Mushi Shogun

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Focus

➢ Originally titled "Project Really Good Graphics"
   ○ The point is to show off cool graphics technologies
➢ Technical features:
   ○ Particle systems
   ○ Sky shaders
   ○ Post-processing effects
   ○ Sine-wave interpolation
   ○ Material edits

The Catch

➢ Gameplay revolves around catching bugs, during a time limit.

➢ The plot:
  ○ You are a Japanese cyborg that has just become self-aware.
  ○ Naturally, you set out on world domination.
  ○ Quickly, you learn that human beings are unlikely to bend to your will.
  ○ You have become keenly aware of the mindless obedience that insects exhibit.
  ○ You are quickly convinced that this is the quickest and most efficient way of building up a war machine for your conquest.
  ○ Madam Fate has revealed your destiny to you...
  ○ Arise, Mushi Shogun.

Bugs (and Scorpions)

➤ Different bugs are worth different amounts
➤ Most bugs spawn exclusively during either the day or night
➤ Some bugs spawn exclusively when it is raining or not
➤ Catching bugs gives you points
  ○ Points awarded vary by bug species
  ○ Catching a bug requires touching it with the net
  ○ The net can be swung in front of the player
➤ A limited number of bugs spawn at each dawn and sunset
  ○ Rain & Rainless exclusive bugs switch out for one another upon rain randomly toggling

Particles

➢ Rain
  ○ Rain drops fall from over the player's head, using a particle system to random spawn rain textures
  ○ Rain bends light with a refractive material
  ○ Another particle system spawns ripples on the ground
➢ Fireflies
  ○ A special type of bug, firefly swarms use a particle system
  ○ They glow in the dark, and each firefly particle moves on its own accord
  ○ They swarm around a central location, where the swarm can be caught

Sky and View

➤ Day / Night cycle
  - Color, direction, and brightness of light varies with time
  - Sky also visibly changes color to match sunrise, sunset, day, and night based on Rayleigh scattering

➤ Post-Processing Effect
  - Screen has water trickling down it during rain
  - Uses a refractive, animated material

Greenery

➤ Grass patches manually spawned at map center
   ○ Each piece sways using a Sine wave function, as if in a breeze
➤ Trees spawned randomly throughout expansive map
   ○ Limited, but large range
   ○ Trees avoid spawning inside one another
   ○ Use LOD to avoid taxing the system, based on distance from tree
➤ Tree leaves
   ○ Material noticeably sways back and forth, as if to a breeze
   ○ Sun shines through materials, creating "God Rays"

Tying Loose Threads

➢ Main menu beautifully displays the game running in the background
➢ Pause menu ("P") allows player to Resign early to return to the main menu
➢ Upon game end, player is ranked based on score achieved and time played
  ○ Theme of ranks based on word domination
  ○ Catching 100,000 bugs in the full time limit will grant the highest rank