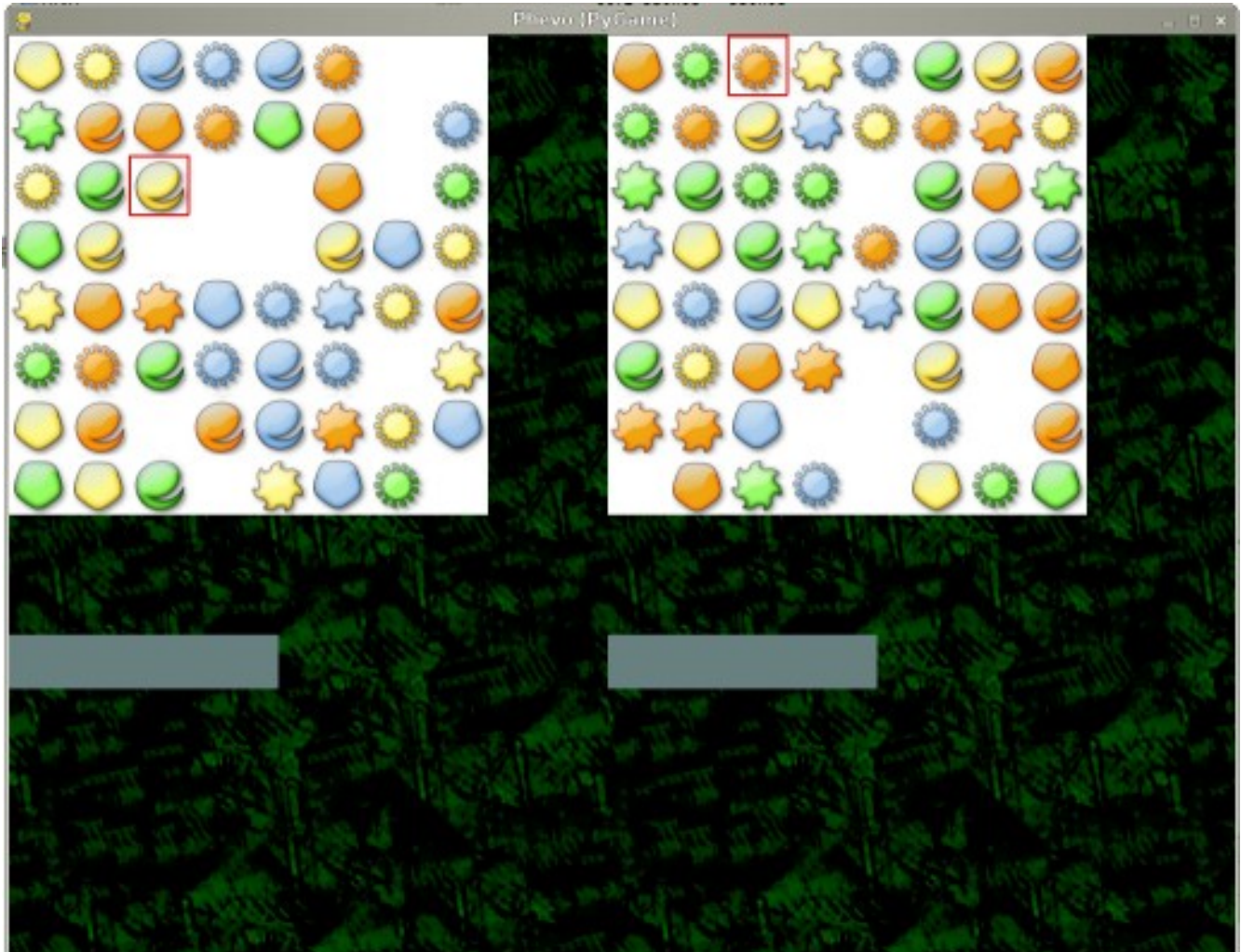# PHEVO

Prototype Spec

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This document briefly outlines the initial prototype for the game, Phevo. This document assumes the reader is familiar with the overall idea of the game and has observed its progress up until now.

Prototype screen layout

Overall game flow

- Two populations are created with randomized "phevos" having four distinct colors and shapes.
- The two populations are under the control of two players
- Each player has a red cursor box that they can manipulate with keyboard presses. The cursor can move up, down, left or right on the field.
- When the cursor hovers over a particular phevo, the player can hit their "queue" key. The phevo

is then placed in a queue located below the player's population.

- The queued phevo is replaced in the population by a offspring of two of its neighboring phevos. The new phevo will resemble them in a mix of their colors and shapes.

- The queue may hold no more than 5 phevos. Any presses on the queue button that would exceed that number will be ignored.

- The player also has an "inject" button. The inject button will release a phevo, as a "bug," from the queue into the opposing player's field.

- If the bug coming from the queue matches a phevo that appears in the opposing player's population, that opposing phevo may become infected, which is indicated by a "sick" icon appearing over it.

- Sick phevos can spread disease to phevos surrounding it that match the type of bug is was infected with.

- If a phevo is unlucky, it may die from its infection. That phevo is removed from the board.

- If a phevo remains in a queue long enough, it can mutate into one of two super bugs:

  - Any color: the bug retains its shape, but takes on a rainbow appearance, indicating that it can infect any phevo that has its shape in any color

  - Any shape: the bug retains its color, but takes on an "Omega" shape, indicating that it can infect any phevo that has its color in any shape.

- Play continues in real time until one player has lost at least 75 percent of his or her phevos.

Player interactivity

- The player can move his or her cursor up, down, left, or right

- The player can queue a phevo, making it a bug

- The player can inject a bug into the opposing population

- The player can queue infected phevos, thus preventing them from dieing

- The player can "cultivate" certain types of phevos by selectively queuing phevos in areas with neighbors that hold valuable or needed traits.

Scoring

- If the player loses at least 75 percent of his or her population, he or she has lost.

Populations

- Consist of phevos in four different colors and shapes

- Pass bugs between neighbors above, below, left, and right.

- Breed new phevos, after queueing, with former neighbors above, below, left, and right.

Queues

- Hold a maximum of 5 phevos
- Mutate phevos into superbugs after approximately 5 seconds.
- Dispeanse from left to right into the opposing populations.

Phevos

- One of four possible colors or shapes.
- Can become bugs.

Tweakable Variables

Population

- Size (default 64)
- creation (currently random—can be based off of specific breeding pairs)

Bugs

- infection rate/virulence
- lethality
- time between infection and death/cure

Queue

- Size (5)
- Mutation rate (~ 5 seconds)

General

- Win condition (75 percent of opponent's population lost)