

Tech[HACK] Valley

Hosted by Georgia Tech Esports

Game Development Track: Calm/Cozy Games

The Challenge

In an era of constant connectivity and digital overstimulation, the need for mindful, restorative experiences has never been greater. The Game Development track challenges participants to create games that serve a higher purpose: helping players destress, find calm, and experience psychological restoration through thoughtful game design.

The suggested theme for this track is **Calm/Cozy**, with an emphasis on games designed to help individuals relax and decompress. However, **any game will be accepted**, even if it falls outside this theme, as long as it presents genuine innovation in game design, mechanics, or player experience.

Understanding Cozy/Calm Games

Cozy games represent a distinct genre designed with relaxation as a primary goal. Unlike action-packed or competitive games, cozy games are typically slow-paced, feature minimal conflict, and often involve creative activities or exploration in peaceful settings. Research published in the Journal of Cyberpsychology, Behavior, and Social Networking has found that individuals who played relaxation-focused video games reported lower levels of anxiety and improved mood regulation. A 2021 study found that casual gaming could have the same psychological benefits as mindfulness meditation, including lowered heart rate, blood pressure, and stress levels.

Common Elements of Cozy Games

- **Low-pressure environments:** No fail states, time limits, or harsh punishment for mistakes
- **Soothing aesthetics:** Calm color palettes (often pastels), soft sounds, and smooth animations
- **Player autonomy:** Freedom to progress at one's own pace without external pressure
- **Repetitive, satisfying tasks:** Activities like farming, crafting, organizing, or cleaning that provide gentle focus
- **Comfortable atmosphere:** Lofi or ambient music, cute graphics, and welcoming environments
- **Minimal or no combat:** Focus on creation, exploration, and nurturing rather than destruction

Required: Psychological Theory Documentation

IMPORTANT: All game submissions must be accompanied by a document that maps each game mechanic to a level of psychological theory, explaining how that mechanic is intended to affect the player psychologically.

This documentation requirement ensures that game design decisions are intentional and grounded in an understanding of player psychology. Your document should demonstrate thoughtful consideration of how your game's mechanics work together to create the desired psychological effect on players.

Relevant Psychological Frameworks

Consider incorporating these established psychological theories into your documentation:

| Theory | Application to Game Design |
|--|---|
| Flow Theory (Csikszentmihalyi) | Balance challenge and skill to create immersive states where players lose track of time. Clear goals, immediate feedback, and concentration on task. |
| Self-Determination Theory (Ryan & Deci) | Support three psychological needs: Autonomy (player choice), Competence (mastery), and Relatedness (connection). Intrinsic motivation emerges when these are satisfied. |
| Cognitive Load Theory | Reduce mental burden through gradual difficulty progression, intuitive interfaces, and clear visual communication. Prevents overwhelm and maintains attention. |
| Attention Restoration Theory (Kaplan) | Create environments that allow directed attention to rest. Natural settings, gentle fascination, and sense of being away from stressors restore cognitive resources. |
| Catharsis Theory | Provide safe spaces for emotional release and processing. Emotional cleansing leads to feelings of restoration and renewal. |
| Positive Psychology (Seligman) | Foster gratitude, optimism, resilience, and mindfulness. Design experiences that build on strengths and promote flourishing. |

Documentation Format Example

Your psychological mapping document should follow a format similar to this:

- **Mechanic:** [Name of game mechanic]
- **Description:** [How the mechanic works in-game]

- **Psychological Theory:** [Which theory/theories apply]
- **Intended Effect:** [How this mechanic affects the player psychologically]
- **Supporting Evidence:** [Research or examples that support this design choice]

Rules & Requirements

Team Composition

- Teams may consist of 1-4 members
- Multidisciplinary teams (programmers, artists, musicians, psychologists, writers) are encouraged
- All team members must be registered hackathon participants

Submission Requirements

- A playable game build (any platform: PC, web, mobile)
- **Psychological Theory Document (REQUIRED)**: Mapping of game mechanics to psychological theories
- A brief presentation (5 minutes maximum) demonstrating your game and explaining your design rationale
- Source code or project files
- Any third-party assets must be properly credited and legally licensed

Theme Guidelines

- **On-Theme (Calm/Cozy)**: Games designed explicitly for relaxation, stress relief, and emotional comfort
- **Off-Theme (Innovation)**: Any game genre is acceptable if it demonstrates significant innovation in mechanics, narrative, technology, or player experience

Judging Criteria

Projects will be evaluated by a committee based on:

| Criterion | Description |
|--------------------------------|---|
| Innovation | Originality and creativity in mechanics, aesthetics, or concept |
| Psychological Grounding | Quality and depth of psychological theory documentation |
| Player Experience | Effectiveness at achieving intended emotional/psychological goals |
| Polish & Execution | Technical quality, visual/audio design, and overall cohesion |
| Presentation | Clarity of demonstration and ability to articulate design decisions |

Awards

The overall winner of the Game Development Track will receive an award to be determined. All participants will receive recognition for their contributions to advancing games for well-being.

Background: Games and Mental Health

The scientific study of video games as therapeutic tools has expanded significantly in recent years. Research demonstrates that games can serve as effective interventions for stress reduction, emotional regulation, and cognitive restoration when designed with these goals in mind.

The Science of Relaxing Games

Games that encourage relaxation, repetition, or gentle focus can guide the brain into a flow state, creating a meditative zone where time perception shifts and the mind gets relief from background anxiety. Research from the American Psychological Association has highlighted the potential of video games in promoting emotional resilience, particularly in games that focus on problem-solving and creativity. Studies have shown that playing games like Tetris or Flower can be as effective as guided meditation for reducing stress. However, not all video games have the same positive effects, as high-intensity games with violent content or high competition can increase stress levels, making cozy games a more effective choice for relaxation.

Psychological Mechanisms

Escapism and Immersion

Cozy games offer an escape from everyday pressures, allowing players to immerse themselves in alternative worlds. Whether fishing on a tranquil lake or tending a garden, these in-game activities provide distraction from real-world worries. This immersion allows the brain to rest from stress, reducing both physical and emotional effects of anxiety.

Mindful Gameplay

Many cozy games encourage mindfulness by focusing on slow, deliberate activities requiring patience. Tasks like planting crops, organizing inventory, or arranging furniture encourage players to focus on the present moment, reducing rumination and promoting a meditative state. Clinical psychologists have noted that games demanding focused attention give the mind a structured break from grief or stress without avoiding it entirely.

Sense of Accomplishment

By engaging in activities that bring peace and achievement, players often experience increased self-esteem and self-awareness. Games provide a boost of self-esteem that work or daily responsibilities may not always offer, serving as a quick moment of reprieve that contributes to better overall functioning.

Notable Examples in the Genre

- **Stardew Valley:** A farming simulator allowing players to grow crops, raise animals, and build relationships at their own pace
- **Animal Crossing: New Horizons:** Island life simulation with real-time progression and creative customization
- **PowerWash Simulator:** Satisfying cleaning gameplay with visible, tangible progress
- **Journey:** Minimalist exploration with ambient music and fluid movement conveying harmony
- **Unpacking:** Zen puzzle game about the familiar experience of moving into a new home
- **Kind Words:** Players send and receive supportive messages, creating a therapeutic community
- **Spiritfarer:** Combines soothing mechanics with meaningful storytelling about life and loss

Design Principles for Relaxation

1. **Appropriate Pacing:** Not too fast (stress-inducing) or too slow (boring). Allow players to engage at their own rhythm.
2. **Non-Threatening Challenges:** Present goals without punishment. Failure should be a learning opportunity, not a setback.
3. **Meaningful Choice:** Offer customization and player agency to support autonomy needs.
4. **Aesthetic Harmony:** Use calm colors, soft sounds, smooth animations, and cohesive visual design.
5. **Clear Feedback:** Provide immediate, satisfying responses to player actions that reinforce progress.

Resources for Further Reading

- Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*
- Ryan, R.M., Rigby, C.S., & Przybylski, A. (2006). "The Motivational Pull of Video Games: A Self-Determination Theory Approach." *Motivation and Emotion*
- Take This (takethis.org): Gaming and mental health nonprofit
- Geek Therapeutics (geektherapeutics.com): Research on therapeutic gaming
- Game Accessibility Guidelines (gameaccessibilityguidelines.com)

Create games that matter. Design experiences that heal. We look forward to playing what you build!