

CREATIVE PROGRAMMING AND COMPUTING – A.Y. 2023-24

χαρμόλυπη

(CHARMOLYPI)

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INSPIRATION AND CONCEPT

THE INSTALLATION AIMS TO ENHANCE THE BEAUTY OF CLOSENESS BETWEEN HUMAN BEINGS. THE LOSS OF SOCIAL CONNECTION OFTEN LEADS TO FEELING LONELY AND PAINED.

THE INTENTION BEHIND THIS PROJECT IS TO REPRESENT, IN AN ABSTRACT WAY, WHAT HUMANS POSSESS AND SHARE OF THEMSELVES. RELATIONSHIPS ARE THE EXPRESSION OF THE CHOICE TO RISK START LOSING SOMETHING PERSONAL AND MAKE SPACE FOR SOMETHING ENRICHING. DISTANCE IS UNDERSTOOD AS SOLITUDE.

TWO INDIVIDUALS FAR FROM EACH OTHER ARE SINGLE ENTITIES, KEEPING THEIR ENTIRE BEING WITHIN THEMSELVES. WHEN THE TWO CHOOSE TO START GETTING CLOSER ONE ANOTHER, AN EXCHANGE GRADUALLY HAPPENS, THEN TRANSLATING INTO AN OPENING OF THEIR RESPECTIVE BOUNDARIES, SHARING PARTS OF THEMSELVES AND RECEIVING SOMETHING VALUABLE IN EXCHANGE.

FINAL GOAL:

- ✦ PROMOTE AND ENCOURAGE CLOSENESS, SHARING AND OPENNESS
- ✦ HIGHLIGHT THE FEELING OF JOY IN CHOOSING COMMUNITY OVER SOLITUDE

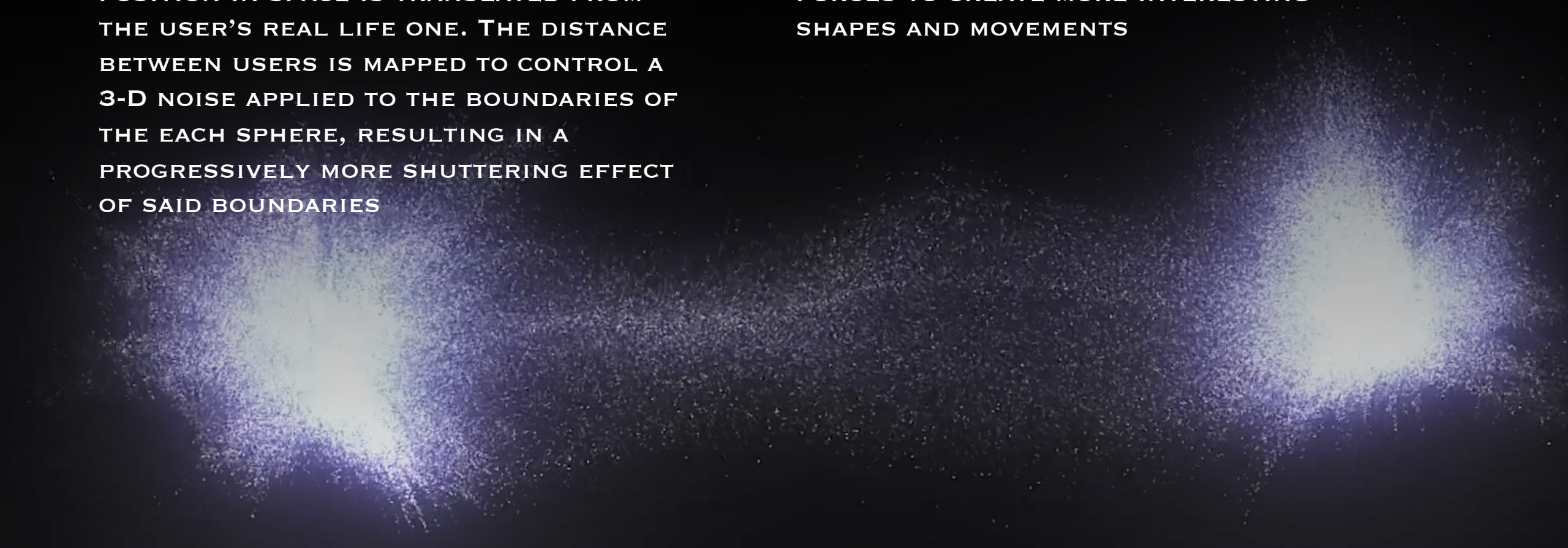
VISUAL IMPLEMENTATION

VISUAL SOFTWARE: TOUCHDESIGNER

EACH INVOLVED SUBJECT IS ASSIGNED TO A SPHERICAL 3-D GEOMETRY, WHICH POSITION IN SPACE IS TRANSLATED FROM THE USER'S REAL LIFE ONE. THE DISTANCE BETWEEN USERS IS MAPPED TO CONTROL A 3-D NOISE APPLIED TO THE BOUNDARIES OF THE EACH SPHERE, RESULTING IN A PROGRESSIVELY MORE SHUTTERING EFFECT OF SAID BOUNDARIES

INTERACTION TECHNOLOGY: KINECT

GEOMETRIES INSTANTIATE POINT-CLOUD LIKE FIGURES, AFFECTED BY TURBULENT FORCES TO CREATE MORE INTERESTING SHAPES AND MOVEMENTS



AUDIO IMPLEMENTATION

SOUND SYNTHESIS METHODS:

- ✦ SUBTRACTIVE
- ✦ GRANULAR

SOUND SYNTHESIS SOFTWARE: SUPERCOLLIDER

GENERATION OF SOUNDS:

- ✦ PAULSTRETCH ALGORITHM → GENERATES PADS BY HUGELY SLOWING A GIVEN SAMPLE. SHIMMER AND REVERB EFFECTS ARE ADDED
- ✦ MARKOV CHAIN (1ST ORDER) → IMPLEMENTED THROUGH A PYTHON SCRIPT. IT'S RESPONSIBLE FOR THE COMPUTATION OF A GENERATIVE CHORD PROGRESSION AFTER EVALUATING PROBABILITIES OF A GIVEN DATASET

PROJECT IMPROVEMENTS: POSSIBLE IMPLEMENTATIONS

- ✦ MORE COMPLEX MARKOV CHAIN → COULD BE USED TO GENERATE MELODIES. ITS PROBABILITY MATRIX COULD BE CHARACTERIZED BY REAL-TIME DATA FROM THE KINECT OR FROM AN EXTERNAL DATASET
- ✦ INCREASE OF THE NUMBER OF USERS → UP UNTIL 6 PEOPLE AT A TIME
- ✦ MORE COMPLEX FORCES SYSTEM AND PARTICLE INTERACTION → TO OBTAIN A MORE *PHYSICAL FEELING* OF THE PARTICLES SYSTEM'S BEHAVIOR