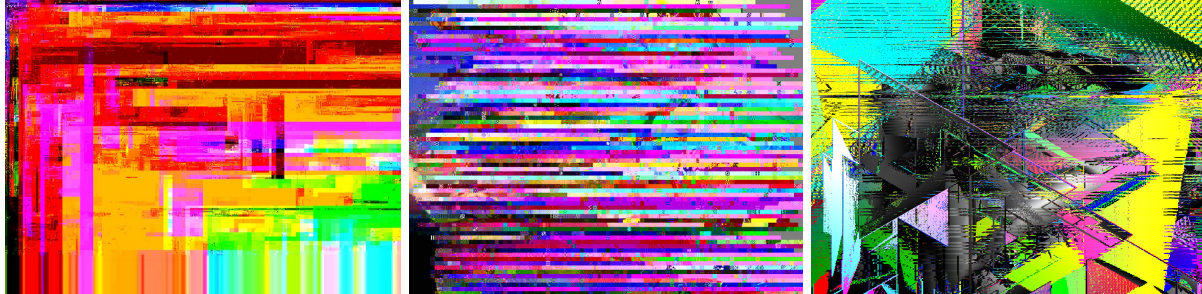


# Raster Burn Design Document

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## Detailed Plan

RASTER BURN is a virtual competitive team sport for four or more players. Players navigate a field and work together to score points against their opponent. The main mechanics are simple sports elements like dribbling, passing, and shooting. The desired game feel is that of an artifact: jerky, glitchy, quantized. RASTER BURN matches are intended to be intense and filled with exciting, game-changing moments.

One “aha” moment could occur as you dribble down the field, and see an opponent come towards you to try to take the ball away. You quickly charge up your kick, flick the analog stick towards your teammate, and unleash a shot that passes through your opponent (stunning them), and landing right in front of your teammate. Your teammate instantly charges up a shot and sends the ball hurtling towards the goal, using a power shot. Score!

### **Low-Bar**

Our low-bar goal is comprised of the minimum game feel elements and mechanics required to make the game feel whole. In other words, the low-bar is a finished, playable implementation of the game with special effects and sounds reinforcing all interactions.

To create the feel of a digital “artifact” for our avatars, we will use quantized motion for certain interactions, specifically the dribble and the dash. To dribble, you navigate your avatar so that it collides with the ball. Every time you collide with the ball, it teleports a specific distance ahead of your avatar; something small enough to be controllable but noticeable enough to suggest the quantized nature of the interaction. To dash, you hold down a face button to charge up your dashing power. When you release the button the dash occurs instantly, teleporting you forward a specific number of units (depending on how much you charged up). Your dashing movement will leave a trail behind you, suggesting the glowing trail left behind by fast moving sprites on a cathode ray tube monitor or the sword stroke of a samurai in an anime movie; essentially there

should be an impression of speed. If you collide with a wall during a dash movement, you reflect off of it. If you collide with the ball, you transfer your speed to it, allowing powerful passes and shots. For a fraction of a second after a ball has been dashed into, it is “powered up.” If a teammate dashes into the ball while it’s powered up, the ball gets an extra boost, called a “power shot.” In our high-bar goals, the power shot may have other effects besides extra speed.

- Jerky, quantized, “being an artifact” game feel
- Simple sport mechanics
  - Dribbling
  - Dashing
  - Passing
  - Shooting (including multiplayer “power shots”)
- Pong-style goals on each end
- Sounds for specific actions
  - Dribble
  - Dash
  - Shoot
  - Score
  - Stun
  - Collision with wall
  - Collision between players
  - Ball respawn
- Visuals for game feel
  - Movement trail for players and ball
  - Collision particle effects
    - Player
      - with ball
      - with other players
      - with wall
    - Ball
      - with wall
      - with goal
      - with obstructions

## Mid-Bar

Our mid-bar goal adds polish effects that stress the desired glitch-art aesthetic. These primarily include more advanced special effects and carefully crafted audio. Creation of these effects will

likely require learning low-level graphics in addition to using alternative audio generation tools such as programmable game boy advance cartridges.

- Selling the aesthetics
  - Visuals
    - Atari Glow
    - Static
    - Pixel explosions
    - Tearing
  - Sounds
    - Static
    - Bleeps and bleeps
    - Dial up noises

## High-Bar

Our high-bar goal includes additional, non-essential features that could improve the overall game experience. One example is to have dynamic fields to introduce greater variety and surprise into the gameplay. Another example is a high-five mechanic to provide players with a way to celebrate with their avatars.

- “Corruption” of the field as the game goes on
  - Creates obstructions around the field
- High five mechanic
  - Way to celebrate victories with your team
- Different arenas with varied sets of walls and obstructions

## Milestone Feature Sets

### Nov 4 (ALPHA)

For the alpha version of the game, we want all the mechanics necessary to play a complete game. These include the low-level mechanics of avatar control (movement, dashing), mid-level inter-avatar mechanics (passing, stunning, stealing), and high-level goals like scoring and winning a match. Our goals for playtesting in alpha will be to find out if the game’s avatars feel the way we want them to, and whether that feel and control scheme lets players engage with our high-level experience goals of teamwork and competition.

- All sport mechanics
- Scoring
- Four player local multiplayer

- Basic sound effects

### Nov 18 (BETA)

Our beta milestone is built around polish goals that improve game feel and feedback. These aren't mechanically required to play the game, but will drastically improve the both the play and aesthetic experience. Playtesting these additions will help us determine whether we have met the artifact game-feel we are seeking to achieve. We also hope to learn whether we should adjust any polish effects for better feedback or feel.

- Game feel visuals complete
  - Particles for collisions
- Basic aesthetic visuals
  - Atari Glow
- Completed sound effects

### Nov 25 (FINAL)

The final milestone includes all non-essential mechanics, visuals, and effects. Completion of any or all of these would amplify the game experience, but none are necessary for the game to be playable and fun. Having only non-essentials for the final milestone also gives us leeway in the event that previous milestones slip. Playtesting for this milestone will let us know whether the additional mechanics and environments add or detract from the existing gameplay experience, as well as showing us what minor tweaks we can make in time for our final presentations.

- Advanced visuals
- Advanced sound
- High bar mechanics
  - dynamic arenas
  - high five

## Timeline

Week of:	Goals:
Oct 28	All alpha features completed: mechanics, scoring, basic visual and sound effects that enhance game feel
Nov 4 (ALPHA)	playtesting round 1, learn graphics / unity rendering system, atari glow
Nov 11	Visual and sound effects that sell glitch aesthetic (detailed in mid-bar goals), adjust mechanics from playtesting feedback

Nov 18 (BETA)	playtesting continues (round 2), refine visuals and sounds, add optional mechanics (dynamic arenas, high five), adjust mechanics from playtesting feedback
Nov 27 (FINAL)	final playtesting, small tweaks on all components of game from playtesting feedback
Dec 2 (PRESENTATION)	prepare and give final presentation