

Nanobots!

Edoardo Carrer
Game Programmer

Mattia Casarotto
Game Designer - Visual Designer

David Leonardo Gomez
Game programmer

0.0 DESIGN PLAN

[Link to calendar](#)

1.0 VISION STATEMENT

"Nanobots!" is a strategy game where you **simulate** battles between two enemy swarms of **nanobots**. You **choose the characteristics** of your creation, **set their behaviour** and then you let them fight in an arena to see which is the deadliest bot.

You can **set up** your part of the battlefield before the round starts, adding **power ups, energy** or **danger-zones** for the robots. But be careful! You will affect both your and your enemy robots! So use these tools carefully!

Battle against the premade scientists that you will find in the **story mode**, unlock **upgrades** and items for your personal robots and then **challenge your friends** online to see who is the best nanobot engineer!

1.1 Game Logline

Nanobots! create, compete, upgrade, repeat!

1.2 Gameplay Synopsis

When you first start the game you receive your first nanobot, you can choose between some options made for you and you start with an introduction fight.

PRE-BATTLE: Before the fight begins you see only half of the field, have the option to modify the deployment of your nanobot swarm (you can choose how to place them), you can also

choose to place some energy, traps or power ups on the field. Once you are ready the battle starts, and you can see how the enemy placed the elements on it's side of the arena.

BATTLE: While the battle is taking place your bots will do what they are programmed to do, roam around, find energy sources, multiply, avoid obstacles and finally attack the enemy swarm. The battle lasts around 1 minute, around the 45 seconds mark the remaining creatures are pushed to the center of the arena and finish the fight. If after 1.15 there is still no winner then the player with the most creatures wins.

UPGRADE: After each battle you receive points and parts, like metal, batteries, etc. You can use this to modify your nanobots and upgrade it before the next battle.

You can modify your creature in the LAB, when in edit mode you will see one of the creatures zoomed in, with it's stats and characteristics next to it.

There are two ways you can modify a bot: hardware and software.

To modify the hardware you can touch individual parts like the legs, sensors and weapons to see more details, and see if upgrades or other options are available.

For the software there is a dedicated button that will take you to the programming interface. Here you will see 4 categories: "main goal", "attack behaviour", "search behaviour", "swarm behaviour". Modifying this will determine how your bots behave during the battles.

2.0 AUDIENCE, PLATFORM & MARKETING

3.0 LEGAL ANALYSIS

4.0 GAMEPLAY

4.1 Overview

In "Nanobots!" The players will participate in numerous battles between their nanobots and other nanobots, either the premade ones from the Story Mode or the ones made by your friends. After each battle the players will get points and parts that they can use for upgrades for their bots.

4.2 Gameplay Description

The main gameplay mechanic is the **battle**, most importantly the **setup** of the battle, since the fight itself, once started, will be completely **simulated**, and out of the hands of the players.

In the **setup phase** each player can only see it's own half of the map, and they will have to place different elements on it's part of the arena (walls, energy, and traps) and also they have to choose where to deploy the first nanobot.

Once the **battle starts** the rest of the map is revealed, and the bots spawn in the designated area. Each bot will behave a bit differently, depending on the upgrades and settings the player decided for it, but mainly it will start looking for the **energy** sources in the map, and once it gets it it will **duplicate**.

If it finds an **enemy** bot it will **attack** it, sending a **signal** to the other bots. Moving and attacking consumes energy, while killing an enemy gives you energy. A bot will **duplicate** when it's energy is 100% full, and will spawn two bots with 50% energy each.

If a bot remains for too long without acquiring energies or killing enemies it will die and despawn once it's energy reaches 0%.

4.3 Game Modes

First Start

At the first start of the game, the player chooses his nickname, and then he starts the tutorial. The tutorial consists of a brief explanation and trial of all the gameplay mechanics, explained by the first enemy of the story mode, an engineer which also gives some information about the game world. After the tutorial, the player enters the LAB.

The LAB

The LAB is the place where players can upgrade and personalize their nanobots, buy new parts using **bolts** and swap them.

The main categories of parts are:

- Vision
This upgrades affect how far your nanobots can see, and the field of view. Usually the more far you can see, the narrower the field of view is.
- Attack
These upgrades affect how you attack other bots. There are ranged or closeup weapons, each weapon has it's damage level, the attack rate, some have splash attacks that affect multiple enemies, also there are types of weapons (fire, electric, acid, normal etc.)
- A armor
Armor upgrades can offer resistance to different kinds of attacks, and usually affects the speed of the bots.
- Movement
These upgrades affect how the bots move, usually the faster a bot moves the less accurate it's movements will be.
- Special Abilities
These upgrades can have particular effects on the bots, for example they could make it so when a bot dies it explodes, or that it gives energy to its surrounding friends.

Story Mode

In this mode the player will fight against different adversaries, each one a bit more challenging than the other. To pass the levels the player will have to try out different configurations of their bot or try to change the placement of the elements in his side of the arena, in order to be effective against the adversary.

VS Mode

In this mode two players will battle in the arena. Each one will select their bot and the disposition of the elements in their part of the arena, once both of them are done the battle will begin.

4.4 Controls

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4.5 Interface

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4.6 Resources

Player Level

Some resources and upgrades are unlocked only after the player reaches a certain level. The levels go from 1 to 25, and require XP to go from a level to another. Like is usual, going from level to level will get increasingly difficult.

Name	Double if Won	XP
Killed Bots	✓	n. of enemies killed by bots
Remaining Bots	✗	n. of bots remaining
Time Used	✗	remaining seconds * 5
Traps Placement	✓	n. of enemies killed by your traps

Bolts

To buy and upgrade parts for your bot at the LAB you will need "**Bolts**". Bolts are acquired after each game, depending on how many bots get destroyed.

When the game is over, all the bots spawned during the match are converted to bolts. The winner keeps all the bots generated from his bots and also 75% of the bots generated from

the adversary. The loser only gets 25% of the bolts generated by it's bots.

4.7 Flowchart

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GAME CHARACTERS

5.1 Your Bot

Your bot is the main focus of the game, upgrading and personalizing it will be the main goal. Each upgrade comes with some pros and some cons that will add up to the base stats of your bot.

Some upgrades will not just affect the stats of your bot but will also change some aspects of it's behaviour, for example how it behaves when it dies or when it receives a signal from the other bots.

upgrades list

STORY

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GAME WORLD

description of the map (file i sent)

MEDIA LIST

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PROTOTYPE

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