**Mindscape: A Therapeutic Video Game for Cognitive Health**

**1. Vision Statement**

To revolutionize therapeutic interventions for age-related cognitive decline by creating an engaging, accessible, and social video game that empowers individuals with early-stage dementia to maintain their cognitive abilities and social connections, transforming therapy from a clinical obligation into an enjoyable and motivating activity.

**2. Mission Statement**

Our mission is to develop and implement a multiplayer video game, played with a console-style controller, as a regular, standardized therapy in hospitals and health centers. We will work with a team of game developers, neuropsychologists, and health professionals to design a game that is clinically effective, socially enriching, and continuously validated through scientific research and patient outcomes.

**3. Core Values**

* **Empathy:** We prioritize the user experience of our elderly players, designing a game that is intuitive, frustration-free, and respectful of their abilities.
* **Collaboration:** We believe in the power of social connection, both for our players and for our project team, working closely with clinical experts to ensure our product is evidence-based.
* **Innovation:** We are committed to pushing the boundaries of what is possible in digital health, using technology to create new and more effective forms of therapy.
* **Accessibility:** We will ensure our game is easy to use for all players, regardless of their prior experience with technology, by providing simple and clear controls and tutorials.
* **Integrity:** We will base all our claims on rigorous scientific validation and ethical practices, ensuring our product genuinely helps those it is designed for.

**4. Target Audience**

* **Primary Audience:** Individuals aged 65 and older who have been diagnosed with Mild Cognitive Impairment (MCI) or are in the very early stages of dementia.
* **Secondary Audience:** Geriatric care centers, hospitals, psychologists, occupational therapists, and family members of patients.

**5. Problem Statement**

Age-related cognitive decline, including dementia, is a growing global health crisis. Current non-pharmacological therapies can be monotonous, isolating, and often fail to motivate patients to participate consistently. This lack of engagement hinders therapeutic effectiveness, leading to faster cognitive decline and reduced quality of life.

**6. Solution Description: "Mindscape"**

Mindscape is a multiplayer video game designed specifically for cognitive therapy. The game will be played using a simplified, user-friendly console controller, which provides a tangible and engaging interface without overwhelming the user.

* **Game Genre:** A cooperative puzzle-adventure or a gentle, non-competitive strategy game. The focus will be on collaboration and low-pressure problem-solving, not on quick reflexes or complex mechanics.
* **Therapeutic Mechanics:** The game will incorporate mechanics proven to boost cognitive function, such as:
  + **Memory:** Puzzles that require players to recall patterns, sequences, or object locations.
  + **Executive Function:** Tasks that involve planning, task switching, and problem-solving.
  + **Spatial Awareness:** Navigating gentle, 3D environments to achieve goals.
  + **Hand-Eye Coordination:** The use of the controller itself for fine motor skill practice.
* **Multiplayer/LAN Sessions:** Patients can connect with one another in a dedicated, secure network (either online or via a local area network in a therapy center) to solve puzzles together. This is a critical feature that provides social interaction and a sense of community.

**7. Unique Selling Proposition (USP)**

Unlike traditional brain-training apps or passive therapies, Mindscape offers a holistic, multiplayer experience that is both clinically designed and intrinsically motivating. The use of a console controller, a social gaming environment, and a clear pathway for hospital implementation makes it a unique and powerful tool.

**8. Therapeutic Goals**

* Improve working memory, executive function, and processing speed.
* Increase patient motivation and adherence to a therapy schedule.
* Reduce feelings of social isolation and depression by fostering a sense of community.
* Enhance fine motor skills and hand-eye coordination.
* Provide a platform for non-invasive, objective data collection to support psychological assessments.

**9. Implementation Strategy**

1. **Phase 1: Pilot Development & Clinical Collaboration:**
   * Develop a prototype of a single-level game.
   * Partner with a local hospital or a university psychology department to recruit participants for a small-scale pilot study.
   * Design the study to include pre- and post-intervention neuropsychological tests to measure the game's impact.
2. **Phase 2: Data Validation & Feature Expansion:**
   * Analyze the data from the pilot study to validate the game's therapeutic effectiveness.
   * Based on feedback, expand the game with new levels, features, and multiplayer functionality.
   * Publish the findings in a relevant academic journal.
3. **Phase 3: Wider Adoption & Scaling:**
   * Use the validated data to create a compelling proposal for hospital administrators and health insurance providers.
   * Build a dedicated team to market and support the game as a professional therapeutic tool.
   * Scale the project by approaching other hospitals and health centers to integrate Mindscape into their patient care plans.

**10. Participants**

**Neurosurgeon:** Pablo Emilio Ordonez Ortega

**Developer Team:** Juan Pablo Ordonez Gomez

**Psychologist team:** Jacobo Andres Herrera, Abraham Jauregui

**Other Doctors:** Juan Camilo Casabon Martinez

**Entities or groups:** Fundacion Hospital San Pedro, Pasto, Colombia