Design Document for Myco Game

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*Working Title:* “Myco-“ prefix relates to fungi. https://en.wikipedia.org/wiki/Mycology

(The name is not really that important at this stage, but “Myco” is easier and shorter to spell than “Mycelium”.)

*Game Concept:* Arcadey arena battler with sensor management, various abilities, and dynamic levels. Featuring playable fungi supported–and menaced–by other denizens of the forest floor, Myco is a fun and moderate-paced romp through the understory.



*Genre Connections:* ”Vehicular combat”, “Third-person Shooter”, “MOBA”

*Sources of Inspirations:* World of Warships, Missile Defense, Fantasia, Mario Kart (Balloon Battle Mode), Splatoon

*Mechanics:*

* “Sensor” Control
  + Nearby passive detection radius
  + Active sensors
    - Toggle with E-key
    - Select from the options at spawn[?]
      * “Firefly”
        + Shines a cone of vision, visible to everyone. (Think flashlight in the dark)
      * “Moth”
        + Has a circular radius of detection, similar to the passive detection—except the Moth radius is visible to everyone. (Think pheromones… or maybe a lantern.)
      * “Carpenter Bee”
        + Flies an orbit around the controlling mushroom, or maybe around the point of aim. Provides vision to the user, and is also visible to everyone. Can be “shot down”.
  + Mycellium pulse
    - Activate with Q-key
    - On a cooldown
    - Temporarily provides vision near friendly mycelium
* Abilities
  + Activated with SPACEBAR-key
  + Cycle through different abilities with R-key
  + “Blink”
    - Short range teleport
    - Instant cast, cooldown
    - Much longer range on friendly mycelium
  + “Submerge”
    - Temporary underground movement
    - Toggle, with a finite meter that refills over time
    - Can’t cross hostile mycelium[?]
  + “Shell”
    - Immobilizes self temporarily
    - Short term invulnerability
* “Riders” (Weapons)
  + Select different riders with #Keys 1-5
  + Fire with Left Mouse Button [LMB], Alt-fire option with Right Mouse Button [RMB]
  + Infinite ammo, with various cooldowns
  + Set to “auto-fire” with SHIFT-key[?]
  + “Locust”
    - Long range missile launched with LMB / Waypoint setting with RMB
  + “Ant”
    - Spreads mycelium along its path of travel launch with LMB / zigzag movement with RMB?
  + “Gnat”
    - Interceptor missiles, launched with LMB / toggle 1,2, or 3 gnats with RMB
  + “Slug”
    - Slow moving and high damage torpedo, launched with LMB / seeker toggle with RMB?
  + “Spore Burst”
    - Close range point defense mode -OR- Medium range ‘gun’ mode. Fire with LMB / Toggle modes with RMB
* Movement
  + WASD-keys
  + Controlling the player mushroom feels a bit like “plowing” through the earth, with a small bit of inertia. Starting and stopping should be responsive, but not instant.
  + The player mushroom “front” should have some clear visual indication, as the point-of-aim is independent from the facing of the mushroom.
  + Strafing is possible. [?]
  + As mushrooms move, they leave behind mycelium. This lasts a period of time before it decays away (and is deleted).
  + Maybe movement is different on friendly or hostile mycelium.
* User Interface
  + Minimal, with no “mini-map”
  + Visual representation of player “health” via mushroom condition
  + “Riders” sit on the mushroom cap, and have some indication to show which is active/cooldown at any given moment [?]

*Level Design:*

* Forest floors and open meadows. Trees, rocks, grass, and other details are appropriately huge compared to the mushrooms.
* Probably should have random-spawned “rogue riders” that are hazards to all mushrooms (mobs).
* Dynamic level movement and hazards [?]
  + Falling trees
  + Rain