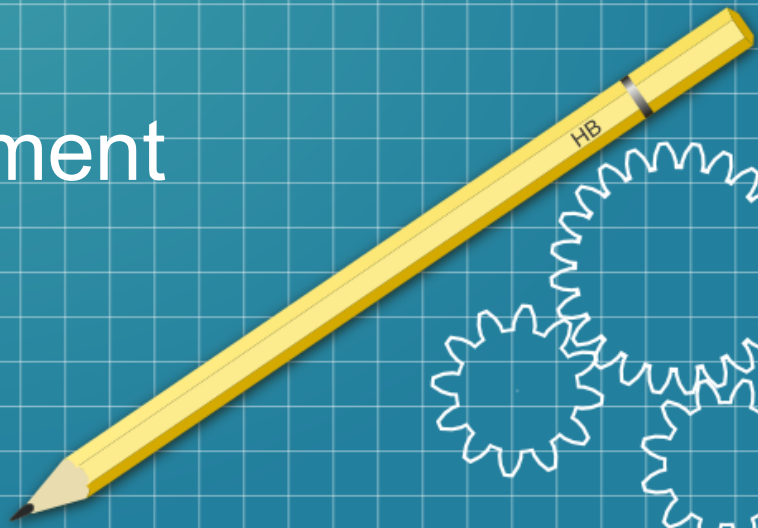
Projeto Massa

Game Design Document



Core Concept

This game design document describes the details for a 2D math puzzle game at first planned to be released on Windows platform.

The game is referred to as Projeto Massa in this GDD but other name candidates are: Mass Mech, Make-a-Mass, Massive Heave.

Mass Project is a puzzle game about an engineer calculating the mass of fabricated robots to launch them into battle, the game has an original story an characters, meant at an young male target audience.

Characters

Codename End-is-near is the main protagonist, an young male ingenious engineer that builds robots to fight the Giant Insects, he is portrayed as a cool youngster to encourage the target audience to empathize with him, he wears a cyberpunk styled overall with a similarly cyberpunk styled safety helmet.

The main character should be portrayed in an anti-hero fashion since this is a very popular character archetype even though the character isn’t actually an anti-hero, a good example of a popular character that is not anti-hero but is depicted as one is Sonic in the first installments of the Sonic franchise.

Story

The game is set in the future on planet earth, the technological advancements made it possible to fully heal the environment and created an utopic society thriving in a planet with a completely restored fauna and flora, however that caused an unprecedented sudden increase in oxygen on the planet.

The oxygen lured to the surface of the planet giant insects that lived for thousands of years underground. Humankind must now remember the art of war to control this new threat as it looks for ways to restore the peace.

Theme

This is a game about action and determination, the focus is in the journey of the protagonist to defeat the insects and protect the people, there is moments of respite and recollection but the story must constantly show the hero marching on wards full of hope, it must also have a sense of humor and be funny, movement, action and explosions must be a constant background to make up for the slow-paced nature of the core mechanics.

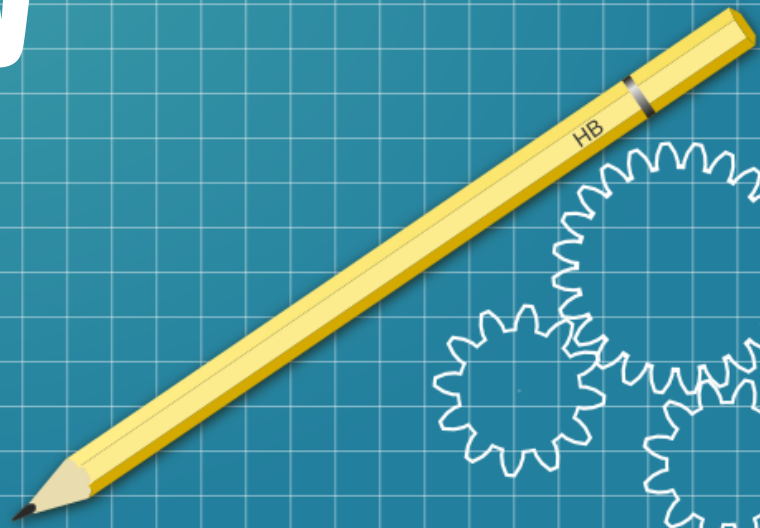
Storytelling

The story is told to the player in a subtle fashion, hints in the scenes and stages tell the player what is happening and how it ends, for example:

- Stage 4 is set in a dam, aquatic insects are trying to break through the dam and into the city, the background shows hysteric people running in the background and a mess of flying military vehicles, despite all this, the hero stands confident doing his job building robots, this specific stage ends only with every enemy defeated, the player can figure out on his own that the outcome is a victory and the dam is saved.

Mass Project

Gameplay



Goal

The player goal is to control “End-is-near” in his quest to keep the insects at bay, to do this the player should complete a series of stages.

At each individual stage the player will give the total answer to many questions of sum and according to the difficult of the stage this sum can include negative numbers, multiplications and divisions.

When the player gets an answer right a robot is launched into battle and fight on it’s own, throughout the stage many robot will beat many enemies before they are beaten as well.

Skills

The following are skills the player is supposed to have or acquire as it plays, the game must be balanced to become harder keeping up to the player skill improving as it progresses:

- Addition and subtraction
- Multiplication and division
- Quick thinking
- Plan forward

Mechanics

The stage starts as the player sees the main character programming on the machine that consists mostly of boxes from where the parts of the robots come, hanging in hooks, those parts group up in the upper middle of the screen and numbers come up below each part, those numbers represent their mass.

There is no zero, instead the interface will show “standard”, because the standard is zero, the range for those numbers change according to how difficult is the stage.

In harder difficulties the numbers can have on their left the symbols for multiplication and division, this means that the respective number is multiplying or dividing the next.

Mechanics

The player can see a lever in the right corner going from -99 to +99, in the middle instead of zero there is the word “standard”, the player can adjust the lever in a specific number, it is shown in a display, after choosing a number the player must press the launch button, then the robot will be put together and released in the air.

If the player got the sum of the numbers right, then the robot will fall in a catapult device that looks like a balance and will be launched to the fight, if the player got the numbers wrong the balance will either stay in place or crash into the ground, if it is too light or too heavy, respectively.

After the robot launch succeed or fail, the game continues with a new robot and new parts come from the boxes.

Mechanics

At later stages of the game the player will have to choose which specific parts to build the robots with, the mass of each part is random as in earlier stages, but the parts the player chooses will change the combat capabilities of robots built and its efficiency against specific enemies, this way, the player must not only answer the questions right and quickly but must react to the specifics of the enemies in the screen and on higher difficulties plan ahead of time.

A few possible parts the player could choose are:

- Flamethrower (Strong against swarms)
- Laser Gun (Strong against big enemies)
- Treads (Faster movement)

Progression

As the player makes progress and advances through the stages the questions will get gradually harder including numbers with two digits, then three, four and so on, negative numbers are of great importance to make the game hard, without those the game will be too easy to most players, therefore negative numbers must be added early on.

Multiplication and division are elements to be added to increase the difficult greatly, when introducing those it may be necessary to reduce the number of digits temporarily to keep the learning curve smooth, those should most likely be introduced later on, in the middle of the campaign or so.

Besides, at later stages a new mechanic will be introduced giving the player the option to choose parts but adding the need to react quickly and plan ahead of time.

Losing and Winning

To beat the game as a whole the player must reach and beat the last stage, different stages may have different win conditions, but usually one of the following:

- Defeat all the enemies before gate is destroyed.
- Protect the gate for a set time.
- Make a number of robots within time limit.

Art

The game aesthetics are colorful but not too saturated to avoid making the game look too childish, with lots of animations and action all over the screen most of the time, the sprites should have noticeable outlines and the backgrounds should be layered with parallax effects.

The soundtrack should fit each specific situation, but most of the time the stages should have energetic musics to compliment the sfx going, like the explosions and battle noise.

Technical Sheet

Initially, the game will be released on Windows, and possibly later on:

- iOS
- Android
- Windows Phone

Game Engine is Unity.

Consider Steam as marketplace for the target audience.

Other Ideas

- Add an overworld screen in between stages, where the player can see the progress made and how much left.
- Add an in-game store where the player can buy power-ups with in-game currency.
- Add special stages where the player can control the robots and take the fight to the insects on its own.
- Add collectibles that can be acquired doing impressive feats: like finishing a stage within half the limit time.
- Add easter eggs referencing other media, possibly with of causing a nostalgic reaction in the target audience.