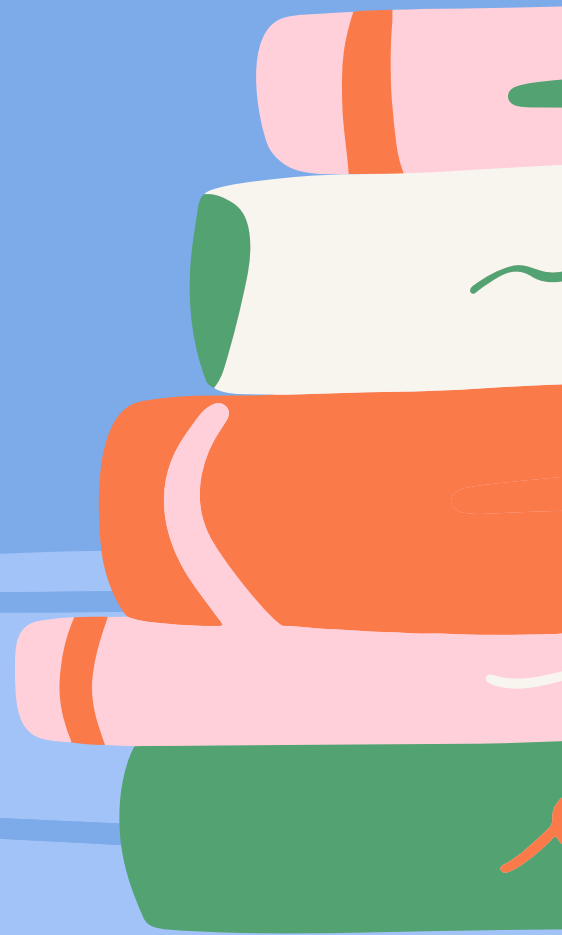


FINAL PROJECT

Drop dots

Kundyz Muktar,
Muhammad Hassan Khan



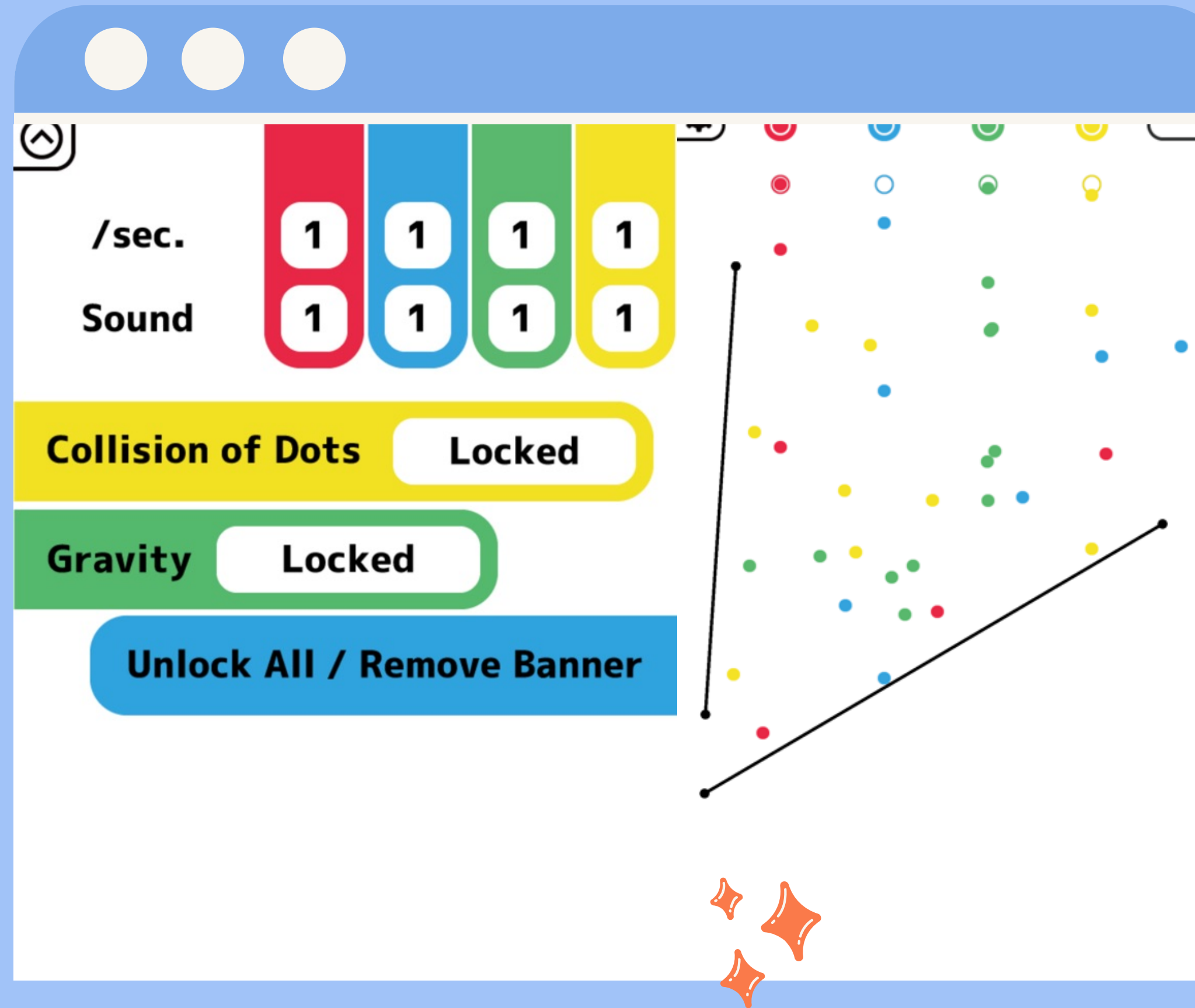


IT IS AN ENDLESS, SINGLE-PLAYER GAME, WHICH IS PLAYED ON A TWO-DIMENSIONAL SCREEN. THE AIM OF THIS GAME IS TO CREATE MUSIC BASED ON COLLISION SOUNDS.



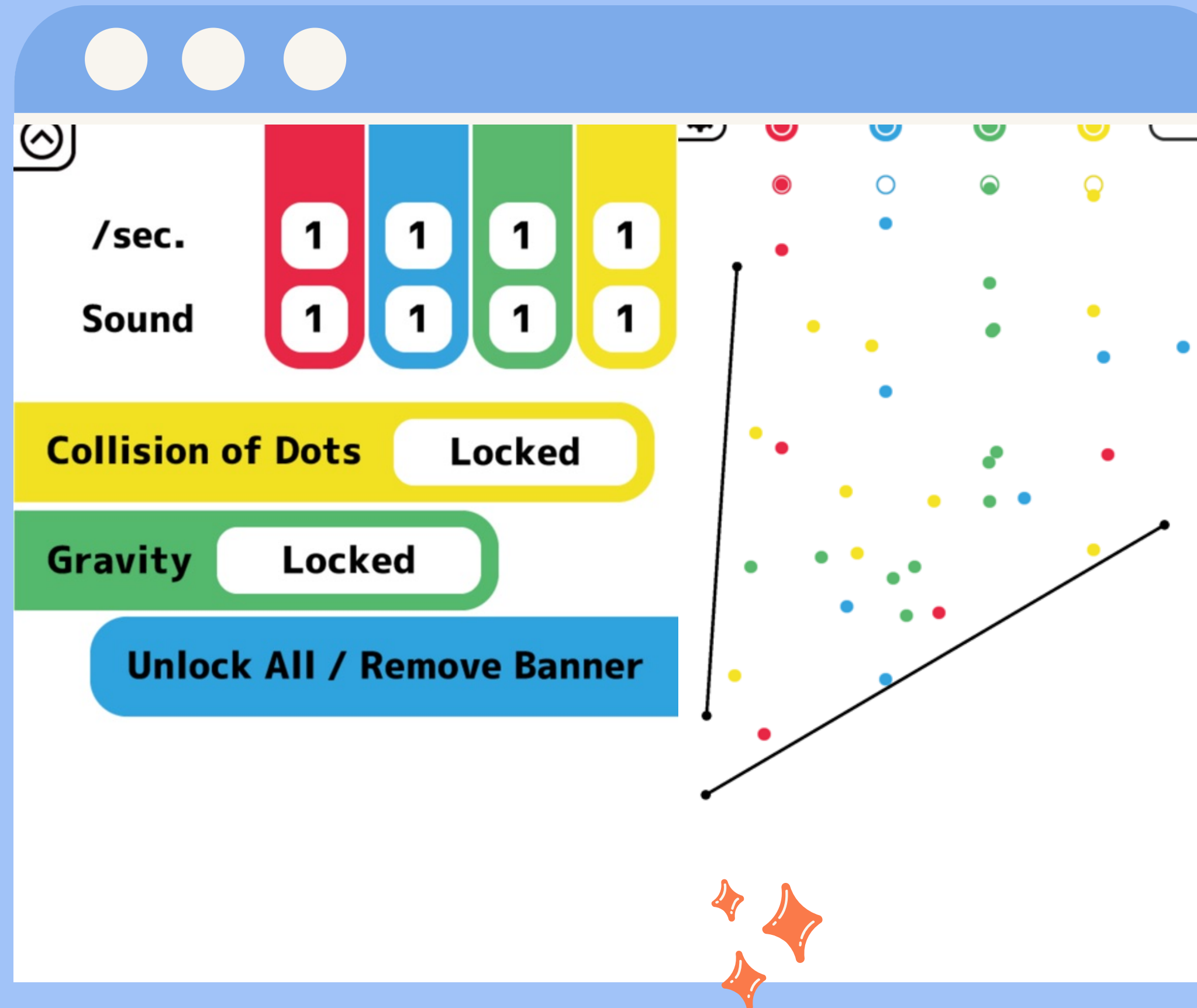
DROP DOTS - ENJOY SOUND BY PHYSICS DOTS

- Reference points seen as hollow circles on the screen.
- Balls fall from reference points periodically.
- Different colors indicate balls from different reference points. These balls stay on screen until bouncing outside the bounds of the screen.
- Sounds can be changed specific to a reference point.



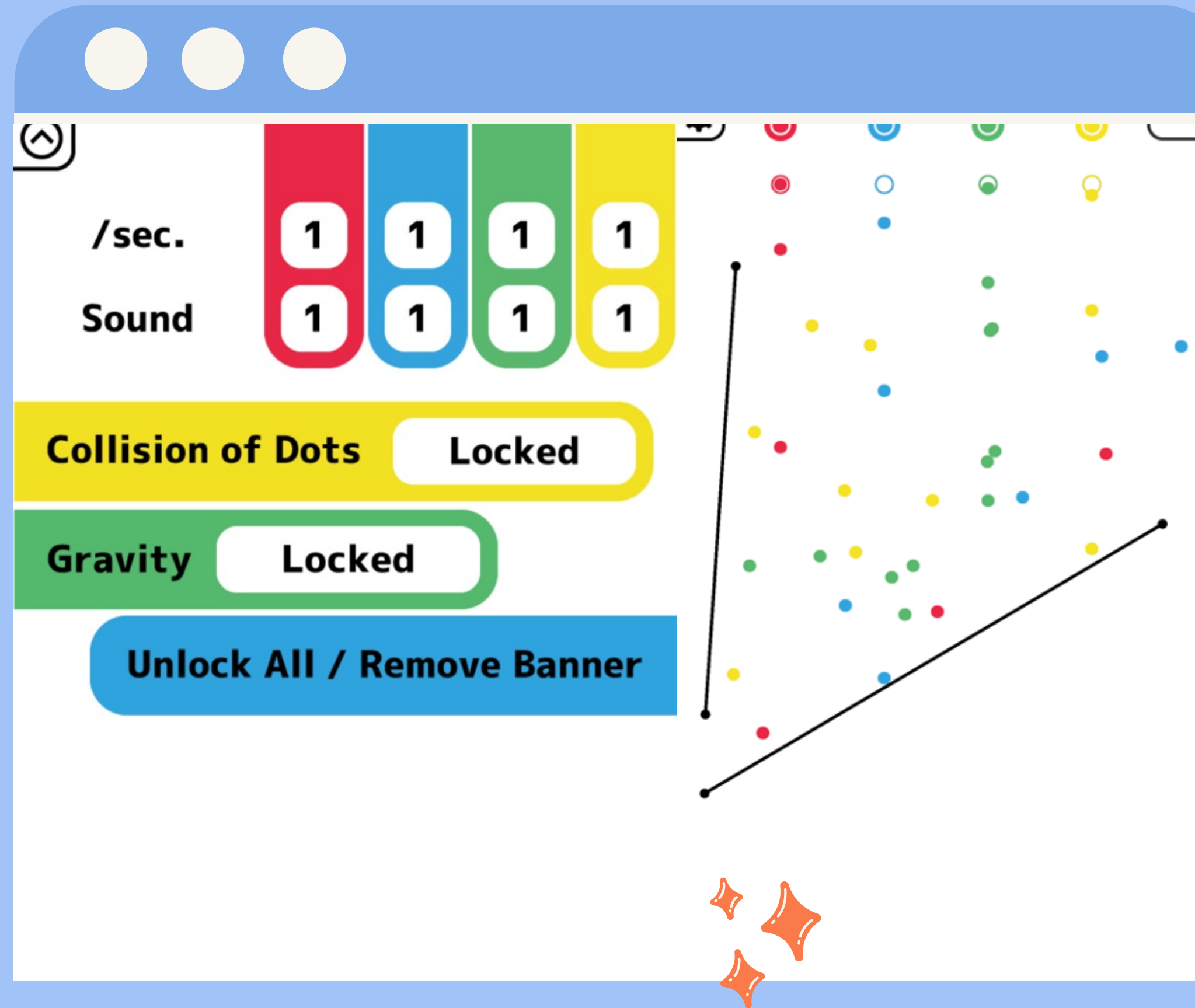
DROP DOTS - ENJOY SOUND BY PHYSICS DOTS

- Solid black dots and lines are interactable objects.
- **Lines:** we select 2 points on the screen using mouse, which are going to be endpoints of the line. These endpoints can be dragged so that we can change the existing lines.
- **Black dots** are created just by clicking on the screen.



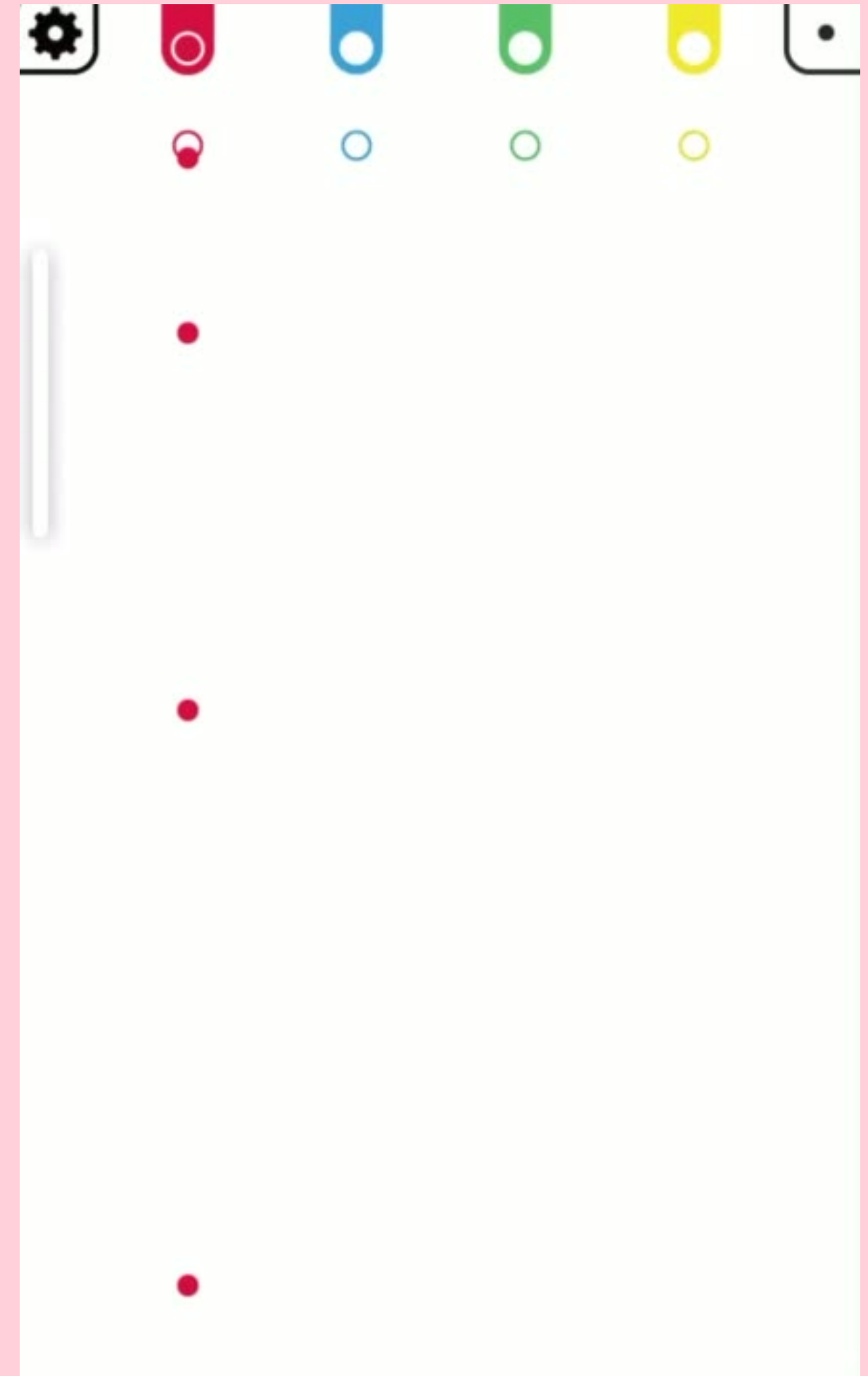
DROP DOTS - ENJOY SOUND BY PHYSICS DOTS

- The menu on the top right to select between sounds and objects: you can select dots or lines as well as a tool to clear the screen.
- The speed of dropping balls can be adjusted in the settings menu as well.



DEMO

- Menu: select lines, dots, clear screen (start again) button
- Activator buttons to turn off, and on reference points
- Ball physics, with balls losing momentum on impact with objects, and changing angle of movement according to angle of impact, as well as gravity
- Sounds played on impact with objects, which can be chosen from the menu and depend on angle and velocity of impact



STRATEGIES FOR IMPLEMENTATION



- OOP: objects representing different components of the game: menu, colorful balls, reference points, lines, dots, game.
- Sound logic: it is going to be discrete, depending on specific ranges of velocities and angles, a distinct sound will be played (we will consider manipulating sound frequencies based on momentum and angle in-game).
- Ball physics: since balls lose momentum on impact, their sounds change continuously throughout the game.

Work Distribution



KUNDYZ

- object creation
(interactive objects;
lines, dots)
- sound logic
- menu



MUHAMMAD

- object creation (balls,
reference points)
- ball physics



THANK YOU!!!