**Mecha X Monster GDD**

**Overview**

**Game Title**: Mecha X Monster  
**Genre**: Idle/Clicker with Turn-Based Combat and Rogue-Lite Elements  
**Theme**: "Everything at a Cost" (Charity Game Jam)  
**Target Audience**: Children in hospitals (ages 8–16)  
**Platform**: Web-based, built with Vanilla JavaScript Game Framework and Enhanced Combat System  
**Core Concept**: Players manage an asteroid mining operation, collecting currencies and rare mecha parts to build mechas, which unlock turn-based battles against monsters. Strategic trade-offs (upgrades vs. saving, risking mechas, currency exchanges) drive the theme. The game starts with one mine and scales to five, culminating in a final boss fight after all mines have been defeated.  
**Design Goals**:

* Simple, accessible controls (clicks, buttons) for short play sessions (5–10 minutes).
* Uplifting, colorful visuals and narrative to empower kids.
* Scalable scope for a 2-week game jam, starting with one mine and expanding as time allows.
* Leverage existing framework (GameState, Drawer, Dialogue, Popup, Screens, Audio Manager + UI, Animations Manager, Achievements, Slots, Combat, Inventory).

**Core Mechanics**

**1. Mining Mechanics**

* **Auto-Mining**: Players click a mining machine to start it. A progress bar fills automatically (e.g., every 5 seconds). Each fill generates currency (e.g., Shells, coins, bars, gems, or bonds – depending on the mine) and has a chance to drop a mecha part (specific to the mecha for each mine).
  + **Mine 1** – Green Mecha – Yellow Slime – Shells
  + **Mine 2** – Yellow mecha – teal slime - coins
  + **Mine 3** - red Mecha – blue slime – bars
  + **Mine 4** – Blue mecha – orange slime - bonds
  + **Mine 5** – Pink mecha – black slime - gems
* **Click-to-Collect**: Players click the machine to collect accumulated currency. No clicking is required to mine, ensuring accessibility.
* **Mecha Part Drops**: Each bar fill has a low chance (e.g., 1% base, upgradable) to drop a mecha part (e.g., FireBot Arm). These ‘chances’ are geodes that the player has to click and ‘burst’ open to reveal. If it’s not a mecha part – it is 1-5x the gold production of the mining machine.
* **Inventory**: Mecha parts are stored in an inventory. Players can sell parts for currency or save them to build mechas.
* **Production Boost**: A built mecha doubles the mine’s currency output (e.g., it was 10 sells per fill, now it’s 20). You visually see the first mecha you build – and then you see a X2 -> X3, to the lower left of it as you build more mechas of the same type. The bonus stacks for each additional mecha you have.

**2. Upgrade Mechanics**

* **Upgrades Drawer**: An "Upgrades" button opens a drawer with options to improve the mining machine:
  + **You can spin a slots mini**-game to get an upgrade for your mine.
    - **Reduce Fill Time**: Decrease progress bar fill time (e.g., -10%).
    - **Increase Output**: Add more currency per fill (e.g., +1 currency).
    - **Output Multiplier**: Increase output based on stored currency (e.g., +0.1x per 100 currency).
    - **Mecha Part Drop Rate**: Increase drop chance (e.g., +1%).
    - **Nothing**: You get nothing – that sucks.
* **Cost Trade-Off**: Each upgrade you get increases the cost to spin the wheel. Once you get mecha part drop rate to 100% you can’t get those upgrades anymore.

**3. Mecha Building**

* **Parts Requirement**: Each mecha (e.g., green bot) requires 6 unique parts (e.g., Left Arm, Right Arm, Left Leg, Right Leg, Head, Torso).
* **Build Button**: When all parts are collected, a “Build Mecha” button appears over the mecha’s spot on the mine screen. Clicking consumes the parts and builds the mecha.

**4. Combat Mechanics**

* **Monster Fight Access**: A “Monster Fight” button is visible as long as you control a mecha. Clicking opens a popup to select a mecha.
* **Fight Structure**: Each fight consists of three battles:
  + **Easy Battle**: Simple enemy with 2 moves and bad stats.
  + **Medium Battle**: Full enemy with 4 moves and normal stats.
  + **Mini-Boss**: Stronger enemy with 4 moves and higher stats.
* **Turn-Based Combat**: Uses Combat System with animated health/energy bars, floating damage numbers, and sprite animations.
  + **Mechas and monster have 4 out of a pool of 6 moves**. Monsters – you can come up with.
    - **Green** – Light, Heal, Defend, Rest
    - **Yellow – Heavy, Boost, Heal, Rest**
    - **Red – Light, Heavy, Defend, Heal**
    - **Blue** – Heavy, Heal, Defend, Rest
    - **Pink** – Defend, Boost, Light, Heavy
* **Training Between Battles**: Players play a bubble clicker mini-game (10 seconds) to earn training currency. Players can also exchange money they’ve earned during the run into training curreny- and they can exchange training currency into money (the type depending on the mine location). The currency exchange rates aren’t good – to influence you to only exchange if you need to – and not as a normal act.
  + **Slot Machine**: Spend training currency for random stat boosts (e.g., +5 Health, 50 Training Credits, nothing, etc). You must match 3 of the same symbols in a 1 line, 3 reel slot machine. The paytable dictates what prize you get if you match 3.
  + **Direct Purchase**: Buy specific stat boosts (e.g., +10 Health, costs 100 Training Credits, more expensive).
  + **Increasing Cost: Both slot machine and direct purchases go up in price during training, but the costs are reset the next time you start training.**
* **Combat Outcomes**:
  + **Win**: Keep the mecha, gain bonus monster currency (e.g., 20 base shells + 50 bonus shells).
  + **Loss**: Mecha is destroyed, keep your monster currency (e.g., 20 base shells).
* **Rogue-Lite Element**: Enemy move patterns are randomized per fight for replayability.
* **Theme Tie-In**: Risking the mecha in combat vs. potential rewards; training vs. saving currency.

**5. Currency Exchange**

* **Trading Post**: Players interact with the tutorial NPC (AstroGuide) at a trading post to exchange currencies – exchange rates aren’t good and this is to encourage players to earn a currency directly instead of trading for it. The trading post is there for any runaway currencies and to allow players to get the next upgrade or spin if they realllly want to and don’t mind burning extra currencies.
* **Unlocking Mines**: New mine sites (e.g., Ice Mine) require specific currencies to unlock (2 monster bar – 100 mecha coins and 500 shells). Each site has a unique Mecha, monster, mecha currency and monster currency.
* **Visuals**: The trading post is a cozy sci-fi shop with a table showing exchange rates and currency icons (e.g., flame for Fire Credits).

**6. Progression**

* **Mine Sites**: 5 total, each with a unique currency, mecha, and monster (e.g., Fire Mine: Fire Credits, FireBot, FireBeast).
* **Final Boss**: After defeating all 5 different mini-bosses at least once, a final boss fight unlocks (tougher battle where use the mechas one after another as they are destroyed).
* **Achievements**: Reward milestones (e.g., “First Mecha Built”, “Monster Slayer”, “All Mines Unlocked”).

**Game Flow**

The game follows a 12-step flow, designed for short, engaging sessions:

1. **Start Screen**:
   * Displays a vibrant asteroid backdrop with a large “Start Mining” button and the game logo pulsing.
   * Tagline: “Can You Stop the Evil Slime?”
2. **Empty Asteroid (Tutorial)**:
   * AstroGuide introduces the goal: mine resources, build mechas, and fight monsters to restore the colony.
   * Comic-style dialogue bubble with encouraging text (e.g., “Let’s start small and dream big!”).
   * A 2D map shows one location on the asteroid with a glowing “Build Port (Free)” button over a spot.
   * The player gets the ‘New Port’ achievement – each achievement earns them a specific currency – this achievement earns them 10 shells.
3. **First Mine**:
   * The 2D map now shows another one location on the asteroid with a glowing “Build Mine (10 shells)” button over a spot.
   * Clicking builds the mine (dust animation and filling bar before appearing after the bar is full and the dust disappears). It starts pulsing and AstraGuide says ‘your mine is all built – now get to mining!’
   * Player clicks the mine and is taken to the mining screen.
4. **Mining Screen**:
   * Features a mining machine (e.g., backhoe). AstroGuide tells the player to click the machine to start it.
   * Once started, a progress bar appears that fills every 10 seconds. Once it’s full 1 shell is added to the mining machine.
   * Click the machine to collect it’s current value (e.g., 1 shell).
   * Click the mining machine to open an upgrade slot machine mini-game.
   * There are 3 additional mining machines that can be bought, each requiring more shells. (25, 100, 500)
5. **Inventory Management**:
   * Parts are stored in a grid-based inventory with icons.
   * You can exchange items for currencies at the trading post.
   * Selling parts provides currency but delays mecha building – the exchange rates aren’t great and it’s often better to just build mechas. Only useful if you have a lot of extra of a few specific parts.
6. **Combat with Training**:
   * Fight consists of three battles (easy, medium, mini-boss) using the Enhanced Combat System.
   * Between battles, a 12-second bubble clicker mini-game earns Training Credits. The bubbles have different icons and move around the screen, the icons are worth different amounts. There are a max of 6 bubbles on screen at a time, and new ones are spawned as soon as one is popped.
   * Spend Training Credits on:
     + Slot Machine: Random stat boosts (e.g., +5 Health, 50 Credits + x\*10).
     + Direct Purchase: Specific boosts (e.g., +10 Health, 100 Credits x\*25).
   * Winning all battles keeps the mecha and grants bonus monster currency. Losing destroys the mecha but retains currency.
7. **Monster Currency**:
   * Defeating monsters grants monster currency (e.g., Monster Shells).
   * Spend to unlock new locations or exchange or other currencies.
8. **Currency Exchange (Trading Post)**:
   * Players talk to AstroGuide at a trading post (cozy sci-fi shop).
   * Shows all currencies you have unlocked.
   * Click a currency to view all items you can trade and what their value is in that currency.

**Theme Integration: "Everything at a Cost"**

* **Upgrades vs. Saving**: Spending currency on upgrades (faster mining, part drops) reduces funds for training or unlocking mines.
* **Sell vs. Build Parts**: Selling mecha parts gives quick currency but delays building, requiring more mining time.
* **Training vs. Saving**: Spending Training Credits on mecha stats risks