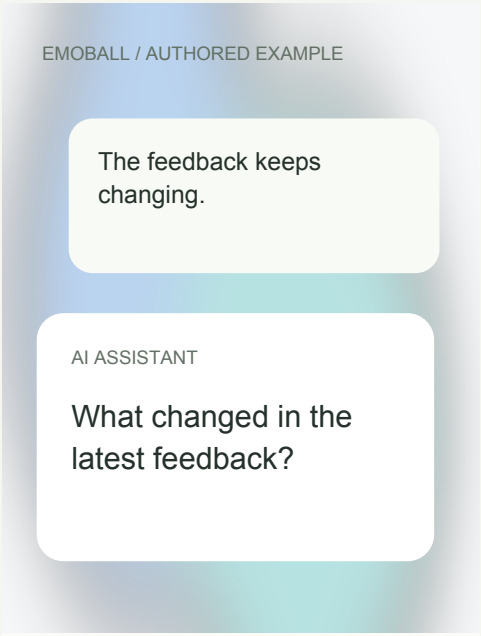
Use one referent per preview. The earlier automatic A-to-B sequence is deferred. Owner review and human comprehension remain open.

05 / CORE EXPERIENCE

A correction changes the conversation.

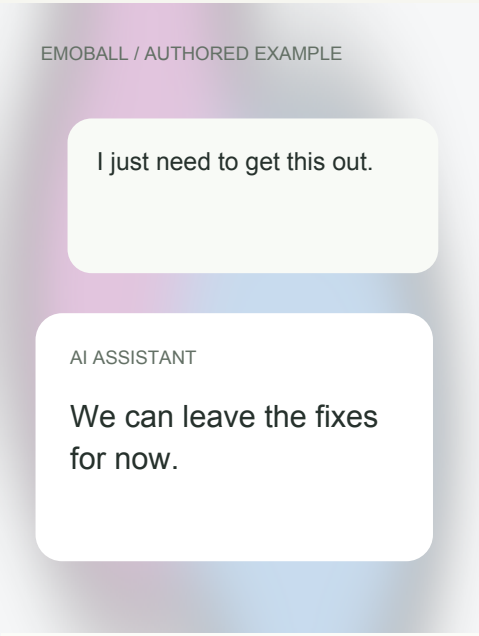
Four connected exchanges. Schematic storyboard of the implemented script; these panels are not user-test evidence.

01 / DESCRIBE



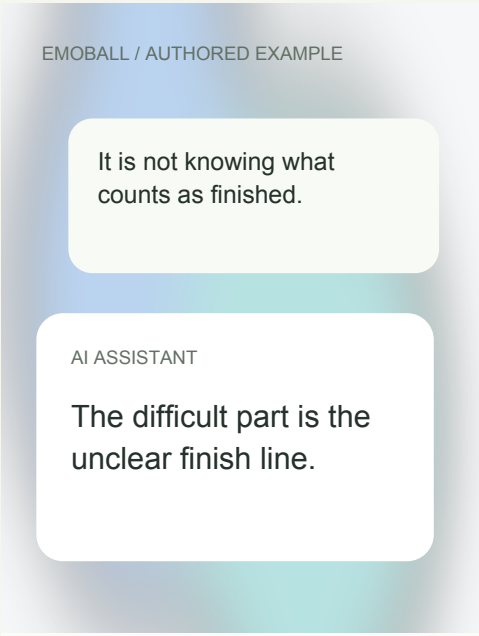
Clarifying

02 / CONTINUE



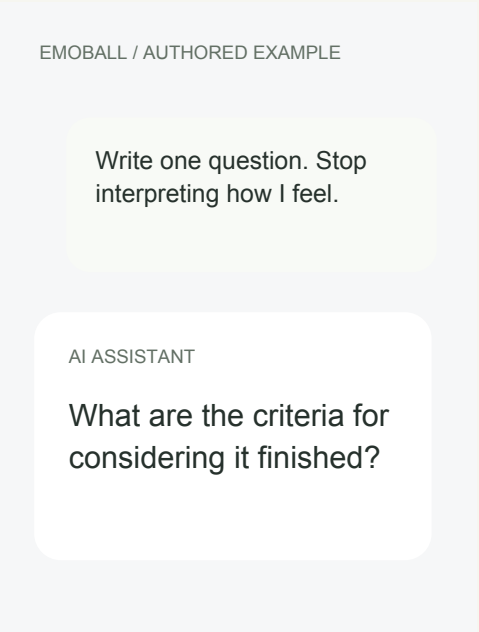
Space to speak

03 / CORRECT



Updated account

04 / ACT & PAUSE



Practical help / neutral

History stays intact.

The active field follows the current reply. Pausing feedback carries into other examples until explicitly resumed.

06 / EXPRESSION GRAMMAR

A small vocabulary with explicit boundaries.

Retain the approved native-inspired soft field and light studies. Palette semantics are proposed conventions.

Space to speak		The reply leaves room to continue without advice.	User sadness, AI inner feelings, psychological state
Untangling the situation		The reply asks or resolves a focused question.	Confidence, thought intensity or intelligence
Acknowledging the moment		The reply acknowledges the event or stated experience.	Always happiness, celebration or a positive outcome
Task / end / paused	Neutral	The useful words stand without a field.	A negative judgement about the conversation

One visual parameter, one job.

Hue = proposed response convention. Position = composition. Slow movement = continuity. None indicates emotion intensity or confidence.

07 / INTERACTION SPECIFICATION

Make cause and response visible.

Timing values are authored design parameters. Frame-rate targets and accessibility provisions are not device benchmarks.

READY

Suggested message

Neutral

PREPARING

Message + typing

Send locked

RESPONDED

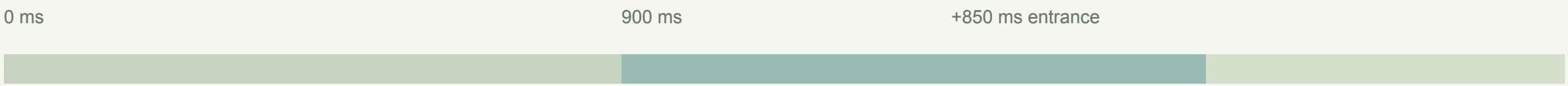
Reply + caption

Optional field

CORRECTED

Updated account

History retained



User message / neutral preparation

Reply and field arrive together

Reduce movement

Pause animation; preserve meaning through text and static colour.

Preserve readability

Stable message surfaces; colour is never the only cue.

Leave cleanly

Tasks, endings and paused feedback clear the field.

08 / PRODUCT ACCEPTANCE

Define what the prototype has to do.

Six product requirements shown here; the complete 12-item contract is in product-system-12.json.

P01	Entry	Start with a situation; no feeling category or support-mode choice is required.	implemented; perceived effort untested
P02	Response fit	A clear task is answered directly; a request to vent receives no unsolicited plan.	authored and state-checked; open-ended response quality untested
P03	Correction	A correction changes the next response without rewriting conversation history.	executed state check
P04	Attribution	Each field has one referent: the approach of the current response in B.	implemented; spontaneous comprehension untested
P06	Opt-out	Feedback can pause now and remains paused across examples until resumed.	executed state check; browser review
P09	Access	The caption carries the meaning; motion can stop; controls work by keyboard.	targeted provisions; no full conformance claim

Design acceptance is separate from usefulness.

09 / EXECUTED REVIEW

Broaden the situations. Keep the claims bounded.

Executed state-machine checks and single-assistant scenario inspection; no participant or live-model outcome.

29	6	19	0
checks passed	authored conversations	exchanges / each meaning	independent participants

Sarcastic opening	Positive wording does not trigger celebration.	Human interpretation remains unknown.
Another person’s feeling	A friend’s anxiety is not assigned to the person chatting.	Script coverage is not generalisation.
Past versus present	Earlier anxiety is not carried into current relief.	Unmapped concepts stay open in A.
Response correction	A request for quiet changes acknowledgement to listening.	The palette may still need too much teaching.

10 / NEXT DECISIONS

Review the experience, then test the contribution.

The project continues beyond this review. These gates make the next design decision explicit.

01 / RESPONSE FIT	Colour off first. Does the reply respect a task, a request to vent, a correction and an ending?	Revise when the response ignores the request or delays useful help.
02 / VISUAL MEANING	First encounter, explanation, repeated use, then an unfamiliar example. What does the field refer to?	Simplify if the person needs a long explanation or reads it as a mood diagnosis.
03 / CONTRIBUTION	Compare identical words and captions: no field, generic field, selected mechanism.	Calibrate stimuli before causal testing. Keep preference separate from understanding.
04 / CALIBRATION	Inspect an inappropriate reply with and without an attractive field.	Reduce or remove the field if it conceals the mismatch.

OWNER REVIEW

Does B fit your original intention? Does the conversation feel useful? Is explanation still too heavy?