Ethical brief

Our goal is to create a calm and structured environment that encourages users to explore their emotional world safely. This brief outlines the core ethical principles guiding the project and the measures we take to protect users.

1. Supporting users without exploiting psychological vulnerability; not a clinical substitute

Untangle is not intended to treat mental-health conditions, and does not replace therapy or professional support. We will include clear disclaimers during onboarding and within the settings menu. When the system detects patterns of consistently distressing entries, it provides neutral wellbeing suggestions and directs users to general mental-health resources rather than advice or assessment. The system will never identify disorders, risk, or "problematic patterns." Instead, it provides structured reflection, gentle grounding exercises, and evidence-informed prompts that promote awareness rather than offering any clinical or psychiatric care. Many users will arrive with emotional sensitivity or ongoing stress, and the system therefore avoids interpretation, diagnosis, or therapeutic claims, instead keeping reflective questions open and user-directed. All in-app language emphasises that the user is in control of pace and depth of analysis.

3. Avoiding retraumatisation

We recognise the risk that reflective tools can inadvertently evoke difficult memories. Untangle mitigates this by giving the user full agency over what to open, when to stop, and how deeply to engage. Emotional objects can be set aside, paused, or dismissed without penalty. Prompts avoid distressing or 'therapeutic' questions and do not push users toward revisiting distressing events, instead taking a positive and more general focus.

4. Preventing escapism and reinforcing healthy connection

XR can be absorbing, and immersive wellbeing tools should avoid encouraging disengagement from daily life. Untangle uses embodiment as a means of emotional sense-making rather than escape, employing reflective exercises which occasionally encourage outward-facing actions, including contacting a friend, stepping outside for fresh air, or engaging in a small real-world activity. These suggestions support the wellbeing components commonly referenced in psychological models: agency, relatedness, and competence (Deci & Ryan, 2008), which we use as a grounding for our software. In more detail:

4.1. Supporting wellbeing through agency, relatedness, and competence

Research on psychological wellbeing emphasises the importance of:

- **Agency**: Users control the AR space, the pace of unpacking, and the organisation of their emotional environment.
- **Relatedness**: Some prompts gently encourage real-world social contact or prosocial actions.
- **Competence**: Users develop skill in emotional differentiation and regulation. The exercises are designed to help them feel more capable and informed about their internal states.

These elements guide our interaction design so that Untangle supports growth rather than dependency.

6. Accessibility and inclusion beyond XR

Embodiment is central to the project because AR can enhance affective presence and support grounding. Yet we recognise that not all users have headsets or wish to use immersive environments. All core features—including the journal, emotional clusters, and reflective exercises—will remain accessible through the companion app. The AR space deepens the experience without restricting access to the core reflective tools.

7. Evidence-based grounding

Our core mechanics are guided by:

- Affective-science work on emotional granularity and differentiation
- Research on interoception, embodiment, and emotional engagement
- Mindfulness and grounding studies that emphasise attention, sensory anchoring, and non-judgement
- HCI research on calm technology, sensory design, and digital wellbeing

We will continue to refine the system in accordance with emerging evidence and relevant health-app guidelines.

8. Data protection and safeguarding young users

Emotional tracking involves highly sensitive data, and so protecting confidentiality is central to the project's design.

. To protect users:

- No emotional data will be used for AI training.
- All data will remain local or encrypted depending on deployment requirements.
- The app and AR experience will be protected by a personal passcode.
- We will implement strict access controls if under-18s are allowed to use the system.
- Users may delete all emotional data at any time.

9. Aesthetic choices that support safety and comfort

We aim to create an environment that feels warm and tactile, and the aesthetic will remain accessible to a broad audience. Eventually, we hope to design a customisable space which will be comfortable and accessible to many different users. As preliminary ideas, users would be able to select between two visual styles:

- A more analog, craft-like space with cardboard, string, paper textures, and warmer tones
- A cleaner, translucent interface with soft orange accents, representing a calm and minimal environment

The aesthetic avoids clinical or diagnostic cues and instead fosters a gentle sensory presence.