

“Captain Rocket vs The World of Tomorrow” - GDD

Intro

It's a beautiful summer's day in 1939, and people all around the world has gathered in New York City for the New York World Fair, “The World of Tomorrow”, where the newest in robotics is being shown to the public eye for the first time! But as the showcasing starts, something goes horribly wrong, as the robots turn their weapons towards everything and everyone they see! Luckily, Captain Rocket is at the scene, and uses high tech weaponry and jetpack to take down everything from hedge cutting gardening bots to military soldier bots, and save New York from certain destruction!

Genre

Twin-stick top down shooter. Somewhat strategical, fast paced and action filled.

Target Audience

Casual to hardcore gamers who enjoy top down shooters and fast paced action gameplay with a strategical touch.

Features

- Four different weapons with distinct features (electric rod, machine gun, grenade launcher)
- A jetpack with extra movement ability, such as a dash and a power leap
- The “Airstrike”, a highly powerful attack from above, which effects will differ depending on the weapon currently equipped
- Different enemies with distinct features and abilities
- Three levels with an epic final battle
- A playful combination of colour and the festive fairground feeling, mixed with intense robotic mayhem and destructible environment
- A bad ass player character

Look and Feel

We're focusing on an art-deco, dieselpunk-ish art style, with clean and vibrant colours. Lots of hard surfaced materials and a “futuristic” vibe, but futurism á lá late 30s early 40s.

Gameplay Flow

The first level should be the at the start of the fair's main avenue. Split into 2 sections, with a checkpoint in between. The first section should only include the melee enemies, whilst the second section include both melee and ranged (medium) enemies. This first level should be fairly linear without any strategically placed architecture, just a fairly open, linear environment. Here, the player should be introduced to at least the machine gun and, more importantly, the "Airstrike" and the dash/leap. I.e. all movement and the most basic weapon. All weapons *can* be introduced in the first level, but it would be wise to split them up so that we don't lay an info dump on the player.

The coming levels should also be split up into separate "set-pieces", with check points in between these set-pieces. This to be able to better coordinate the amount/variation of enemies and the layout of the levels to give an optimal experience for the player. The player's goal in the game should be to eliminate all robots, and then have some form of resolution encounter (shutting down a main power source/control for all robot forces, taking down a boss (like the inventor who went mad with power) or something similar.

Player Mechanics

Weapons

- "Teleforce Electric Rod" - Metallic sword that fires a constant electric beam. Short to medium attack range.
- "Machine Gun" - Rapidly firing, high powered "machine gun". Medium reload time (~4/5sec). Medium to long firing range.
- "Rocket Launcher" - Heavy damage rocket launcher, with fast flying rockets with a small blast radius. Long reload time (~5/6sec). Long firing range.
- "The Diskus" - A weapon that fires disks that ricochets off the environment and slashes through small enemies/medium enemies **without shield**. These disks will do damage to shields and to the large tank enemies on hit, then ricochet off of these as well. Rapidly shoots ~5 disks before reloading.

Jetpack

- "Dash" - The player dashes forward, instantly killing smaller enemies in its path. Ends with an AoE slam at the end that kills smaller enemies in a small radius and stuns enemies further out. Short cooldown (~5sec).

- “Boost Jump” - A small boost jump that lets the player jump over obstacles. Does not kill enemies on landing zone, but stuns them (lets the player get a grasp of the surrounding dangers without overpowering).
- “Air Strike” - A powerful strike from above. This charges up over time, based on e.g. amount of enemies killed/shots fired. When activating it, the player flies up into the air and gets a 2D top-down real time view of the map, and can target a specific area for attack. Enemies in the area will be damaged and shortly disrupted in some way after the Airstrike has been made. The player can then choose which attack to use:
 - “Ground Slam” - A powerful ground slam that kills any smaller enemy and stuns all others in a large radius.
 - “Shock Wave” - With the “Teleforce” equipped, the player can slam down their rod in the ground and create an extreme force of electricity that will kill any smaller enemies and stun all others in a large radius on impact. As aftermath, electricity will stay in the ground and spontaneously stun enemies over time. Disappears after a short to medium time (~5 sec to ~10 sec).
 - “Bullet Rain” - With the “Machine Gun” equipped, the player hails down a rain of bullets on its enemies for a medium to long time (~10 sec). The player will not need to reload during this time. Has a somewhat smaller radius than other airstrikes, but will kill or severely damage all enemies in the attack zone.
 - “Atomic(?????) Bomb!” - With the “Rocket Launcher” equipped, the player releases a massive bomb with a huge blast radius and instantly kills all enemies in the attack zone. As aftermath, the ground will be set ablaze and damage both player and enemies. The fire will give out after a short to medium time (~5 sec to ~10 sec).

Life, Health, Ammo and Chargetimes

Life & Health & Death

The player will have infinite lives but a set amount of health that they can fill up by going into close combat with enemies. This includes dashing into enemies and hitting them with the electric rod. If the player would die, they should quickly return to a checkpoint, **but not instantly**. If they respawn instantaneously, the players will be robbed of a breather directly after a mistake has been done. This breather can be crucial for letting the player think over what they did and how they should adapt their tactics. This breather could be a couple of seconds, or a up to a minute or two. We could also have a “You Died” screen, so that the players themselves can choose when they want to respawn.

Ammo

All guns will have infinite ammo, but a set amount in each mag. This is to keep the player from just constantly firing. The reload time should be a few seconds for each weapon, but will also include the “active reload”. Some form of timer should show up and if the player presses the reload button again at a certain point during this timer, they will get a boost in either damage or attack speed. This could also give some AoE attack property, but this will have to be tested and balanced accordingly, so to not be overpowered.

Charge Times/Cool Downs

The “Airstrike” is a charge up ability, meaning that the player will have to do some action several times to be able to do the “Airstrike”. These could be different actions, such as

- a) killing enemies
- b) shooting AND hitting enemies
- c) shooting, but not necessarily hitting enemies

The first alternative has a down side, seeing that depending on the number of enemies in a certain level, this mechanic could come far too late where the player has killed so many enemies that the Airstrike doesn't make that big of an impact. The second alternative is better, because some enemies demand a higher amount of hits to kill, meaning that the charge-up will still happen faster, but not be so cheap so that the player can just bullet spray to get the Airstrike. The last alternative is quick and easy, but has the downside that the players might just spray bullets aimlessly in order to get the Airstrike.

The optimal solution could be to combine the two latter alternatives, or all three, where the player charges a very small percent whenever they're firing a bullet, a larger percent when hitting an enemy and the biggest percentage gain when killing enemies. This would still motivate players to “shoot to kill”, but players who not be as skilled with aiming, that actually might *need* the Airstrike more, can still get it even if they don't rapidly kill enemies.

The Dash and Boost Jump should have a few seconds cool down in order to not overpower the player, or just let the dash/jump through everything. However, these has to be short, since these movement mechanics are crucial to regaining health.

AI Mechanics

Enemies

Small/Melee

These melee chargers are normal sized (somewhat smaller than or same size as the player), have fairly low health and are easy to kill... but comes in great numbers.

TrimBot - The convenient little gardening bot! With two high powered saws on each arm, they can quickly trim down hedges and shrubs and even cut off loose branches!

Medium/Ranged

These ranged enemies are the same size, or a bit larger than the melee enemies. They have shields that'll only break after a lot of damage has been done to it. A bit slower than the melees and will not come in the same quantity. They have a static firing time, meaning that each time they start shooting at the player, they will always shoot for the same amount of time. They also slow down their movement significantly when shooting. This will give the player a way to learn their attack patterns and be able to get behind them and shoot at their weak backs.

FuseBot - The next level of construction welding! With a super precise, long distance laser and a big shield to fend off any sparks or broken off metal shards, this construction robot will make a dangerous and demanding work practice something of the past!

Large/Tanks

The tanks are the greatest immediate threat to the player. They're large, has loads of health, and are not very affected by AoE attacks. They have one attack pattern when far away from the player, where they move slowly and have a ranged attack that in some way disrupts/stuns the player and deals some damage. When they get closer, they charge at the player and starts rapidly melee attacking for a set amount of seconds. If they hit the player, they launch them in a certain direction and does some amount of damage.

MiliBot - Replacing human soldiers on the battlefield for good! These first-class military robots are equipped with heavy plate armor, a long distance machine gun, a

stunning mechanism and a heavy arm that can launch off any human - or smaller robot - attackers.

Environmental Mechanics

The levels will be filled with smaller physics objects and destructible meshes that flies around when the player shoots at them. This only to get some juiciness into the environment.

Another environmental mechanic that we want to aim for is destructible environments that affect the gameplay.

- Breaking walls - Having destructible walls that affects the gameplay in different ways, for example
 - a) Opening up new paths for the players to take in the levels
 - b) Exposing pipes that can release e.g. steam that can stun enemies or slow enemies, or a flash freeze that freezes enemies in their place so that the next hit completely shatters them... mmm juicy
- Breaking floors - Creating holes in the level that the player can lure enemies into
- Breaking structures to block paths for enemies

Kill List

Level hazards; holes in floors that the player can open by either activating a switch / button, or shooting something that makes an object fall and make a hole maybe.

(Shoot to disconnect?) Some kind of magnetic device connected to a powerline that drags or pushes enemies and /or objects either towards or away from the player. (Electromagnetism).

Shoot to disconnect(?) electric cables from wall(s) / machinery to electrocute enemies.

Firing sound effects drops in tone so that the player can learn to know when ammo runs low. (This together with the graphical visualization, to better be able to time the active reload timer.)

Ricochet sounds and effects randomized and only when firing machine gun (or other low cal weapon) (both from bots and walls)

Randomized death animations (heads popping, flying straight up, exploding limbs - whole bots exploding, arms/legs flying off, bots crawling without legs on floor, bots loosing control (travels in a circle) accelerating speed, goes off to explode at random location a.s.o.)

Knockback effects on bots (think T2, mall, roses, shotgun).

(Mini)Boss: a shiny metal ball comes rolling towards the player, stops and then starts to pull all metal parts (dead bot parts) from the environment towards itself building it self up to a monster sized “trash metal pieces-bot”.

Good robots, assisting (cleaning, giving health) - that can turn bad by going into a charging station or perhaps get infected by other bots.

Tiered Feature Pyramid List

Tier #1

- Level #1: Start + end, final encounter (mini boss)
- Weapon #1: Machine gun, cooldown/reload
- Enemy #1: Spinning melee bot
- Health #1: Health drops from enemies
- UI/HUD #1: Health bar, ammo count, reload, airstrike charge, start menu, in-game (pause) menu
- Airstrike #1: One airstrike, 2D overlay + enemy sprites
- Destruction #1: Particles, destructible props (physics objects + sliced meshes)
- Character #1: Main character, basic movement, shooting, reloading
- Sound #1: Title music, level music, SFX 1
- Tutorial #1: Tooltips

Tier #2

- Level #2: Start + end, final encounter, environmental variation
- Enemies #2: Medium ranged enemy
- Weapon #2: Ripper

- Character #2: Dash or Boost Jump
- Destruction #2: Environment destruction visual (architecture affected by damage)
- UI/HUD #2: Weapon swap element
- Active Reload #1: For both weapons, AoE + damage boost
- Sound #2: Weapons, level 2 music, ambient sounds
- Airstrike #2: Two airstrikes, 2D overlay + sprites

Tier #3

- Level #3: start + finish, end goal + final encounter
- Weapon #3: Rocket Launcher
- Melee #1: Electric Rod
- Health #2: Health only on melee attack
- Character #3: Dash and Boost Jump
- Destruction #3: Environmental destruction affects gameplay (opens new paths + creates obstacles)
- UI/HUD #3: Weapon HUD, final encounter HUD
- Active Reload #2: Weapon specific powers
- Sound #3: Weapons, level 3 music, final encounter music
- Airstrike #3: 3 airstrikes + melee, 2D overlay + sprites
- Enemies #3: Large tank enemy

~ Top Tier Shinies ~

(Tier #4)

- Enemies #4: Stationary Turrets, Mini-Bosses
- Boss #1: Final Boss
- Sound #4: Dynamic Soundtrack (one musical theme that changes pace with gameplay tension)
- Destruction #4: Environmental hazards (e.g. steam that affects robots, water that can be electrified, etc)
- Narrative #1: 2D Cinematics (comics explaining disposition and progression narrative)

